

COLLEGE OF SOCIAL SCIENCE

Mary A. Finn, DEAN

Our science transforms the human experience. Our faculty and students seek to understand and improve lives at the individual, group, organizational and societal level. In addition to substantive knowledge in their field, students in the College of Social Science acquire the communication and analytical skills needed to excel in complex and changing environments. The College has made a commitment to engaged and experiential learning; every student graduating will have an opportunity to learn outside the traditional classroom. The College is open and welcoming. We are a diverse and dynamic intellectual community deriving strength from a plurality of identities and lived experiences. The complexity and scale of societal challenges demands nimble and rigorous solutions that can only emerge through exceptional research, teaching and collaborations. Our faculty are global leaders in top-tier research while advancing engaged learning and societal well-being.

The College offers graduate and undergraduate courses and degree programs, as well as undergraduate minors and graduate specializations, through its 12 departments and schools: Department of Anthropology; School of Criminal Justice; Department of Economics; Department of Geography, Environment, and Spatial Studies; Department of History; Department of Human Development and Family Studies; School of Human Resources and Labor Relations; School of Planning, Design and Construction (Urban and Regional Planning); Department of Political Science; Department of Psychology; School of Social Work; and the Department of Sociology. The College also offers programs through the Center for Integrative Studies in Social Science; Chicano/Latino Studies; Environmental Science and Policy Program; the Global Urban Studies Program; and the Center for Gender in Global Context.

Affiliated centers and institutes that contribute to the research, outreach, and teaching missions of the College include: the Center for Anti-Counterfeiting and Product Protection; the Center for Global Change and Earth Observations; the Center for Humane Arts, Letters and Social Sciences Online (MATRIX); Remote Sensing and Geographic Information Science Research and Outreach Services; the Institute for Public Policy and Social Research; and the Institute of Public Utilities.

The College also offers the Social Science Scholars Program; a rigorous program of study for a close-knit community of undergraduate student scholars, integrating intensive seminars, internships, study abroad, undergraduate research, and mentoring by faculty and alumni. A few Departments in the College - Economics, History, and Political Science - similarly maintain undergraduate scholars programs.

UNDERGRADUATE PROGRAMS

The College of Social Science offers degree programs through its departments and schools and through the Center for Integrative Studies in Social Science. A student should carefully study the catalog descriptions of these majors and meet with an academic advisor before choosing one. The three general types of majors in the college are described below.

A **departmental** major consists of at least 30 credits in courses recognized by the department as counting toward the major. Each departmental major is designed to provide concentrated study in a specific field; it will be complemented by courses outside the major to give breadth to a student's education, including an interdisciplinary minor.

A student majoring in one of the **schools** is introduced to principles and techniques that are basic to the subject area and then learns to apply them in professional programs of study. The minimum number of credits required varies among programs. In each school, the major program consists of courses offered within the school and course work in complementary disciplines.

The **Interdisciplinary Studies in Social Science** major, administered by the Center for Integrative Studies in Social Science, is organized around three thematic concentrations. Students select one from the following: Community Governance and Advocacy, Health and Society, and Liberal Studies. The **Social Science Education** major is available for students seeking teacher certification. The **Global and International Studies in Social Science** major focuses on the study of global systems and processes as they are expressed in local places.

Majors in the college lead to either a Bachelor of Arts or a Bachelor of Science degree. These degrees are valuable for pursuing a wide variety of careers, and serve as the foundation for advanced degrees in professional or graduate school.

Minors

The College of Social Science requires each student to complete an interdisciplinary minor. Minors and designated tracks in minors approved to meet this requirement include: African American and African Studies (Social Science track); African Studies; Asian Pacific American Studies (Social Science track); Asian Studies; Chicano/Latino Studies; Cities: Environment, Design and Society; Cognitive Science (Social Science track); Digital Cultural Heritage and History; Environment and Health; Human Behavior and Social Services; International Development; Jewish Studies (Social Science track); Latin American and Caribbean Studies; Law, Justice and Public Policy; Leadership of Organizations; Lesbian, Gay, Bisexual, Transgender and Sexuality Studies (Social Science track); Migration Studies; Peace and Justice Studies (Social Science track); Race and Ethnicity in the United States; Social Science Quantitative Data Analytics; Women's and Gender Studies (Social Science track); and Youth and Society.

The college also offers a number of other minors. These include: Anthropology; Defense Studies and Leadership; Economics; Environmental Social Science, Geographic Information Science; Geography; Global Studies in Social Science; History; Security Management; and Sociology.

Students in Social Science may also complete a Minor in Bioethics (see the *Lyman Briggs College* section of this catalog).

Students who are enrolled in bachelor's degree programs in the college may elect the Minor in Environmental and Sustainability Studies. For additional information, refer to the statement on *Minor in Environmental and Sustainability*

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Studies in the *College of Natural Science* section of this catalog.

Freshmen

Freshmen at Michigan State University are enrolled in the Neighborhood Student Success Collaborative but may declare a major preference for a major in a department or school of the College of Social Science, the Interdisciplinary Studies in Social Science major, or the Global and International Studies in Social Science major. Students who declare any Social Science major preference will be assigned an academic advisor in this College. Upon reaching 28 credits, sophomores may choose to declare their major in the college.

Admission to the College of Social Science

1. Completion of at least 28 credits acceptable to the college.
2. An academic record which at least meets the requirements of Academic Standing of Undergraduate Students.
3. Acceptance as a major in a program of the college. The number of students admitted to the School of Planning, Design and Construction, Urban and Regional Planning, and the School of Social Work program is limited.
4. Students interested in the History Education major or the Interdisciplinary Studies in Social Science: Social Science Education major must be admitted first to the Teacher Preparation Program in the College of Education.

Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees

To ensure an appropriately broad and well-balanced education, all undergraduates enrolled in the College of Social Science must satisfy the following subject matter and credit requirements, in addition to the graduation requirements of the university as described in the *Undergraduate Education* section of this catalog.

The following restrictions pertain to all courses taken in fulfillment of requirements for the Bachelor of Arts and Bachelor of Science degrees in the College of Social Science:

1. Courses applied to the university requirements in Integrative Studies and Mathematics may not also be counted toward the college graduation requirements.
2. Unless otherwise noted, no more than two courses offered by a student's major department or school may be counted toward the college requirements.
3. Only credits in courses graded on the numerical, Pass-No Grade, or S-NS systems may be counted toward college and major requirements, i.e. courses taken in satisfaction of college and major requirements may not be taken on a Credit-No Credit basis.
4. Complete the requirements of a major of no fewer than 30 credits with a minimum 2.0 grade-point average for courses in the major.

I. Bachelor of Arts

All candidates must meet the following requirements:

A. EXPERIENTIAL LEARNING REQUIREMENT

All students must complete an experiential learning requirement. The experiential learning requirement may be satisfied either within or outside the requirements of the major. The requirement may be met by completing a 3 or 4-credit experiential learning course, approved by the College of Social Science Committee on Curriculum and Academic Policy or its designee. A list of approved courses will be maintained by the College of Social Science. The experiential learning requirement is designed to ensure that each undergraduate student will have the opportunity to enhance problem-solving and integrative reasoning skills through practice outside of the traditional classroom learning environment. Study abroad and study away experiences, internships, service learning and civic engagement experiences, undergraduate research, including, in appropriate cases, honors theses, and entrepreneurship experiences can meet this requirement. The requirement may also be met through a non-credit experience, for example, an undergraduate research experience mentored by a faculty member, if approved in advance by the College of Social Science Committee on Curriculum and Academic Policy or its designee. For further information, consult the Office of Student Affairs in the College of Social Science or an academic advisor in a department or school.

B. INTERDISCIPLINARY MINOR REQUIREMENT

Complete a minimum of 15 credits in one Interdisciplinary Minor from a list of minors approved by the College of Social Science Committee on Curriculum and Academic Policy. Minors approved for this requirement include: African American and African Studies (Social Science Track); African Studies; Asian Pacific American Studies (Social Science Track); Asian Studies; Chicano/Latino Studies; Cities: Environment, Design and Society; Cognitive Science (Social Science Track); Environment and Health; Human Behavior and Social Services; International Development; Latin American and Caribbean Studies; Jewish Studies (Social Science Track); Law, Justice, and Public Policy; Leadership of Organizations; Lesbian, Gay, Bisexual, Transgender, Queer and Sexuality Studies (Social Science Track); Peace and Justice Studies (Social Science Track); Race and Ethnicity in the United States; Social Science Quantitative Data Analytics; Women's and Gender Studies (Social Science Track); Youth and Society. Other interdisciplinary minors can meet this requirement if approved by the College of Social Science Committee on Curriculum and Academic Policy or its designee. For further information, consult the Office of Student Affairs

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in the College of Social Science or an academic advisor in a department or school.

C. DISTRIBUTION REQUIREMENTS

1. Complete a minimum of 30 credits in courses numbered at the 300 level and above. Courses offered by the student's major department or school may be used to satisfy this requirement.
2. A maximum of 12 credits of independent study may be applied to the degree.
3. A maximum of 12 credits of internship, field experience, or practicum credits may be applied to the degree.
4. The total of independent study, internship, field experience, and practicum credits applied to the degree may not exceed 20 credits.

II. Bachelor of Science

All candidates must meet the following requirements:

A. EXPERIENTIAL LEARNING REQUIREMENT

All students must complete an experiential learning requirement. The experiential learning requirement may be satisfied either within or outside the requirements of the major. The requirement may be met by completing a 3 or 4-credit experiential learning course, approved by the College of Social Science Committee on Curriculum and Academic Policy or its designee. A list of approved courses will be maintained by the College of Social Science. The experiential learning requirement is designed to ensure that each undergraduate student will have the opportunity to enhance problem-solving and integrative reasoning skills through practice outside of the traditional classroom learning environment. Study abroad and study away experiences, internships, service learning and civic engagement experiences, undergraduate research, including, in appropriate cases, honors theses, and entrepreneurship experiences can meet this requirement. The requirement may also be met through a non-credit experience, for example, an undergraduate research experience mentored by a faculty member, if approved in advance by the College of Social Science Committee on Curriculum and Academic Policy or its designee. For further information, consult the Office of Student Affairs in the College of Social Science or an academic advisor in a department or school.

B. INTERDISCIPLINARY MINOR REQUIREMENT

Complete a minimum of 15 credits in one Interdisciplinary Minor from a list of minors approved by the College of Social Science Committee on Curriculum and Academic Policy. Minors approved for this requirement include: African American and African Studies (Social Science Track), African Studies; Asian Pacific American Studies (Social Science Track); Asian

Studies; Chicano/Latino Studies; Cities: Environment, Design and Society; Cognitive Science (Social Science Track); Environment and Health; Human Behavior and Social Services; International Development; Latin American and Caribbean Studies; Jewish Studies (Social Science Track); Law, Justice, and Public Policy; Leadership of Organizations; Lesbian, Gay, Bisexual, Transgender, Queer and Sexuality Studies (Social Science Track); Peace and Justice Studies (Social Science Track); Race and Ethnicity in the United States; Social Science Quantitative Data Analytics; Women's and Gender Studies (Social Science Track); Youth and Society. Other interdisciplinary minors can meet this requirement if approved by the College of Social Science Committee on Curriculum and Academic Policy or its designee. For further information, consult the Office of Student Affairs in the College of Social Science or an academic advisor in a department or school.

C. SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS REQUIREMENT

Complete a minimum of 12 credits in Science, Technology, Engineering, and Mathematics courses that is a part of each BS major as approved by academic governance. If these courses are listed as part of a student's B.S. major, the student must complete 12 credits from the major's STEM list. If these courses are not listed as part of a student's B.S. major, the student must complete 12 credits from a list maintained by the College of Social Science Committee on Curriculum.

D. DISTRIBUTION REQUIREMENTS

1. Complete a minimum of 30 credits in courses numbered at the 300 level and above. Courses offered by the student's major department or school may be used to satisfy this requirement.
2. A maximum of 12 credits of independent study may be applied to the degree.
3. A maximum of 12 credits of internship, field experience, or practicum credits may be applied to the degree.
4. The total of independent study, internship, field experience, and practicum credits applied to the degree may not exceed 20 credits.

Preprofessional Programs

Students at Michigan State University may select programs of study that satisfy the admission requirements of a professional school of their choice, such as law or medicine. Since the admission requirements to professional programs vary among schools, it is not feasible to establish a single program for each profession that satisfies the admission requirements of all professional schools. In the field of law, however, the College

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of Social Science has suggested programs of study that satisfy the admission requirements of most law schools. It is the student's responsibility to determine whether a proposed program meets the entrance requirements of the desired professional school.

Prelaw. Prelaw programs in the College of Social Science are available through the Department of Political Science and the Interdisciplinary Studies in Social Science Program. For additional information refer to those sections and to the university statement on prelaw programs in the *Undergraduate Education* section of this catalog.

Premed. Students preparing for medical school may pursue a premed program in combination with the B.S. degree program in several majors in the college, such as Anthropology, Human Development and Family Studies, Psychology, Sociology or the Interdisciplinary Studies in Social Science (Health and Society) major. Declared premed students will be advised by a preprofessional advisor in the College of Natural Science as well as by the academic advisor in their Social Science major.

Honors Study

The College of Social Science encourages honors students to develop distinctive undergraduate programs in their chosen fields. In each major a specially designated Honors advisor, usually a member of the faculty, assists students to plan a rigorous and balanced program tailored to the students' individual interests and abilities.

Departments and schools of the college offer honors courses and seminars at both introductory and advanced levels. These courses are provided chiefly, but not exclusively, for members of the Honors College. In addition, the college offers independent study and research opportunities for Honors College students whose interests in social, behavioral, and economic science reach beyond the topics covered by college courses.

MINOR IN AFRICAN STUDIES

The Minor in African Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the minor complements a number of major fields, students who plan graduate study related to Africa, who wish to pursue careers in international agencies in the United States and other countries, or who wish to work in Africa may find the minor particularly appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

The Minor in African Studies provides a multidisciplinary educational experience for students who are interested in Africa. The minor is designed to help students to acquire a better understanding of diverse aspects of African environments, economies, politics, societies, and cultures.

The student's program of study for the minor must be approved in advance and in writing by the advisor for African studies in the College of Social Science.

Requirements for the Minor in African Studies

CREDITS

The student must complete a minimum of 16 credits:	
1. The following core course (4 credits):	
HST 208 Introduction to African History, Culture and Society	4
2. One of the following courses (3 or 4 credits):	
ANP 417 Introduction to Islam in Africa	3
ANP 455 Archaeology of Ancient Egypt	3
GEO 338 Geography of Africa	3
GEO 339 Geography of the Middle East and North Africa	3
HST 201 Historical Methods and Skills	3
HST 360 African History to 1800	3
HST 361 African History since 1800	3
HST 364 South Africa: From Shaka Zulu to Mandela	3
HST 421 Women and Gender in Africa	3
HST 450 Special Topics in African History	3
HST 484 Seminar in African History (W)	3
PLS 422 Seminar in Political Science (W)	4
The topic of HST 201 and PLS 422 must contain specific content pertaining to African studies and be approved by the African Studies advisor.	
3. Complete at least 6 credits from the following courses (6 credits):	
EEP 260 World Food, Population and Poverty	3
ENG 350 Readings in African, African-American, or African Diaspora Literature	3
HA 271 African Art	3
MC 395 Cultural Dimensions of Public Affairs	4
MUS 426 Music of Africa	2
PHL 351 African Philosophy	3
RCAH203 Transcultural Relations through the Ages	4
REL 360 African Religion	3
The topic of MC 395 and RCAH 203 must contain specific content pertaining to African studies and be approved by the African Studies advisor.	
4. The following course (3 credits):	
PLS 351 African Politics	3
Students are encouraged to take courses in African languages to enhance their understanding of Africa.	

MINOR IN ASIAN PACIFIC AMERICAN STUDIES

The Minor in Asian Pacific American Studies, which is administered by the College of Social Science, is available as an elective to students enrolled in bachelor's degree programs at Michigan State University. Although the minor complements a number of major fields, students who plan graduate study related to the social sciences, ethnic studies, literature, media studies, or history may find this minor engaging. Students interested in pursuing professional training in business administration and management, city and regional planning, counseling, education, law, library and information science, public health, and social welfare may also be interested.

The minor focuses on social and cultural history and contemporary issues relating to Asian Pacific Americans, a diverse group who come from varying class, ethnic, religious, and national backgrounds. The minor incorporates an interdisciplinary approach to issues and populations in the United States and includes exposure to current research, case studies, and contact with local communities.

Students who are interested in this minor must contact the coordinator for the Minor in Asian Pacific American Studies. The student's program of study for the minor must be approved in advance and in writing by the coordinator for Asian Pacific American Studies. With the approval of the department and college that administer the student's degree program, courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for a bachelor's degree. Certain courses in the minor may require approval of the department or college that administers the

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course, and enrollment in a specific section as approved by the coordinator of the minor.

Requirements for the Minor in Asian Pacific American Studies

The student must complete a minimum of 15 credits:

1. The following core course (3 credits):

SSC 293 Introduction to Asian Pacific American Studies 3

2. Complete one course from each of the following areas (minimum of 12 credits):

Asian Pacific American Studies

ANP 437 Asian Emigrant Communities: A Global Perspective 3

ENG 352 Readings in Asian/Asian American/Asian Diaspora Literature and Visual Culture 3

ISS 335 National Diversity and Change: United States (N) 4

MC 319 Asian American History 4

Asian Diaspora

ANP 437 Asian Emigrant Communities: A Global Perspective 3

ENG 352 Readings in Asian/Asian American/Asian Diaspora Literature and Visual Culture 3

ENG 360 Studies in Postcolonial and Diaspora Literature (W) 3

ENG 460 Seminar in Global and Postcolonial Literature 3

FLM 451 Studies in Postcolonial Cinema 3

MC 369 Global Issues in Citizenship (W) 4

Race and Ethnicity

ANP 330 Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity 3

ENG 449 Seminar in Race, Ethnicity, Literature 3

HDFS 442 Ethnic Families in America 3

MC 281 Immigrants, Minorities, and American Pluralism 4

MC 385 Comparative Race and Ethnic Relations 4

SOC 215 Race and Ethnicity 3

Asian Studies

ANP 415 China: Culture and Society 3

HA 260 Asian Art 3

HA 462 The Arts of China 4

HST 210 Modern East Asia 4

HST 365 The Vietnam War 3

HST 366 Modern Southeast Asia 3

HST 368 China since 1900 3

HST 370 Modern Japan: History, Culture, and Society 3

HST 371 Women and Gender in Asia 3

HST 389 World War II in Asia and the Pacific 3

HST 451 Special Topics in Asian History 3

PSY 493 Issues in Psychology (W) 3

REL 325 East Asian Buddhism 3

REL 335 East Asian Religions 3

REL 355 Southeast Asian Religions 3

With the approval of the Coordinator for Asian Pacific American Studies, students may take a second Asian Pacific American Studies or Asian Diaspora Studies course in place of an Asian Studies course. Students may not use the same course to fulfill the requirement in different areas.

The topic of ISS 335 and PSY 493 must contain specific content pertaining to Asian Pacific American Studies and be approved by the Coordinator for Asian Pacific American Studies.

One Asian language course at level 102 or above (Chinese, Hindi, Japanese, Korean, or Urdu) may be used toward Asian Studies courses in requirement 2.

With the advance approval of the Coordinator for Asian Pacific American Studies, other courses and options such as study abroad, study away, and independent study may be used to fulfill minor requirements.

3. Students majoring in a College of Social Science major may complete the following set of requirements in fulfillment of the minor requirements in lieu of requirements 1. and 2. above. Students who plan to complete these requirements should consult an undergraduate advisor in the College of Social Science. The requirements may meet the College of Social Science college interdisciplinary minor requirement.

Complete a minimum of 16 credits from the following:

1. The following course (3 credits):

SSC 293 Introduction to Asian Pacific American Studies 3

2. Two of the following Race, Ethnicity and Migration courses (6 or 7 credits):

ANP 330 Race, Ethnicity and Nation: Anthropological Approaches to Collective Identity 3

ANP 437	Asian Emigrant Communities: A Global Perspective	3
HDFS442	Ethnic Families in America	3
HST 160	Introduction to Asian History and Culture	4
SOC 215	Race and Ethnicity	3
SOC 310	Global Migration 3	
3.	One of the following Asian Diaspora and Asia courses (3 or 4 credits):	
CHS 102	Elementary Chinese II	5
CHS 201	Second-Year Chinese I	5
CHS 202	Second-Year Chinese II	5
CHS 301	Third-Year Chinese I	4
CHS 302	Third-Year Chinese II	4
CHS 350	Studies in Chinese Language	3
CHS 360	Chinese Film Studies	3
CHS 366	Chinese Culture: Tradition and Modernity (W)	3
CHS 401	Fourth-Year Chinese I	3
CHS 402	Fourth-Year Chinese II	3
CHS 410	Chinese Short Stories	3
CHS 411	Advanced Spoken Chinese	3
CHS 466	Modern Chinese Literature and Films (W)	3
ENG 352	Readings in Asian/Asian American/Asian Diaspora Literature and Visual Culture	3
HA 260	Asian Art	3
HA 462	The Arts of China	4
JPN 102	Elementary Japanese II	5
JPN 201	Second-Year Japanese I	5
JPN 202	Second-year Japanese II	5
JPN 301	Third-year Japanese I	4
JPN 302	Third-year Japanese II	4
JPN 350	Studies in Japanese Language	3
JPN 369	Introduction to Japanese Literature and Culture	3
JPN 401	Fourth-year Japanese I	3
JPN 402	Fourth-year Japanese II	3
JPN 431	Advanced Spoken Language	3
JPN 441	Japanese Short Stories	3
JPN 451	Advanced Japanese for Japanese Language Proficiency Test Preparation	3
JPN 469	Research Seminar in Japanese Literature and Culture (W)	3
JPN 491	Topics in Japanese Studies	1 to 3
KOR 102	Elementary Korean II	4
KOR 201	Intermediate Korean I	4
KOR 202	Intermediate Korean II	4
KOR 301	Intermediate-High Korean I	3
KOR 302	Intermediate-High Korean II	3
KOR 401	Advanced Korean I	3
KOR 402	Advanced Korean II	3
LL 152	First-Year Less Commonly Taught Language II	4
LL 251	Second-Year Less Commonly Taught Language I	4
LL 252	Second-Year Less Commonly Taught Language II	4
LL 261	Advanced Less Commonly Taught Language I	4
LL 262	Advanced Less Commonly Taught Language II	4
LL 301	Third-Year Less Commonly Taught Language I	3
LL 302	Third-Year Less Commonly Taught Language II	3
LL 401	Fourth-Year Less Commonly Taught Language I	3
LL 402	Fourth-Year Less Commonly Taught Language II	3
REL 325	East Asian Buddhism	3
REL 335	East Asian Religions	3
REL 355	Southeast Asian Religions	3
	Linguistics and Languages (LL) courses must be in Hindi and Urdu languages only.	
4.	The following capstone course (4 credits):	
MC 319	Asian American History	4

MINOR IN ASIAN STUDIES

The Minor in Asian Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the minor complements a number of major fields, students who plan graduate study related to Asia or who wish to pursue careers in government or with corporations in Asia may find the minor particularly

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appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree. Courses taken in a Michigan State University Study Abroad program in Asia may be counted toward the minor with the permission of the Director of the Asian Studies Center and the student's advisor.

The Minor in Asian Studies provides an opportunity for students to create a multidisciplinary specialty with Asia as the focus. The student's program of study for the minor must be approved in advance and in writing by the advisor for Asian Studies in Social Science.

Requirements for the Minor in Asian Studies

	CREDITS
The student must complete a minimum of 16 credits:	
1. The following core course (4 credits):	
HST 160 Introduction to Asian History and Culture	4
2. One of the following courses (3 or 4 credits):	
ANP 414 Anthropology of South Asia	3
ANP 415 China: Culture and Society	3
ANP 419 Anthropology of the Middle East	3
EC 406 Economic Analysis of Russia and the Commonwealth of Independent States (W)	3
EC 413 Economic Analysis of Asia (W)	3
GEO 339 Geography of the Middle East and North Africa	3
GEO 340 Geography of Eurasia	3
HST 209 Traditional East Asia	4
HST 210 Modern East Asia	4
HST 343 Russia from Peter the Great to Lenin	3
HST 344 Russia in Twentieth Century	3
HST 365 The Vietnam War	3
HST 366 Southeast Asia in the Age of Empire	3
HST 367 Imperial China	3
HST 368 China since 1900	3
HST 369 Japan to 1800	3
HST 370 Japan since 1800	3
HST 372 The Middle East: Islam and Empires	3
HST 373 The Modern Middle East: From Empires to Nation States	3
HST 451 Special Topics in Asian History	3
HST 485 Seminar in Asian History (W)	3
ISS 330B Asia: Social Science Perspectives (I)	4
MC 441 Islam and World Politics	4
PLS 354 Politics of Asia	3
PLS 358 Politics of the U.S.S.R. and Its Successor States	3
The following courses may not fulfill requirement 3. below if used to fulfill this requirement: MC 441 and PLS 358.	
3. Complete at least 6 credits from the following courses (6 credits):	
ASN 291 Special Topics in Asian Languages	1 to 4
ASN 401 East Asian Cultures (W)	3
HA 260 Asian Art	3
HA 261 Modern Asian Art	3
HA 462 The Arts of China	4
HA 463 Japanese Art	4
IAH 204 Asia and the World (I)	4
IAH 211B Area Studies and Multicultural Civilizations: Asia (I)	4
LL 250B Topics in National Cinemas: East Asian Cinema	3
MC 323 Japanese Foreign Policy	4
MC 324D Regional Politics, Cooperation, and Conflict in Asia	4
MC 328 Russian Foreign Policy	4
MC 441 Islam and World Politics	4
MUS 425 Music of South Asia and Its Diaspora	2
MUS 429 Music of East Asia	2
PLS 358 Politics of the U.S.S.R. and Its Successor States	3
REL 325 East Asian Buddhism	3
REL 330 Islam	3
REL 335 East Asian Religions	3
REL 340 Hinduism	3
REL 345 Religions of South Asia	3
REL 350 Buddhism in South Asia	3
REL 355 Southeast Asian Religions	3
REL 430 The Qur'an and Its Interpreters (W)	3

- REL 432 Modern Muslim Thought (W) 3
The following courses may not fulfill requirement 2. above if used to fulfill this requirement: MC 441 and PLS 358. Students may not use both IAH 204 and IAH 211B to fulfill this requirement.
4. The following course (3 credits):
GEO 337 Geography of Asia-Pacific 3
With the advance approval of the Asian Studies advisor in the College of Social Science, other courses and options such as study abroad, study away, and independent study may be used to fulfill minor requirements. Student are encouraged to take courses in Asian languages to enhance their understanding of Asia.

MINOR IN CHICANO/LATINO STUDIES

The Minor in Chicano/Latino Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the minor complements a number of major fields, students who wish to pursue careers in education, social work, government, healthcare, in businesses that serve mixed ethnic communities or who plan graduate study related to the arts and humanities or social sciences may find the minor particularly appealing. With the approval of the department and college that administer the student's degree program, the courses used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

The Minor in Chicano/Latino Studies is designed to develop students' understanding of the multicultural dimensions of society; to gain knowledge of Chicana/o/x and Latina/o/x scholarship and scholars; and to apply that knowledge to the study of Chicana/o/x and Latina/o/x communities and life. The minor draws on research, teaching, and community service among Chicanos/os/xs and Latinas/os/xs that: (1) focuses intensively on the histories of different racial and cultural subgroups of Latinas/os/xs; (2) draws larger theoretical lessons from comparisons among Latina/o/x groups and between Latina/o/x and non-Latina/o/x populations; (3) seeks to articulate general principles that shape racial and ethnic relations; (4) explores how ethnic identity is constructed and reconstructed over time; and (5) develops methodologies and principles which empower students to enhance leadership and human relations within diverse communities of peoples and conditions.

Students who plan to complete the requirements of the minor should consult the Director of Chicano/Latino Studies.

Requirements for the Minor in Chicano/Latino Studies

	CREDITS
The student must complete a total of 15 credits including:	
1. The following course:	
CLS 201 Introduction to Chicano/Latino Studies	3
2. Complete three courses from the following (9 credits):	
a. At least one course from the College of Social Science:	
CLS 490 Independent Study in Chicano/Latino Studies	3
CLS 493 Internship in Chicano/Latino Studies	1 to 6
HST 327 History of Mexican Americans in the United States	3
HST 383 The Caribbean	3
HST 384 Modern Mexico	3
PLS 304 Minority Politics	3
PLS 392 Special Topics in Political Science	1 to 4
SSC 399 Service Learning and Civic Engagement: Theory and Practice	1 to 6
b. At least one course from outside the College of Social Science:	
ENG 351 Readings in Chicano and Latino Literatures	3

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FLM 211	Documentary History and Theory	3
FLM 460	Seminar in Digital Film and Emergent Media (W)	3
GSAH230	Values, Experience, and Difference in Global Contexts	3
SPN 320	Cultural Readings and Composition (W)	3
SPN 350	Introduction to Reading Hispanic Literature (W)	3
SPN 412	Topics in Hispanic Cultures	3
SPN 491	Special Topics in Spanish	3
TE 250	Human Diversity, Power, and Opportunity in Social Institutions	3

Chicano/Latino Studies 490 and 493 may only be counted once towards the minor. Students enrolling in Film Studies 460, Global Studies in the Arts and Humanities 230, Political Science 392, Spanish 491, Social Science 399, or Teacher Education 250 must have its content approved by the Director of the Chicano/Latino Studies program.

3. The following capstone course (3 credits):

CLS 492	Chicano and Latino Studies: Research, Theory and Practice	3
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MINOR IN CITIES: ENVIRONMENT, DESIGN, AND SOCIETY

The Minor in Cities: Environment, Design, and Society, administered by the College of Social Science, is designed to assist students in understanding the social and environmental context of cities in the modern world in order to apply their learning in careers in various social science fields.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult their major undergraduate advisor in the College of Social Science.

Requirements for the Minor in Cities: Environment, Design, and Society

Complete a minimum of 15 credits from the following:

	CREDITS
1. The following course (3 credits):	
UP 100 The City	3
2. One of the following courses (3 credits):	
ANP 426 Urban Anthropology	3
EC 438 Urban Economics (W)	3
GEO 413 Urban Geography	3
GEO 418 The Ghetto	3
PLS 302 Urban Politics	3
SOC 375 Urban Sociology	3
SSC 497 Flint Community Internship	3 to 12
SSC 498 Innovate Gov Internship	3 to 12
UP 201 Introduction to Urban and Regional Planning	4
UP 458 Housing and Real Estate Development	3
UP 488 The Sustainable and Climate Resilient City	3
3. A minimum of 6 credits from the following courses:	
CSUS200 Introduction to Sustainability	3
CSUS447 Community Economic Development	3
FOR 461 Urban and Community Forestry	3
HRT 460 Green Roofs and Walls	2
IDES 140 Design for Living	3
IDES 344 History of Interior Design: Ancient through Rococo	3
IDES 354 History of Interior Design: Neo-Classical through Modern	3
IDES 440 Contemporary Design Issues	2
LA 200 Introduction to Landscape Architecture	3
MC 367 Global Cities and Urbanism	4
MC 384 Metropolitan Society	4
PDC 403 Introduction to Domicology: Sustainable Built Environment	3
TE 351 Urban Education	3
4. The following capstone course (3 credits):	

HST 396	The City and its Discontents: Perspectives Past and Present	3
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MINOR IN ENVIRONMENTAL SOCIAL SCIENCE

The Minor in Environmental Social Science, which is administered by the Department of Sociology, enhances the education of students who are interested in issues relating to the environment, including those who wish to prepare themselves for advanced degree programs in environmental social science or careers in related fields.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.

Requirements for the Minor in Environmental Social Science

	CREDITS
Complete a minimum of 15 credits from the following:	
1. The following course (3 credits):	
SOC 252 Introduction to Environmental Sociology	3
2. One of the following courses (3 credits):	
ANP 443 Human Adaptability	3
ANP 486 Environmental Archaeology	3
EC 450 Economics of Environmental Policy (W)	3
GEO 201 Introduction to Plant Geography	3
GEO 203 Introduction to Meteorology	3
GEO 204 World Regional Geography	3
GEO 206 Physical Geography	3
GEO 211 Environmental Policy and Practice	3
HST 391 Environmental History of North America	3
UP 488 The Sustainable and Climate Resilient City	3
3. Two of the following courses (6 credits):	
AFRE 206 World Food, Population, and Poverty	3
AFRE 265 Ecological Economics	3
CSUS 310 History of Environmental Thought and Sustainability	3
CSUS 463 Food Fight: Politics of Food	3
ENT 205 Pest, Society, and Environment	3
FOR 330 Human Dimensions of Forests	3
FW 434 Human Dimensions of Fisheries and Wildlife Management	3
FW 439 Conservation Ethics	3
IBIO 446 Environmental Issues and Public Policy	3
PHL 342 Environmental Ethics	3
REL 210 Religion and the Environment	3
4. The following capstone course (3 credits):	
SOC 452 Advanced Seminar in Environmental Sociology	3

MINOR IN GLOBAL STUDIES IN SOCIAL SCIENCE

The Minor in Global Studies in Social Science, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The minor should be attractive to students who plan careers with a global focus and who, therefore, wish to add a strong global dimension to their disciplinary majors. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

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The Minor in Global Studies in Social Science is designed for students who wish to increase their understanding of the processes of continuity and change in various regions of the world, particularly Africa, Asia, Europe, and Latin America. The minor provides an opportunity for students to learn how contemporary global systems influence global relations and national trends, as well as how culture shapes processes of continuity and change in one of the major world regions. Multidisciplinary in theory and practice, the minor is based on the methodologies, theories, and literatures of the social sciences and liberal arts and involves faculty from the social sciences, languages, and applied professional fields.

The College of Social Science academic advisor for Global Studies in Social Science assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the minor must be approved in advance and in writing by the advisor for global studies in social science.

Requirements for the Minor in Global Studies in Social Science

The student must meet the requirements specified below:

- | | CREDITS |
|--|---------|
| 1. Complete a minimum of 15 credits in courses at the 200 level or above excluding any credits in courses that are used to satisfy the Foreign Language Proficiency requirement referenced in item 2. below. Not more than 4 of the 15 credits may be in 200-level courses. | |
| 2. Foreign Language Proficiency: Demonstrate proficiency in a modern foreign language equivalent to four semesters of study at the university level. The results of the Michigan State University foreign language placement test will be considered in determining whether or not the student has fulfilled this requirement. The student is encouraged to complete a fifth semester of study in the language that focuses on the culture, history, and literature of a developing region of the world. | |
| 3. Conceptual Courses: Complete at least two of the following courses that are in a field other than the student's major (6 credits): | |
| ABM 427 Global Agri-Food Industries and Markets | 3 |
| ANP 321 Anthropology of Social Movements | 3 |
| ANP 370 Culture, Health, and Illness | 3 |
| ANP 431 Gender, Environment and Development | 3 |
| ANP 436 Globalization and Justice: Issues in Political and Legal Anthropology | 3 |
| ANR 250 Global Issues in Agriculture and Natural Resources | 3 |
| ANR 475 International Studies in Agriculture and Natural Resources | 2 to 6 |
| ANS 480 Animal Systems in International Development | 3 |
| EC 410 Issues in the Economics of Developing Countries (W) | 3 |
| EEP 260 World Food, Population and Poverty | 3 |
| GEO 435 Geography of Health and Disease | 3 |
| GEO 454 Geography of Environment and Development | 3 |
| MC 320 Politics, Society and Economy in the Third World | 4 |
| PLS 342 Comparative Political Economy | 3 |
| PLS 344 Politics of Developing Countries | 3 |
| PLS 347 Democratic Regimes | 3 |
| PLS 363 International and Domestic Political Conflict | 3 |
| SOC 310 Global Migration | 3 |
| SOC 362 Developing Societies | 3 |
| SOC 416 Global Regions | 3 |
| SOC 451 Dynamics of Population | 3 |
| SOC 452 Environment and Society | 3 |
| WS 403 Women and Change in Developing Countries | 3 |
| 4. Regional Courses: Complete at least one course in any one of the following four geographic areas (3 or 4 credits): | |
| Africa and the Middle East | |
| ANP 416 Anthropology of Southern Africa | 3 |
| ANP 419 Anthropology of the Middle East | 3 |
| EC 414 Economic Analysis of Sub-Saharan Africa (W) | 3 |
| GEO 338 Geography of Africa | 3 |

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| GEO 339 Geography of the Middle East and North Africa | 3 |
| HST 208 Introduction to African History, Culture and Society | 4 |
| HST 361 African History since 1800 | 3 |
| HST 364 South Africa: From Shaka Zulu to Mandela | 3 |
| HST 373 The Modern Middle East: From Empires to Nation States | 3 |
| HST 450 Special Topics in African History | 3 |
| HST 484 Seminar in African History (W) | 3 |
| MC 324A Regional Politics, Cooperation, and Conflict in the Middle East | 4 |
| MC 324B Regional Politics, Cooperation, and Conflict in Sub-Saharan Africa | 4 |
| PLS 346 Middle East Politics | 3 |
| PLS 351 African Politics | 3 |
| Asia | |
| ANP 414 Anthropology of South Asia | 3 |
| ANP 415 China: Culture and Society | 3 |
| ANP 437 Asian Emigrant Communities: A Global Perspective | 3 |
| EC 413 Economic Analysis of Asia (W) | 3 |
| GEO 337 Geography of Asia-Pacific | 3 |
| HST 210 Modern East Asia | 4 |
| HST 367 Imperial China | 3 |
| HST 368 China since 1900 | 3 |
| HST 369 Japan to 18003 | 3 |
| HST 370 Japan Since 1800 | 3 |
| HST 451 Special Topics in Asian History | 3 |
| HST 485 Seminar in Asian History (W) | 3 |
| MC 323 Japanese Foreign Policy | 4 |
| MC 324D Regional Politics, Cooperation and Conflict in Asia | 4 |
| PLS 354 Politics of Asia | 3 |
| Europe | |
| EC 406 Economic Analysis of Russia and the Commonwealth of Independent States (W) | 3 |
| GEO 336 Geography of Europe | 3 |
| GEO 340 Geography of Eurasia | 3 |
| HST 336 Contemporary Europe, 1870 to Present | 3 |
| HST 342 Modern East-Central Europe | 3 |
| HST 344 Russia in the Twentieth Century | 3 |
| HST 348 Modern Germany | 3 |
| HST 452 Special Topics in European History | 3 |
| MC 328 Russian Foreign Policy | 4 |
| PLS 356 Politics of Europe and the European Union | 3 |
| PLS 358 Politics of the U.S.S.R. and Its Successor States | 3 |
| Latin America and the Caribbean | |
| ANP 410 Anthropology of Latin America | 3 |
| EC 412 Economic Analysis of Latin America (W) | 3 |
| GEO 335 Geography of Latin America | 3 |
| HST 212 National Latin America | 4 |
| HST 382 Modern Brazil 3 | 3 |
| HST 383 The Caribbean | 3 |
| HST 384 Modern Mexico | 3 |
| HST 453 Special Topics in Latin American History | 3 |
| HST 486 Seminar in Latin American History (W) | 3 |
| MC 324C Regional Politics, Cooperation, and Conflict in Latin America and the Caribbean | 4 |
| 5. Field Experience, Internship, Thesis, or Independent Study (3 or 4 credits): Complete one of the following three options: | |
| a. An overseas field experience or internship in one of the four geographic areas listed in item 4. above. | |
| b. A domestic internship that involves working on global issues. | |
| c. A thesis or independent study under the direction of a faculty member. | |
| 6. Senior-level Seminar Course (3 or 4 credits). Complete one course with significant global content, approved by the College of Social Science academic advisor for the Global Studies in Social Science minor. | |

MINOR IN HUMAN BEHAVIOR AND SOCIAL SERVICES

The Minor in Human Behavior and Social Services, administered by the College of Social Science, provides an interdisciplinary study of the human behavior and social services that prepare students to critically assess the different

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perspectives on aspects of human behavior which may create the need for assistance and how social service programs respond to those needs.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult their major undergraduate advisor in the College of Social Science.

Requirements for the Minor in Human Behavior and Social Services

Complete a minimum of 15 credits from the following:

	CREDITS
1. The following course (3 credits):	
SW 200 Introduction to Social Work	3
2. One of the following courses (3 or 4 credits):	
ANP 320 Social and Cultural Theory	3
ANP 370 Culture, Health and Illness	3
PSY 101 Introductory Psychology	4
SOC 241 Social Psychology	3
SOC 475 Health and Society	3
SSC 497 Flint Community Internship	3 to 12
SW 471 Child Welfare 3	
3. One of the following courses (3 or 4 credits):	
HNF 150 Introduction to Human Nutrition	3
MMG 141 Introductory Human Genetics	3
PSL 250 Introductory Physiology	4
4. One of the following courses (3 credits):	
CEP 260 Dynamics of Personal Adjustment	3
CEP 261 Substance Abuse	3
CEP 470 Disability in a Diverse Society	3
PHL 340 Ethics	3
PHL 344 Ethical Issues in Health Care	3
PHL 350 Introduction to Social and Political Philosophy	3
TE 150 Reflections on Learning	3
TE 250 Human Diversity, Power, and Opportunity in Social Institutions	3
5. One of the following capstone courses (3 or 4 credits):	
HDFS447 Management of Human Service Programs	3
SW 494B Social Work Field Education: Undergraduate Generalist Practice II	4

Students interested in SW 494B must be a social work major.

MINOR IN INTERNATIONAL DEVELOPMENT

The Minor in International Development, administered by the College of Social Science, is an enhanced integrative learning program of study designed to assist students in understanding the social context of international development. Students will acquire a basic understanding of how social scientists approach international development and how to integrate different approaches to the interrelationships of topics around international development.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science or James Madison College. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.

Requirements for the Minor in International Development

Complete a minimum of 15 credits from the following:

	CREDITS
1. The following course (3 credits):	
ANP 201 Introduction to Cultural Anthropology	3
2. One of the following courses (3 credits):	
EC 310 Economics of Developing Countries	3
EC 410 Issues in the Economics of Developing Countries (W)	3
GEO 204 World Regional Geography	3
HST 390 History of International Relations	3
PLS 342 Comparative Political Economy	3
PLS 344 Politics of Developing Areas	3
SOC 362 Developing Societies	3
3. Two of the following courses (6 credits):	
CSS 101 Introduction to Crop Science	3
CSS 120 Issues in Food and Agriculture	3
CSS 431 International Agriculture Systems	3
CSUS215 International Development and Sustainability	3
EEM 260 World Food, Population and Poverty	3
GSAH220 Global Interactions and Identities	3
MC 430 Applied International Development	3
PHL 358 Philosophy, Gender, and Global Development	3
PHL 452 Ethics and Development	3
WS 403 Women and Change in Developing Countries	3
4. The following capstone course (3 credits):	
ANP 325 Anthropology of the Environment and Development	3

MINOR IN LATIN AMERICAN AND CARIBBEAN STUDIES

The Minor in Latin American and Caribbean Studies, which is administered by the College of Social Science, emphasizes coherent course work about the cultural context, history, politics, economics, and geography of Latin American and the Caribbean with the potential for complementary experiential learning. Some courses focus on individual countries, while others are comparative and cross-national.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.

Requirements for the Minor in Latin American and Caribbean Studies

The student must complete a minimum of 16 credits as specified below:

	CREDITS
1. The following course (4 credits):	
HST 212 National Latin America	4
2. One of the following courses (3 or 4 credits):	
EC 412 Economic Analysis of Latin America (W)	3
GEO 335 Geography of Latin America	3
HST 211 Colonial Latin America	4
HST 382 Modern Brazil	3
HST 383 The Caribbean	3
HST 384 Modern Mexico	3
HST 453 Special Topics in Latin American History	3
HST 486 Seminar in Latin American History (W)	3
3. Two of the following courses (6 to 8 credits):	
ENG 351 Readings in Chicano and Latino Literatures	3

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HA 254	Latin American Art	3
IAH 203	Latin America and the World (I)	4
MC 324C	Regional Politics, Cooperation and Conflict in Latin America and the Caribbean	4
PHL 212	Latin American Philosophy	3
PRT 150	Intensive Beginning Portuguese	5
PRT 250	Intensive Intermediate Portuguese	5
PRT 320	Advanced Portuguese	3
PRT 340	Topics in Luso-Brazilian Language and Culture	3
PRT 350	Introduction to Literary Analysis (W)	3
SPN 342	Media and Conversation	3
SPN 350	Introduction to Reading Hispanic Literature (W)	3
SPN 412	Topics in Hispanic Culture	3
SPN 432	Latin America and its Literature	3
SPN 472	Topics in the Literatures of the Americas	3
4.	The following capstone course (3 credits):	
ANP 410	Anthropology of Latin America	3

MINOR IN LAW, JUSTICE AND PUBLIC POLICY

The Minor in Law, Justice and Public Policy, administered by the College of Social Science, enhances the education and training of students who anticipate entering fields that require multidisciplinary approaches to advanced research, professional practice, or policymaking related to law.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult their major undergraduate advisor in the College of Social Science.

Requirements for the Minor in Law, Justice and Public Policy

Complete 15 credits from the following:

	CREDITS
1. The following course (3 credits):	
CJ 110 Introduction to Criminal Justice	3
2. One of the following courses (3 credits):	
CJ 220 Criminology	3
EC 425 Law and Economics (W)	3
HDFS448 Child and Family Policy	3
HST 225 Law, History and Society in the United States	3
PLS 321 Constitutional Law	3
SOC 214 Social Inequality	3
SSC 498 Innovate Gov Internship	3 to 12
3. Two of the following courses (6 credits):	
CSUS465 Environmental and Natural Resource Law	3
ENG 473B Law and Literature	3
FW 181 Introduction to Science, Technology, the Environment and Public Policy	3
GBL 323 Introduction to Business Law	3
GSAH310 Questions of Justice in Global Contexts	3
IBIO 446 Environmental Issues and Public Policy	3
JRN 430 News Media Law and Ethics	3
PHL 101 Introduction to Philosophy	3
PHL 340 Ethics	3
PHL 342 Environmental Ethics	3
PHL 353 Core Themes in Peace and Justice Studies	3
PHL 354 Philosophy of Law	3
4. The following capstone course (3 credits):	
PLS 320 Judicial Politics	3

MINOR IN PEACE AND JUSTICE STUDIES

The Minor in Peace and Justice Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The minor explores issues of human rights, social justice, environmental justice, economic justice, activism, peace, violence, and conflict, examining their connections and distinctions through an interdisciplinary curriculum that stimulates students to develop the critical thinking skills necessary to face global challenges. The minor allows students to explore a range of thematic issues by developing a series of critical analytics that enable them to discern how power and injustice operate. Students will use critical thinking skills to analyze particular case studies or thematic issues.

With the approval of the department and the college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree. The student's program of study must be approved by the undergraduate advisor for Peace and Justice Studies before enrollment.

Requirements for the Minor in Peace and Justice Studies

The student must complete the following (15 credits):

	CREDITS
1. One of the following core courses focusing on basic concepts and assumptions of peace and justice, contexts of violence and domination, alternatives to violence and domination, and peace and justice as a practice (3 credits):	
ANP 436 Globalization and Justice: Issues in Political and Legal Anthropology	3
ANP 439 Human Rights: Anthropological Perspectives	3
PHL 353 Core Themes in Peace and Justice Studies	3
2. Complete 12 credits from the following. At least 9 credits must be at the 300-400 level and 3 credits must be in a subject outside the student's major. Courses must be approved by the undergraduate advisor for the Minor in Peace and Justice Studies to ensure appropriate amount of peace and justice studies content.	
ANP 220 Gender Relations in Comparative Perspective	3
ANP 236 The Anthropology of Peace and Justice	3
ANP 270 Women and Health: Anthropological and International Perspectives	3
ANP 321 Anthropology of Social Movements	3
ANP 325 Anthropology of the Environment and Development	3
ANP 330 Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity	3
ANP 410 Anthropology of Latin America	3
ANP 426 Urban Anthropology	3
ANP 431 Gender, Environment and Development	3
CJ 220 Criminology	3
CJ 355 Juvenile Justice	3
CJ 422 Comparative and Historical Criminal Justice	3
CJ 425 Women and Criminal Justice	3
COM 100 Human Communication	3
EAD 363 Diversity and Higher Education	3
EC 495 Economics of Poverty and Income Distribution (W)	3
EEM 260 World Food, Population and Poverty	3
GEO 418 The Ghetto	3
GEO 432 Environmental Ethics (W)	3
GSAH310 Conflict and Justice in a Global Setting	3
GSAH312 Media Mobility: Change, Access, Representation	3
HST 313 Women in the United States to 1869	3
HST 364 South Africa: From Shaka Zulu to Mandela	3
HST 365 The Vietnam War	3
HST 392 History of the Holocaust	3
HST 414 World War II: Causes, Conduct and Consequences	3
HST 415 The First World War	3

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HST 420	History of Sexuality since the 18th Century	3	EC 495	Economics of Poverty and Income Distribution (W)	3
HST 487	Seminar in Comparative History (W)	3	HST 365	The Vietnam War	3
JRN 345	Images and Messages	3	HST 392	History of the Holocaust	3
JRN 372	Environment, Science and Health Journalism Special Topics	3	HST 414	World War II: Causes, Conduct and Consequences	3
JRN 375	International Journalism and Media	3	HST 415	The First World War	3
JRN 475	International News and Government Dynamics	3	PLS 160	Introduction to International Relations	3
MC 280	Social Theory and Social Relations	4	PLS 363	International and Domestic Political Conflict	3
MC 281	Immigrants, Minorities, and American Pluralism	4	PLS 364	Politics of the United Nations and International Organizations	3
MC 322	International Security	4	SOC 214	Social Inequality	3
MC 324A	Regional Politics, Cooperation, and Conflict in the Middle East	4	SOC 252	Introduction to Environmental Sociology	3
MC 324B	Regional Politics cooperation, and Conflict in Sub-Saharan Africa	4	c. Two of the following courses (6 credits):		
MC 324C	Regional Politics, Cooperation, and Conflict in Latin America and the Caribbean	4	COM 100	Human Communication	3
MC 324D	Regional Politics, Cooperation, and Conflict in Asia	4	EEM 260	World Food Population and Poverty	3
MC 337	Global Public Health	4	GSAH310	Questions of Justice in Global Contexts	3
MC 366	Film, History, and Nation	4	JRN 345	Images and Messages	3
MC 369	Global Issues and Citizenship (W)	4	JRN 372	Environment, Science and Health Journalism Special Topics	3
MC 377	Culture, Politics and Post-Colonialism	4	JRN 375	International Journalism and Media	3
MC 382	Social Movements	4	PHL 353	Core Themes in Peace and Justice	3
MC 385	Comparative Race and Ethnic Relations	4	REL 185	Introduction to Religion and Nonprofits	3
MC 386	Women and Power in Comparative Perspective	4	WRA 441	Social Justice as Rhetorical Practice	3
MC 387	Jews and Anti-Semitism	4	d. The following capstone course (3 credits):		
MC 388	Sexual Politics: Historical and Contemporary Perspectives	4	ANP 321	Anthropology of Social Movements	3
MC 482	Gender and Violent Conflict	4	MINOR IN RACE AND ETHNICITY IN THE UNITED STATES		
PHL 291	Special Topics in Introductory Philosophy	3 to 4	The Minor in Race and Ethnicity in the United States, administered by the College of Social Science, is designed to assist students in understanding the social context of racial and ethnic categories by focusing on how it is constructed in the United States.		
PHL 342	Environmental Ethics	3	The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.		
PHL 350	Introduction to Social and Political Philosophy	3	Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.		
PHL 351	African Philosophy	3	Requirements for the Minor in Race and Ethnicity in the United States		
PHL 354	Philosophy of Law	3	CREDITS		
PHL 356	Philosophical Aspects of Feminism	4	Students must complete a minimum of 15 credits from the following:		
PHL 357	Philosophy of Karl Marx	3	1. The following course (3 credits):		
PHL 358	Philosophy, Gender, and Global Development	3	SOC 215 Race and Ethnicity 3		
PHL 450	Liberal Theory and Its Critics	3	2. One of the following courses (3 or 4 credits):		
PHL 451	Philosophy and the Black Experience	3	ANP 433 Contemporary American Indian Communities 3		
PHL 452	Ethics and Development	3	ANP 443 Human Adaptability 3		
PHL 453	Ethical Issues in Global Public Health	3	HDFS442 Ethnic Families in America 3		
PHL 454	Topics in Philosophy of Law	3	HST 309 American Indian History: Precontact to the Present 3		
PHL 456	Topics in Feminist Philosophy	4	HST 311 African American History since 1876 3		
PLS 160	Introduction to International Relations	3	HST 317 American Jewish History 3		
PLS 320	Judicial Process	3	HST 327 History of Mexican Americans in the United States 3		
PLS 344	Politics of Developing Areas	3	PLS 304 Minority Politics 3		
PLS 363	International and Domestic Political Conflict	3	SSC 497 Flint Community Internship 3 to 12		
PLS 364	Politics of the United Nations and International Organizations	3	SSC 498 Innovate Gov Internship 3 to 12		
RCAH 203	Transcultural Relations through the Ages	4	3. Two of the following courses (6 credits):		
RCAH 390	Immersions in Language and Culture	3	AAAS300 Survey in Africana Studies 3		
REL 185	Introduction to Religion and Nonprofits	3	ENG 350 Readings in African, African-American, or African Diaspora Literature 3		
SOC 214	Social Inequality	3	ENG 352 Readings in Asian/Asian American/Asian Diaspora Literature and Visual Culture 3		
SOC 215	Race and Ethnicity	3	ENG 354 Readings in Native American Literature 3		
SOC 216	Sex and Gender	3	PHL 350 Introduction to Social and Political Philosophy 3		
SOC 252	Introduction to Environmental Sociology	3	PHL 451 Philosophy and the Black Experience 3		
SOC 331	Political Sociology	3	TE 250 Human Diversity, Power, and Opportunity in Social Institutions 3		
SOC 481	Social Movements and Collective Identities	3			
WRA 441	Social Justice and Rhetorical Practice	3			
WS 301	Sexual Violence Against Women and Children: Theory and Response	3			
WS 403	Women and Change in Developing Countries	3			
3. Completion of a Capstone Paper. This paper may derive from one of the courses completed for requirements 1. or 2. It is intended to synthesize themes the student examined in the minor. A faculty member affiliated with the Minor in Peace and Justice Studies must approve the paper and inform the undergraduate advisor for Peace and Justice Studies of its satisfactory completion.					
4. Students majoring in a College of Social Science major may complete the following set of requirements in fulfillment of the minor requirements in lieu of requirements 1., 2., and 3. above. Students who plan to complete these requirements should consult an undergraduate advisor in the College of Social Science. The requirements may meet the College of Social Science college interdisciplinary minor requirement.					
a. The following course (3 credits):					
ANP 236	The Anthropology of Peace and Justice	3			
b. One of the following courses (3 credits):					
CJ 422	Comparative and Historical Criminal Justice	3			

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Not more than one English or Philosophy option may be used toward this requirement.

4. The following capstone course (3 credits):
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| ANP 330 | Race, Ethnicity and Nation: Anthropological Approaches to Collective Identity | 3 |
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MINOR IN SOCIAL SCIENCE QUANTITATIVE DATA ANALYTICS

The Minor in Social Science Quantitative Data Analytics, administered by the College of Social Science, enhances the education and empowers students interested in understanding how core social science skills such as critical thinking and theoretically oriented analysis are useful in the systematic collection, integration, analysis, and presentation of large-scale and dense information.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Requirements for the Minor in Social Science Quantitative Data Analytics

CREDITS

Students must complete a minimum of 15 credits from the following:

- | | | |
|--|---|---|
| 1. The following course (3 credits): | | |
| PLS 202 | Introduction to Data Analytics and the Social Sciences | 3 |
| 2. One of the following quantitative methods courses (3 or 4 credits): | | |
| EC 420 | Introduction to Econometric Methods | 3 |
| GEO 363 | Introduction to Quantitative Methods for Geographers | 3 |
| MTH 234 | Multivariable Calculus | 4 |
| PSY 395 | Research Design and Measurement in Psychological Research | 3 |
| SOC 282 | Quantitative Analysis for Social Research | 4 |
| STT 200 | Statistical Methods | 3 |
| STT 201 | Statistical Methods | 4 |
| STT 315 | Introduction to Probability and Statistics for Business | 3 |
| STT 421 | Statistics I | 3 |
| STT 441 | Probability and Statistics I: Probability | 3 |
| 3. Two of the following courses (6 to 8 credits): | | |
| CMSE201 | Introduction to Computational Modeling and Data Analytics | 4 |
| CMSE202 | Computational Modeling Tools and Techniques | 4 |
| CSE 231 | Introduction to Programming I | 4 |
| CSE 232 | Introduction to Programming II | 4 |
| EC 421 | Advanced Econometric Methods | 3 |
| GEO 325 | Geographic Information Systems | 3 |
| GEO 429 | Geoprocessing | 3 |
| MTH 235 | Differential Equations | 3 |
| PLS 397 | Analyzing and Visualizing Data in Politics | 3 |
| 4. The following capstone course (3 credits): | | |
| SSC 442 | Social Science Data Analytic Applications | 3 |

MINOR IN YOUTH AND SOCIETY

The Minor in Youth and Society, administered by the College of Social Science, is an enhanced interdisciplinary program of study designed to assist students in understanding the development of youth in societies globally, with particular attention to the dynamic interaction of youth, their families, and the societies in which they live.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the

courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult their major undergraduate advisor in the College of Social Science.

Requirements for the Minor in Youth and Society

CREDITS

- | | | |
|---|--|---------|
| Complete 15 credits from the following: | | |
| 1. The following course (3 credits): | | |
| HDFS 212 | Children, Youth and Family | 3 |
| 2. One of the following courses (3 credits): | | |
| CJ 220 | Criminology | 3 |
| HST 250 | History and Technology of the Digital Age | 3 |
| HST 413 | Families in Historical Perspective | 3 |
| PSY 444 | Developmental Psychology: Adolescence through Youth (W) | 3 |
| SOC 316 | Youth and Society | 3 |
| SSC 497 | Flint Community Internship | 3 to 12 |
| SSC 498 | Innovate Gov Internship | 3 to 12 |
| SW 475 | School Violence: Causes and Interventions | 3 |
| 3. Two of the following courses (6 credits): | | |
| CEP 261 | Substance Abuse | 3 |
| COM 225 | An Introduction to Interpersonal Communication | 3 |
| COM 275 | Effects of Mass Communication | 3 |
| CSUS445 | Community-Based Environmental and Sustainability Education | 3 |
| EAD 361 | Educational Reform and Policy Analysis | 3 |
| HNF 150 | Introduction to Human Nutrition | 3 |
| TE 353 | International Education | 3 |
| 4. The following capstone course (3 credits): | | |
| HDFS 412 | Ecological Perspective of Adolescents | 3 |

TEACHER CERTIFICATION OPTIONS

Teacher certification can be attained through the Child Development, History, or Interdisciplinary Studies in Social Science: Social Science Education major. Students who elect the Interdisciplinary Studies in Social Science: Social Science Education major for teacher certification must contact the Interdisciplinary Studies in Social Science office.

The following minors in the College of Social Science also are available for teacher certification: economics, geography, history, political science, psychology, and sociology. Students who elect one of these minors for teacher certification must contact the department in which the minor is based.

For more information, refer to the statement on the major referenced above and to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

COLLEGE OF SOCIAL SCIENCE 3 + 3 OPTION

The College of Social Science, in collaboration with Michigan State University - College of Law, offers an opportunity for selected College of Social Science students to earn a baccalaureate degree after satisfactory completion of a minimum of 92 credits at Michigan State University and a minimum of 28 credits through subsequent enrollment at Michigan State University - College of Law. Students interested in this option should consult with their academic advisors during the first year in the college.

Admission to the Michigan State University - College of Law component of this program is limited to a small number of students who complete the specified university and college

COLLEGE OF SOCIAL SCIENCE

requirements and who earn a grade-point average and a score on The Law School Admission Test (LSAT) that is acceptable for admission to Michigan State University - College of Law.

All students in this program will complete a minimum of 92 credits at Michigan State University, at least 45 of which shall be College of Social Science credits. The requirements for the program are as follows:

1. Completion of the University requirements for the bachelor's degree.
2. Completion of all College of Social Science requirements for the bachelor's degree, including an interdisciplinary minor requirement; Science, Technology, Engineering and Mathematics (STEM) and/or Arts and Humanities (A&H) distribution requirement; and experiential learning requirements.
3. Complete of a specific major in the College of Social Science.
4. Completion of a minimum of 28 credits equivalent to the first-year curriculum at Michigan State University - College of Law.

Upon satisfactory completion of the specified Michigan State University - College of Law credits, students in this program will be awarded the Bachelor of Arts or Bachelor of Science degree.

GRADUATE STUDY

Units within the College of Social Science offer programs leading to degrees of Master of Arts, Master of International Planning Studies, Master of Human Resources and Labor Relations, Master of Public Policy, Master of Science, Master of Social Work, Master of Urban and Regional Planning, and Doctor of Philosophy.

The following dual degrees program are co-sponsored by the College of Social Science and Michigan State University College of Law: Master of Human Resources and Labor Relations and J.D.; Master of Social Work and J.D.; and Master of Urban and Regional Planning and J.D.

For information about the following interdisciplinary specializations, graduate certificates, and degree programs, see the referenced section of this catalog. The College of Social Science is lead sponsor of:

- (1) Graduate Specialization in Animal Studies: Social Science and Humanities Perspective, for all master's and doctoral students at Michigan State University (see statement on this specialization in the *Department of Sociology* section)
- (2) Interdepartmental Graduate Specialization in Infancy and Early Childhood, for master's or doctoral students in the departments of Anthropology, Psychology or Sociology, or MSW students in the School of Social Work, and in a number of other departments and programs at MSU (see statement on this specialization, below)
- (3) Graduate Specialization in International Development, for all master's or doctoral students at Michigan State University (see statement on this specialization, below)
- (4) Interdepartmental Graduate Specialization in Cognitive Science, for master's or doctoral students in Geography or Psychology, and in a number of other departments and

programs at MSU (see statement on this specialization, below)

- (5) Graduate Specialization in Judicial Administration for all master's students at Michigan State University (see statement on this specialization in the *School of Criminal Justice* section)
- (6) Graduate Specialization in Security Management, for master's degree students enrolled in master's degree programs at Michigan State University (see statement on this specialization in the *School of Criminal Justice* section)
- (7) Graduate Specialization in Forensic Science, for doctoral students enrolled in doctoral degree programs at Michigan State University (see statement on this specialization in the *School of Criminal Justice* section)
- (8) Graduate Specialization in Global Urban Studies, for doctoral students enrolled in doctoral degree programs at Michigan State University (see statement on this specialization below)
- (9) Graduate Certificate in Chicano/Latino Studies, for graduate students enrolled in a graduate degree program at Michigan State University (see statement on this certificate below)
- (10) Graduate Certificates in Youth Development Specialist and Youth Program Management and Evaluation, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA) (see statements on these certificates in the *Department of Human Development and Family Studies* section)
- (11) Graduate Certificate in Environmental and Social System Modeling, for graduate students enrolled in a graduate degree program at Michigan State University (see statement on this certificate below).
- (12) Graduate Certificate in Program Evaluation, for graduate students enrolled in a graduate degree program at Michigan State University (see statement on this certificate in the *Department of Psychology* section).

The College of Social Science is a co-sponsor of:

- (1) Interdepartmental Ph.D. program in Ecology, Evolution, and Behavior for doctoral students in Anthropology or Psychology (see statement on this doctoral program in the *College of Natural Science* section)
- (2) Interdepartmental Ph.D. degree program in Neuroscience (see statement on this doctoral program in the *College of Natural Science* section)
- (3) Interdepartmental Graduate Specializations in Environmental and Resource Economics for graduate students enrolled in a graduate degree program at Michigan State University (see statement on this specialization in the *College of Agriculture and Natural Resources* section)
- (4) Graduate Specialization in Gender, Justice, and Environmental Change, for master's or doctoral students in the College of Social Science (see statement on this specialization in the *College of Agriculture and Natural Resources* section)
- (6) Interdisciplinary Graduate Specialization in Women's and Gender Studies, which is administered by the Program in Women, Gender and Social Justice, for master's or

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doctoral students (see statement on this specialization in the *College of Arts and Letters* section)

Requirements for the various degrees are summarized below. For complete requirements of any given program or degree, contact the appropriate unit in the college and see the *Graduate Education* section of this catalog. A student must meet the standards of the university, college, and unit.

Master of Arts

Most students in the College of Social Science pursue the Master of Arts degree, although several other master's degree programs are available through the college.

Requirements for the Degree

A maximum of 8 credits is allowed for thesis research.

Academic Standards

The accumulation of grades below 3.0 (including N grades in the P–N grading system) in more than two courses of three or more credits each removes the student from the degree program; this policy does not apply to courses below the 400 level unless the courses are required for the student's program.

Time Limit

The time limit for completion of the master's degree is six years from the beginning of the first semester in which credit was earned toward the degree.

Other Master's Degrees

Other degrees at the master's level offered by the college are listed below. For a description and summary of the requirements for each degree, consult the section of this catalog devoted to the appropriate department or school. The statements on *Academic Standards* and *Time Limit* for the Master of Arts degree also apply to all other master's degrees in the college.

DEGREE	DEPARTMENT OR SCHOOL
Master of International Planning Studies	School of Planning, Design and Construction
Master of Human Resources	School of Human Resources and Labor Relations
Master of Science	Department of Geography, Environment, and Spatial Studies
Master of Public Policy	School of Criminal Justice
Master of Social Work	Department of Political Science
Master in Urban and Regional Planning	School of Social Work
	School of Planning, Design and Construction

Doctor of Philosophy

The successful completion of the Doctor of Philosophy degree requires scholarly ability of a high order. Ph.D. degree programs, with emphasis on specialization and research, are

offered in each of the departments in the College of Social Science.

Academic Standards

A doctoral student may earn grades below 3.0 (including N grades in the P–N grading system) in not more than two of the courses required by the guidance committee.

CHICANO/LATINO STUDIES

The Doctor of Philosophy degree program in Chicano/Latino Studies prepares scholars, researchers, and teachers in the social sciences and humanities to develop expertise in the historical and contemporary experiences of Chicanas/os/x and Latinas/os/x in their social, cultural, political, and economic contexts. The program emphasizes global, trans-disciplinary, comparative, and applied approaches to knowledge which enhance collaborative scholarly efforts within the university, peer educational institutions, and the broader community. It addresses Chicana/o/x and Latina/o/x experiences in home communities in the United States, and international dimensions and diaspora experiences involving communities in the United States, Latin America, and the Caribbean.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Admission to the Doctor of Philosophy degree in Chicano/Latino Studies is based on an evaluation of the student's academic record. To be considered for admission to the program with regular status, applicants must have a master's degree in an appropriate field or its equivalent, of at least 30 credits of approved course work beyond the bachelor's degree. Applicants without a master's degree or sufficient course work may be admitted provisionally and be required to complete a specified number of collateral courses, not to count toward the degree, before regular admission is granted.

Application forms for graduate school must be completed online for both domestic and international students. The Graduate School website contains all the information necessary to complete the application process. Applicants must submit the following materials:

1. The online application form to the Graduate School.
2. GRE General Test scores no more than five (5) years old, as well as two sets of official transcripts from all colleges and universities attended, to the Chicano/Latino Studies Graduate Program Director.
3. A statement of purpose, three letters of recommendation, and a writing sample to the Chicano/Latino Studies Graduate Program Director. The letters of recommendation must be submitted by the recommender directly to the Chicano/Latino Studies office.
4. Original transcripts from all colleges or universities attended sent directly from the institution to the Chicano/Latino Studies office.

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5. A writing sample of the applicant's best example of written analytic and interpretative work that validates the applicant's aptitudes and abilities in research and academic writing, and their preparation for scholarly work.
6. A statement of purpose of 1000 words or less providing the applicant's explanation of why s/he wishes to pursue a doctoral degree in Chicano/Latino Studies, outlining an area of interest in Chicano/Latino Studies, and discusses career goals.

Guidance Committee

The graduate director will guide students in the selection of courses for the first year. By the end of the second semester of the first year, students should choose their major professor and their guidance committee. The committee shall consist of at least four members, at least two in Chicano/Latino Studies and up to two in related fields.

Requirements for the Doctor of Philosophy Degree in Chicano/Latino Studies

- | | CREDITS |
|---|---------|
| 1. Students must complete 30 credits from the following: | |
| a. All of the following courses (minimum of 15 credits): | |
| CLS 810 Historiography and Social Science Methods in Chicano/Latino Studies | 3 |
| CLS 811 Literary and Cultural Theory in Chicano/Latino Studies | 3 |
| CLS 893E Readings in Chicano/Latino Studies | 1 to 4 |
| CLS 894 Fieldwork in Chicano/Latino Studies | 1 to 4 |
| CLS 896 Seminar in Chicano/Latino Studies | 3 |
| b. A minimum of 3 credits in research methods in an area of specialization. | |
| c. Complete 2 credits of electives from the following: American studies, anthropology, education, English, history of art, history, music, philosophy, political science, psychology, resource development, social work, sociology, and Spanish. The course work must be selected from an approved course list in consultation with the student's guidance committee. | |
| 2. Complete Spanish, Nahuatl, or another Amerindian language to fulfill the language requirement. Demonstrate advanced reading proficiency by passing oral and written examinations. | |
| 3. Pass two comprehensive written examinations as arranged by the guidance committee, one in Chicano/Latino Studies and one in the student's area of specialization. | |
| 4. Complete 24 credits of CLS 999 Doctoral Dissertation Research. | |
| 5. Submit the dissertation proposal to the guidance committee and successfully pass the oral examination in defense of the dissertation. | |

GRADUATE CERTIFICATE IN CHICANO/LATINO STUDIES

The Graduate Certificate in Chicano/Latino Studies exposes students to methodologies specific to Chicano/Latino Studies, and to debates in the field that reflect larger transformations in United States culture and society. Students interested in research related to Chicanas/o/x and Latinas/o/x in the United States will find this certificate program of interest.

Admission

To be considered for admission to the Graduate Certificate in Chicano/Latino Studies, students must:

1. Have a bachelor's degree.
2. Be currently enrolled in a Michigan State University graduate degree program other than the Doctor of Philosophy degree program in Chicano/Latino Studies.
3. Have a minimum grade-point average of 3.0.

4. Obtain approval from the student's primary major advisor and the Chicano/Latino Studies Graduate Program Director by submitting a short application form.

Requirements for the Graduate Certificate in Chicano/Latino Studies

- | | CREDITS |
|--|---------|
| 1. Complete all of the following courses (9 credits): | |
| CLS 810 Historiography and Social Science: Methods in Chicano/Latino Studies | 3 |
| CLS 811 Literary and Cultural Theory in Chicano/Latino Studies | 3 |
| CLS 896 Seminar in Chicano/Latino Studies | 3 |
| 2. Complete 3 credits in related content from another department or graduate-level program as approved by the Chicano/Latino director. | |
| This requirement may be met by either: (1) a graduate-level course that includes at least 50% Chicano/Latino studies content, or (2) a graduate-level course in which the student completes a research assignment addressing a Chicano/Latino studies topic related to course content. | |

GRADUATE CERTIFICATE IN ENVIRONMENTAL AND SOCIAL SYSTEM MODELING

The Graduate Certificate in Environmental and Social System Modeling is designed for students who desire to understand a variety of modeling techniques used to address environmental problems that span human and natural systems. The certificate program exposes students to a range of state-of-the-art techniques including agent-based modeling, systems dynamics modeling, multilevel modeling, and structural equation modeling.

Requirements for the Graduate Certificate in Environmental and Social System Modeling

- | | CREDITS |
|--|---------|
| Students must complete 9 credits from the following: | |
| 1. Both of the following courses (3 credits): | |
| ESP 850 Introduction to Environmental and Social System Modeling | 1 |
| ESP 890 Modeling Environmental and Social Systems | 2 |
| 2. Two of the following courses (6 credits): | |
| CSUS836 Modeling Natural Resource Systems | 3 |
| ENE 801 Dynamics of Environmental Systems | 3 |
| GEO 869 Agent-Based Modeling | 3 |
| SOC 883 Multi-Equation Quantitative Models | 3 |

GRADUATE STUDY

ENVIRONMENTAL SCIENCE AND POLICY

Dual Major

The interdepartmental dual major in environmental science and policy is administered by the College of Social Science. The dual major is available only to those students who are enrolled in a Ph.D. degree program that involves environmental science and policy and who have a graduate major at Michigan State University. The student does not have the option of completing a dual major in environmental science and policy alone.

The educational objectives of the interdepartmental program are to (1) develop interdisciplinary knowledge and skills across natural and social science disciplines related to the environment and to enable collaboration with researchers and practitioners from other disciplines towards addressing environmental challenges; (2)

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gain knowledge of and experience with science based environmental policies, including how scientific knowledge can contribute to practical policies and how interdisciplinary collaboration can improve the effectiveness of policies; and (3) gain practical experience in communicating scientific research to multiple audiences, including scientific communities and the general public.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

Admission

In order to enroll in the dual major in environmental science and policy a student must also have been admitted to a major at Michigan State University.

The Environmental Science and Policy Program (ESPP) Graduate Program Council, composed of members of the faculty from participating departments will review applications for admission and recommend acceptance of applicants for admission. In special cases an applicant who has deficiencies in background courses may be admitted to the dual major on a provisional basis.

Guidance Committee

The program shall be planned in accordance with the statement on *Dual Major Doctoral Degrees* in the *Graduate Education* section of this catalog. At least one member of the student's doctoral dissertation committee shall be an environmental science and policy affiliated faculty member.

Students in the dual major in environmental science and policy are expected to attend a number of community-building activities with other students from different disciplines.

Requirements for the Dual Major in Environmental Science and Policy

- | | CREDITS |
|---|---------|
| 1. All of the following courses with a minimum grade-point average of 3.0 with no more than one course's grade below 3.0 in courses used in fulfillment of the requirements for the dual major (12 credits): | |
| a. The following course (3 credits): | |
| ESP 800 Principles of Environmental Science and Policy | 3 |
| b. One of the following courses (3 credits): | |
| ESP 801 Physical, Chemical, and Biological Processes of the Environment | 3 |
| CSUS836 Modeling Natural Resource Systems | 3 |
| ENE 801 Dynamics of Environmental Systems | 3 |
| c. One of the following courses (3 credits): | |
| ESP 802 Human Systems and Environment | 3 |
| AFRE 829 Economics of Environmental Resources | 3 |
| CSUS 820 Social-Ecological Resilience | 3 |
| CSUS 824 Sustainable Development | 3 |
| SOC 865 Environmental Sociology | 3 |
| SOC 869 Community and Conservation | 3 |
| d. One of the following courses (3 credits): | |
| ESP 804 Environmental Applications and Analysis | 3 |
| FW 868 Water Policy and Management | 3 |
| 2. Twenty-four credits in Doctoral Dissertation Research (course number 999) from the student's departmental major. | |
| 3. Pass a comprehensive examination that will be defined by the requirements of the student's major department and that will include a written examination in which the student demonstrates a knowledge of environmental science and policy as determined by the guidance committee. | |

4. Submit a dissertation that, in the judgment of the student's guidance committee, represents the integration of environmental science and policy and the student's departmental major.

CENTER for INTEGRATIVE STUDIES in SOCIAL SCIENCE

Gerald Ericksen, Director

Integrative Studies is Michigan State University's unique approach to liberal general education, offering a core curriculum that complements specialized work by students in their majors. Integrative Studies courses integrate multiple ways of knowing and modes of inquiry and introduce students to important ways of thinking in the three core knowledge areas: the Arts and Humanities, the Biological and Physical Sciences, and the Social, Behavioral, and Economic Sciences. They assist students early during their study to develop as more critical thinkers. They also encourage appreciation of our humanity and creativity, human cultural diversity, the power of knowledge, and our responsibilities for ourselves and for our world.

Courses in Michigan State University's Integrative Studies Program are aimed at developing intellectual abilities, including critical thinking and interpretive skills. They help increase knowledge about other times, places, and cultures, key ideas and issues in human experience, and the scientific method and its usefulness in understanding the natural and social worlds. They are expected to enhance appreciation of the role of knowledge, and of values and ethics, in understanding human behavior and solving social problems. Finally, they help students recognize responsibilities and opportunities associated with democratic citizenship and with living in an increasingly interconnected, interdependent world. The Center for Integrative Studies in the Arts and Humanities in the College of Arts and Letters has primary responsibility for the Arts and Humanities area of Integrative Studies at Michigan State University.

The Center for Integrative Studies in General Sciences in the College of Natural Sciences has primary responsibility for Integrative Studies courses in the Biological and Physical Sciences at Michigan State University.

The Center for Integrative Studies in the Social Sciences in the College of Social Science has primary responsibility for Integrative Studies courses in the Social, Behavioral, and Economic Sciences at Michigan State University.

GLOBAL and INTERNATIONAL STUDIES IN SOCIAL SCIENCE

UNDERGRADUATE PROGRAM

The Global and International Studies in Social Science major provides students with breadth in social science foundational courses combined with in-depth knowledge in a world region or global topic. World region concentrations include African Studies, Asian Studies, Canadian Studies, European Studies, Latin American and Caribbean Studies, Middle Eastern Studies, and Russian and Eurasian Studies. Global topical concentrations include Gender and Global Change and International Development. Students enrolled in a concentration cannot complete a minor in the same concentration area.

In addition to academic focus on a region or theme, students must demonstrate second-year foreign language proficiency relevant to their course of study. Students develop understanding of the processes of continuity and change in various world regions through multidisciplinary theory and practice and use of methodologies, theories, and literatures of various disciplines and fields.

Students are strongly encouraged to have at least one international experience through study abroad, internships, or independent study. The major helps prepare students for jobs in government, business, and non-governmental organizations that are engaged with the world outside the United States and for graduate study in international or area studies and other fields.

Upon completion of the Bachelor of Arts Degree in Global and International Studies in Social Science, students will be able to 1) summarize the most important topics relevant to the global or thematic area under study; (2) draw on theories from at least two social science disciplines to explain the social issues present in the area or theme of study; (3) use social science research methods to assess the impact of relevant topics on the global or thematic area of study; and (4) explain how social science intersects with other disciplines to enhance understanding of global or thematic topics.

Students must select one of the following concentrations:

African Studies. The African Studies concentration provides an interdisciplinary education focused on African history, language, culture and society.

Asian Studies. The Asian Studies concentration offers students an interdisciplinary education on Asia, particularly South Asia, Southeast Asia and East Asia. Courses focus on the culture, politics, languages and economy of Asian countries.

Canadian Studies. The Canadian Studies concentration focuses studies on Canada, including modern and aboriginal Canadian issues. A special focus on the interrelationship between Canada and the United States is included.

European Studies. The European Studies concentration provides students with specialized education in Europe, with a focus on Western European countries. Courses include discussion on the politics, language history and culture of Europe.

Gender and Global Change. The Gender and Global Change concentration will provide students with important, foundational content in women and gender studies in global and international perspectives.

International Development. The International Development concentration is an enhanced integrative learning program of study designed to provide students with a basic understanding of: 1) how social scientists approach the topic of international development; 2) how to integrate multiple disciplinary approaches to the interrelationships of topics in international development; and 3) how to facilitate both broad and in-depth understanding of the social context in which international development occurs.

Latin American and Caribbean Studies. The Latin American and Caribbean Studies concentration in Latin American and Caribbean studies contains focused coursework on countries in the Caribbean and Central and South America, and the cultures, languages, and societies of that region.

Middle Eastern Studies. The Middle Eastern Studies concentration contains focused course work on the Middle East, with an emphasis on regional culture, language, religion, and geography.

Russian and Eurasian Studies. The Russian and Eurasian Studies concentration is designed to enhance the student's understanding of the cultures and societies of Russia, and nearby countries at the intersection of Europe and Asia. The concentration offers an interdisciplinary, comparative and cross-cultural approach to the study of Russia and Eurasia.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Requirements for the Bachelor of Arts Degree in Global and International Studies in Social Science

1. The graduation requirements of the University as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Global and International Studies in Social Science.

The University's Tier II writing requirement for the Global and International Studies in Social Science major is met by completing Social Science 499. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major:

	CREDITS
a. Three of the following foundational courses. No more than one course can be from a single discipline (9 to 12 credits):	
ANP 201 Introduction to Cultural Anthropology	3
EC 201 Introduction to Microeconomics	3
EC 202 Introduction to Macroeconomics	3
GEO 151 Introduction to Human Geography	3
GEO 204 World Regional Geography	3
HST 140 World History to 1500	4
HST 150 World History since 1500	4
PLS 140 Introduction to Comparative Politics	3
PLS 160 Introduction to International Relations	3
PSY 101 Introductory Psychology	4
SOC 161 International Development and Change	3
UP 100 The City	3

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With advisor approval, qualified students may substitute Economics 251H for Economics 201.

b. The following courses (4 credits):

SSC 299	Integration of Social Science Perspectives	1
SSC 499	Capstone in Interdisciplinary Studies in Social Science (W)	3

c. Complete a minimum of 15 credits in one of the following concentrations with no more than two courses form a single discipline. At least 9 credits must be from the College of Social Science.

African Studies

College of Social Science courses:

ANP 416	Anthropology of Southern Africa	3
EC 414	Economic Analysis of Sub-Saharan Africa (W)	3
GEO 338	Geography of Africa	3
HST 208	Introduction to African History, Culture and Society	4
HST 360	African History to 1800	3
HST 361	African History since 1800	3
HST 364	South Africa: From Shaka Zulu to Mandela	3
HST 421	Women and Gender in Africa	3
HST 450	Special Topics in African History	3
HST 484	Seminar in African History (W)	3
PLS 351	African Politics	3
SOC 161	International Development and Change	3

Courses outside of the College of Social Science:

ENG 317	Readings in African and Caribbean Literatures	3
ENG 350	Readings in African, African-American, or African Diaspora Literature	3
HA 271	African Art	3
HA 471	Selected Topics in African Art	4
JRN 375	International Journalism and Media	3
JRN 475	International News and Government Dynamics	3
MC 441	Islam and World Politics	4
PHL 351	African Philosophy	3
RCAH 203	Transcultural Relations through the Ages	4
REL 360	African Religion	3

Asian Studies

College of Social Science courses:

ANP 414	Anthropology of South Asia	3
ANP 415	China: Culture and Society	3
EC 413	Economic Analysis of Asia (W)	3
GEO 337	Geography of Asia-Pacific	3
HST 209	Traditional East Asia	4
HST 210	Modern East Asia	4
HST 261	The First Imperial Age, 1600-1750	3
HST 365	The Vietnam War	3
HST 366	Southeast Asia in the Age of Empire	3
HST 367	Imperial China	3
HST 368	China since 1900	3
HST 369	Japan to 1800	3
HST 370	Japan since 1800	3
HST 451	Special Topics in Asian History	3
HST 485	Seminar in Asian History (W)	3
PLS 354	Politics of Asia	3

Courses outside of the College of Social Science:

CHS 360	Cinematic Studies of China, Hong Kong, and Taiwan	3
ENG 352	Readings in Asian or Asian American Literature	3
HA 260	Asian Art	3
HA 261	Modern Asia Art	3
JRN 475	International News and Government Dynamics	3
LL 250B	Topics in National Cinemas: East Asian Cinema	3
MC 319	Asian American History	4
MC 324D	Regional Politics, Cooperation, and Conflict in Asia	4
REL 335	East Asian Religions	3
REL 355	Southeast Asian Religions	3

Canadian Studies

College of Social Science courses:

ANP 411	North American Indian Ethnography	3
ANP 432	American Indian Women	3
CJ 439	Homeland Security	3
GEO 113	Introduction to Economic Geography	3
GEO 330	Geography of the United States and Canada	3
HST 301	Colonial America: Three Worlds Meet	3
SOC 310	Global Migration	3

Courses outside of the College of Social Science:

ENG 204	Topics in North American Literatures	3
FW 207	Great Lakes: Biology and Management	3

REL 306	Native American Religions	3
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The content in FW 207 must be approved by the student's academic advisor.

European Studies

College of Social Science courses:

ANP 416	Anthropology of Southern Africa	3
GEO 336	Environmental Geomorphology	3
HST 335	Europe in the Age of Revolution, 1700-1870	3
HST 336	Contemporary Europe, 1870 to Present	3
HST 337	European Power, Culture, and Thought: Renaissance to the Enlightenment	3
HST 338	European Power, Culture and Thought: The Modern Era	3
HST 341	Modern Britain since 1688	3
HST 347	Modern France	3
HST 348	Modern Germany	3
HST 392	History of the Holocaust	3
HST 412	Women in Modern European History	3
HST 414	World War II: Causes, Conduct and Consequences	3
HST 415	The First World War	3
HST 452	Special Topics in European History	3
HST 483	Seminar in Modern European History (W)	3
PLS 356	Politics of Europe and the European Union	3
PLS 357	Politics of English-Speaking Democracies	3

Courses outside of the College of Social Science:

AL 431	European Fairy Tale Tradition	3
HA 210	Medieval Art	3
HA 230	Renaissance and Baroque Art	3
JRN 475	International News and Government Dynamics	3
MC 324E	Regional Politics, Cooperation and Conflict in Europe	4
MC 329	European Security: Challenges and Strategies	4
MC 331	Encounters with Post-Communism	4
MC 387	Jews and Anti-Semitism	4
REL 275	Magic and Mysticism: Western Esoteric Traditions and Practices	3
REL 310	Judaism	3
ROM 355	French, Italian, and Spanish Cinema since 1930	4

Gender and Global Change

Both of the following courses:

WS 201	Introduction to Women's and Gender Studies	3
WS 202	Introduction to Contemporary Feminisms and Gender Theories	3

College of Social Science courses:

ANP 220	Gender Relations in Comparative Perspective	3
ANP 270	Women and Health: Anthropological and International Perspectives	3
ANP 432	American Indian Women	3
CJ 425	Women and Criminal Justice	3
HST 312	African American Women	3
HST 313	Women in the U.S. to 1869	3
HST 314	Women in the U.S. since 1869	3
HST 412	Women in Modern European History	3
HST 420	History of Sexuality since the 18th Century	3
HST 421	Women and Gender in Africa	3
PSY 339	Psychology of Women	3
SOC 216	Sex and Gender	3

International Development

College of Social Science courses:

ANP 201	Introduction to Cultural Anthropology	3
EC 310	Economics of Developing Countries	3
EC 410	Issues in Economics of Developing Countries (W)	3
HST 260	Navigations and Encounters in an Age of Discovery	3
HST 261	The First Imperial Age, 1600 – 1750	3
HST 326	United States Foreign Relations since 1914	3
HST 390	History of International Relations	3
PLS 342	Comparative Political Economy	3
PLS 344	Politics of Developing Areas	3
PLS 363	International and Domestic Political Conflict	3

Courses outside of the College of Social Science:

ANR 250	Global Issues in Agriculture and Natural Resources	3
EEP 220	World Food, Population and Poverty	3
GSAH260	Global Interactions and Identities	3
PHL 358	Philosophy, Gender and Global Development	3
PHL 452	Ethics and Development	3

COLLEGE OF SOCIAL SCIENCE

WS 403	Women and Change in Developing Countries	3	PSY 295	Data Analysis in Psychological Research	3
Latin American and Caribbean Studies			SOC 281	Methods of Social Research I	4
College of Social Science courses:			WS 203	Introduction to Methods for Women's and Gender Studies Research	3
ANP 410	Anthropology of Latin America	3	e. Foreign Language Competency		
EC 412	Economic Analysis of Latin America (W)	3	Students must demonstrate competency in a language relevant to the region of study. This is achieved through the completion of the second year of study or equivalent language placement scores. Students are strongly encouraged to complete language minors or other relevant minors.		
GEO 335	Geography of Latin America	3	This requirement may be satisfied by placing into a 300-level foreign language course based on a Michigan State University placement test. Students who come from other countries or cultures where a language other than English is spoken, should contact their academic advisor to discuss placement.		
HST 211	Colonial Latin America	4	The following languages are pre-approved for each concentration. Students who wish to use a language other than those listed must receive approval from their academic advisor. Second-year proficiency is demonstrated through the completion of one course from any of the following languages:		
HST 212	National Latin America	4	African Studies		
HST 382	Modern Brazil	3	AFR 202A	Second-Year Swahili II	4
HST 383	The Caribbean	3	AFR 202B	Second-Year African Language II	4
HST 384	Modern Mexico	3	AFR 252	Intermediate Individualized African Language II	4
HST 453	Special Topics in Latin American History	3	ARB 202	Second-Year Arabic II	5
HST 486	Seminar in Latin American History (W)	3	Asian Studies		
PLS 352	Latin American Politics	3	ARB 202	Second-Year Arabic II	5
Courses outside of the College of Social Science:			CHS 202	Second-Year Chinese II	5
ENG 351	Readings in Chicano and Latino Literatures	3	JPN 202	Second-Year Japanese II	5
JRN 475	International News and Government Dynamics	3	LL 252	Second-Year Less Commonly Taught Language II	4
MC 324C	Regional Politics, Cooperation, and Conflict in Latin America and the Caribbean	4	RUS 202	Second-Year Russian II	4
Middle Eastern Studies			Students who choose LL 252 must have a language in Tamil, Hindi, Korean, Vietnamese, Thai, Malay, Persian, Turkish, Uzbek, Tagalog/Filipino, Nepali, Bahasa/Indonesia, Telegu, Bengali, or Khmer.		
College of Social Science courses:			Canadian Studies		
ANP 419	Anthropology of the Middle East	3	FRN 202	Second-Year French II	4
GEO 339	Geography of the Middle East and North Africa	3	LL 252	Second-Year Less Commonly Taught Language II	4
HST 205	The Ancient Mediterranean and the Medieval World	4	Students who choose LL 252 must have the language Ojibwe.		
HST 372	The Middle East: Islam and Empires	3	European Studies		
HST 373	The Modern Middle East: From Empires to Nation States	3	FRN 202	Second-Year French II	4
HST 487	Seminar in Comparative History (W)	3	GRM 202	Second-Year German II	4
The content in HST 487 must be approved by the student's academic advisor.			ITL 202	Second-Year Italian II	4
Courses outside of the College of Social Science:			LL 252	Second-Year Less Commonly Taught Language II	4
JRN 375	International Journalism and Media	3	PRT 202	Second-Year Portuguese II	4
MC 324A	Regional Politics, Cooperation, and Conflict in the Middle East	4	PRT 250	Portuguese for Speakers of Other Romance Languages II	4
MC 335	Israeli Politics, Cultures and Society	4	RUS 202	Second-Year Russian II	4
MC 441	Islam and World Politics	4	SPN 202	Second-Year Spanish II	4
REL 310	Judaism	3	Students who choose LL 252 must have a language in Polish, Turkish, or Dutch.		
REL 330	Islam	3	Gender and Global Change		
Russian and Eurasian Studies			Second year proficiency in any language other than English.		
College of Social Science courses:			International Development		
EC 406	Economic Analysis of Russia and the Commonwealth of Independent States (W)	3	Second year proficiency in any language other than English.		
HA 271	African Art	3	Latin American and Caribbean Studies		
HST 326	United States Foreign Relations since 1914	3	FRN 202	Second-Year French II	4
HST 342	Modern Eastern Europe	3	PRT 202	Second-Year Portuguese II	4
HST 343	Russian from Peter the Great to Lenin	3	PRT 250	Portuguese for Speakers of Other Romance Languages II	4
HST 344	Russia in the Twentieth Century	3	SPN 202	Second-Year Spanish II	4
HST 414	World War II: Causes, Conduct and Consequences	3	Students who choose LL 252 must have a language in Persian/Farsi, or Turkish.		
HST 415	The First World War	3	Russian and Eurasian Studies		
MC 441	Islam and World Politics	4	LL 252	Second-Year Less Commonly Taught Language II	4
PLS 358	Politics of the U.S.S.R. and Its Successor States	3	Students who choose LL 252 must have a language in Turkish, Kazak, Kyrgyz, Persian/Farsi.		
Courses outside of the College of Social Science:					
LL 250D	Topics in National Cinemas: Russian and Soviet Cinema	3			
MC 321	The Cold War: Culture, Politics and Foreign Policy	4			
MC 324E	Regional Politics, Cooperation and Conflict in Europe	4			
MC 328	Russian Foreign Policy	4			
MC 329	European Security: Challenges and Strategies	4			
MC 331	Encounters with Post-Communism	4			
MC 387	Jews and Anti-Semitism	4			
RUS 231	19th-Century Russian Literature in Translation	3			
RUS 232	20th-Century Russian Literature in Translation	3			
d.	One of the following research methodology courses (3 or 4 credits):				
ANP 429	Ethnographic Field Methods	4			
ANP 461	Method and Theory in Historical Archaeology	3			
ANP 464	Field Methods in Archaeology	2 to 6			
CJ 292	Methods of Criminal Justice Research	3			
EC 420	Introduction to Econometric Methods	3			
GEO 221	Introduction to Geographic Information	3			
GEO 324	Remote Sensing of the Environment	4			
GEO 363	Introduction to Quantitative Methods for Geographers	3			
HST 201	Historical Methods and Skills	3			
PLS 201	Introduction to Methods of Political Analysis	4			

COLLEGE OF SOCIAL SCIENCE

UNDERGRADUATE PROGRAMS

INTERDISCIPLINARY STUDIES IN SOCIAL SCIENCE

The College of Social Science explicitly recognizes that many important and rewarding areas for study do not fit neatly within the boundaries of any single social science discipline, but rather overlap two or more such fields. The college also recognizes that many students do not wish to limit their undergraduate major studies to the specialization of a single disciplinary department or professional school. The interdisciplinary studies in social science major provides undergraduates with an interest in public policy, problem solving in society, and community engagement, the core of the mission of the College, a unique opportunity to shape their curriculum to develop interdisciplinary approaches to real world issues at the local, national, and global levels. The educational objectives of the major are to: develop students' integrated judgment, advanced communication skills, analytical thinking, cultural awareness, and civic engagement; develop students' understanding of social science approaches to the challenges and issues that face societies across space and time, and develop students' ability to integrate disciplinary knowledge, skills, and methods to solve complex real world problems.

The college offers two broadly based, coherent, multidisciplinary, undergraduate majors in interdisciplinary social science.

1. Interdisciplinary Studies in Social Science
2. Interdisciplinary Studies in Social Science: Social Science Education

INTERDISCIPLINARY STUDIES IN SOCIAL SCIENCE

Students must select one of three concentrations:

Community Governance and Advocacy. Explores issues and problems related to community organizations, political or social advocacy, governance, private-public sector partnerships, philanthropy, and other local, state, or regional matters. Course offerings deal with physical development, social interaction, race and ethnicity, family, gender, economics, and politics as they relate to challenges of community life.

Health and Society. Examines the social, behavioral, and economic determinants of health. Students will gain the knowledge and skills to improve population health. Students may select from courses in health psychology, anthropology of alternative medicine, or the sociology of health care systems.

Liberal Studies. Students will create an individual sequence of course work designed to accomplish study in interdisciplinary studies in social science.

Requirements for the Bachelor of Arts or Bachelor of Science Degree in Interdisciplinary Studies in Social Science

1. The graduation requirements of the University as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts or Bachelor of Science degree in Interdisciplinary Studies in Social Science.

The University's Tier II writing requirement for the Interdisciplinary Studies in Social Science major is met by completing Social Science 499. That course is referenced in item 5. below.

2. The graduation requirements of the College of Social Science for the Bachelor of Arts or Bachelor of Science degree.

3. Foundation Courses (9 to 12 credits):

Three of the following courses:

ANP 201	Introduction to Cultural Anthropology	3
EC 201	Introduction to Microeconomics	3
GEO 204	World Regional Geography	3
HST 110	Historical Approaches to Contemporary Issues	3
PLS 200	Introduction to Political Science	4
PSY 101	Introductory Psychology	4
SOC 100	Introduction to Sociology	4

One foundation course must match the discipline in the selected cognate, as listed in item 7. below. Qualified students may substitute Economics 251H for Economics 201.

4. The following course (1 credit):

SSC 299	Integration of Social Science Perspectives	1
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5. Capstone Course (3 credits):

The following course:

SSC 499	Capstone in Interdisciplinary Studies in Social Science (W)	3
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6. Complete a minimum of 15 to 27 credits in one of the following concentrations with no more than two courses from a single discipline. Courses in the cognate discipline may not be used to satisfy the course requirements of the concentration.

Students pursuing the Liberal Studies concentration should refer to the section below on Liberal Studies.

Community Governance and Advocacy

Anthropology

ANP 321	Anthropology of Social Movements	3
ANP 330	Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity	3
ANP 426	Urban Anthropology	3
ANP 430	Culture, Resources, and Power	3
ANP 439	Human Rights: Anthropological Perspectives	3

Criminal Justice

CJ 110	Introduction to Criminal Justice	3
CJ 355	Juvenile Justice	3
CJ 474	Law and Criminal Justice Policy	3

Economics

EC 335	Taxes, Government Spending, and Public Policy	3
EC 380	Labor Relations and Labor Market Policy	3
EC 425	Law and Economics (W)	3

Geography

GEO 413	Urban Geography	3
GEO 418	The Ghetto3	

History

HST 306	Modern United States	3
HST 413	Families in Historical Perspective	3

Human Development and Family Studies

HDFS442	Ethnic Families in America	3
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Political Science

PLS 301	American State Government	3
PLS 302	Urban Politics	3
PLS 313	American Public Policy	3
PLS 320	Judicial Politics	3
PLS 331	Political Parties and Interest Groups	3
PLS 333	Public Opinion and Political Behavior	3

Psychology

PSY 270	Community Psychology	3
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Sociology

SOC 215	Race and Ethnicity	3
SOC 330	Social Stratification	3
SOC 331	Political Sociology	3
SOC 361	Contemporary Communities	3
SOC 363	Rural Sociology3	
SOC 375	Urban Sociology	3
SOC 424	Organizations and Society	3
SOC 481	Social Movements and Collective Identities	3

Social Science

SSC 493	Social Science Internship	3
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Social Work

SW 475	School Violence: Causes and Interventions	3
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Urban Planning

UP 100	The City	3
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UP 201	Introduction to Urban and Regional Planning	4
UP 353	Land Use Planning	4
Health and Society		
<i>Anthropology</i>		
ANP 204	Introduction to Medical Anthropology	3
ANP 206	Introduction to Physical Anthropology	3
ANP 270	Women and Health: Anthropological and International Perspectives	3
ANP 370	Culture, Health and Illness	3
ANP 423	Psychological Anthropology	3
ANP 425	Issues in Medical Anthropology	3
ANP 471	The Anthropology of Alternative Medicine	3
<i>Economics</i>		
EC 498	Economics of Health Care (W)	3
<i>Epidemiology</i>		
EPI 390	Disease in Society: Introduction to Epidemiology and Public Health	4
<i>Geography</i>		
GEO 435	Geography of Health and Disease	3
<i>History</i>		
HST 420	History of Sexuality since the 18th Century	3
HST 425	American and European Health Care since 1800	4
<i>Human Development and Family Studies</i>		
HDFS 225	Lifespan Human Development in the Family	3
HDFS 445	Human Sexuality	3
HDFS 449	Special Needs Children and Their Families	3
<i>Neuroscience</i>		
NEU 310	Psychology and Biology of Human Sexuality	3
<i>Psychology</i>		
PSY 209	Brain and Behavior	3
PSY 280	Abnormal Psychology	3
PSY 320	Health Psychology	3
PSY 409	Psychobiology of Behavioral Development (W)	3
<i>Sociology</i>		
SOC 215	Race and Ethnicity	3
SOC 216	Sex and Gender	3
SOC 368	Science, Technology and Society	3
SOC 424	Organizations and Society	3
SOC 427	Environmental Toxicology and Society	3
SOC 451	Dynamics of Population	3
SOC 452	Environment and Society	3
SOC 475	Health and Society	3
<i>Social Science</i>		
SSC 493	Social Science Internship	3
<i>Social Work</i>		
SW 472	Social Work in Health Care	3
SW 474	Substance Abuse and the Human Services	3
Liberal Studies		
Students interested in completing a Liberal Studies concentration must complete 27 credits of course work in the College of Social Science, of which at least 3 credits must be a course on social research methods offered by any unit in the college. Liberal Studies students are limited to no more than five courses in a single discipline, and are not required to complete a disciplinary cognate as listed in item 7. below. Liberal Studies students may only count College of Social Science courses toward their major requirements, but are strongly encouraged to select appropriate electives, or minors to accomplish the student's academic goals. To pursue this concentration, a student must develop a proposal in coordination with the interdisciplinary studies in social science advisor that includes the following: To pursue the concentration, a student must develop a proposal in coordination with the interdisciplinary studies in social science advisor that includes the following:		
a. a proposed outline of the course work to be taken with a rationale for each course.		
b. a statement of purpose for the proposed course work.		
c. a set of specific learning outcomes that will be achieved through the course work that is not available in other majors at the university, or in the college.		
The proposed course of study must be approved by the interdisciplinary studies in social science advisor, two tenure-stream faculty members in the College of Social Science, with final approval from the Center for Integrative Studies in Social Science advisory committee.		
7.	Disciplinary Cognate	
Complete a minimum of 12 credits in courses in one of the following disciplines: anthropology, economics, geography, history, political science, psychology, or sociology. Courses in the disciplinary cognate may not be used to satisfy the course requirements of the concentration. Students		

pursuing the Liberal Studies concentration above are not required to complete a disciplinary cognate.		
Anthropology Cognate. In addition to the ANP 201 foundation course listed in item 3. above, complete the following:		
a. The following course:		
ANP 206	Introduction to Physical Anthropology	3
b. One of the following courses:		
ANP 320	Social and Cultural Theory	3
ANP 429	Ethnographic Field Methods	4
ANP 461	Method and Theory in Historical Archaeology	3
ANP 463	Laboratory Methods in Archaeology	3
ANP 464	Field Methods in Archaeology	3
c. One of the following courses:		
ANP 321	Anthropology of Social Movements	3
ANP 330	Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity	3
ANP 363	Rise of Civilization	3
ANP 370	Culture, Health, and Illness	3
ANP 420	Language and Culture	3
ANP 422	Religion and Culture	3
ANP 423	Psychological Anthropology	3
ANP 426	Urban Anthropology	3
ANP 430	Culture, Resources and Power	3
ANP 431	Gender, Environment and Development	3
ANP 436	Globalization and Justice: Issues in Political and Legal Anthropology	3
ANP 440	Hominid Fossils	3
ANP 441	Osteology and Forensic Anthropology	4
ANP 462	Frontiers and Colonization in Historical Archaeology	3
d. One of the following courses:		
ANP 410	Anthropology of Latin America	3
ANP 411	North American Indian Ethnography	3
ANP 414	Anthropology of South Asia	3
ANP 415	China: Culture and Society	3
ANP 451	European Archaeology	3
ANP 452	North American Archaeology	3
Economics Cognate. In addition to the EC 201 foundation course listed in item 3. above, complete the following:		
a. The following course:		
EC 202	Introduction to Macroeconomics	3
Economics 252H may be substituted for Economics 202.		
b. Three courses in Economics at the 300-400 level		
9		
Geography Cognate. In addition to the GEO 204 foundation course listed in item 3. above, complete the following:		
a. One of the following courses:		
GEO 113	Introduction to Economic Geography	3
GEO 151	Introduction to Human Geography	3
GEO 206	Physical Geography	3
b. One of the following courses:		
GEO 221	Introduction to Geographic Information	3
GEO 324	Remote Sensing of the Environment	4
GEO 363	Introduction to Quantitative Methods for Geographers	3
c. Complete one Geography course at the 300-level.		
3		
d. Complete one Geography course at the 400-level.		
3		
History Cognate. In addition to the HST 110 foundation course listed in item 3. above, complete the following:		
a. The following course:		
HST 201	Historical Methods and Skills	3
b. Complete 9 credits from one of the following areas with a minimum of 6 credits in 300-400 level courses:		
<i>Women, Gender and Family</i>		
HST 312	African American Women	3
HST 313	Women in the United States to 1869	3
HST 314	Women in the United States since 1869	3
HST 324	History of Sport in America	3
HST 412	Women in Modern European History	3
HST 413	Families in Historical Perspective	3
HST 420	History of Sexuality since the 18th Century	3
HST 421	Women and Gender in Africa	3
HST 450	Special Topics in African History	3
HST 451	Special Topics in Asian History	3
HST 452	Special Topics in European History	3
HST 453	Special Topics in Latin American History	3
HST 454	Special Topics in American History	3
HST 455	Special Topics in Modern History	3

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HST 480 Seminar in American History (W)	3	HST 450 Special Topics in African History	3
HST 483 Seminar in Modern European History (W)	3	HST 484 Seminar in African History (W)	3
HST 484 Seminar in African History (W)	3	<i>The History of a Specific Area of the World - Asia</i>	
HST 485 Seminar in Asian History (W)	3	HST 209 Traditional East Asia	4
HST 486 Seminar in Latin American History (W)	3	HST 210 Modern East Asia	4
HST 487 Seminar in Comparative History (W)	3	HST 366 Southeast Asia in the Age of Empire	3
History 450, 451, 452, 453, 454, 455, 480, 483, 484, 485, 486 and 487 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of History.		HST 367 Imperial China	3
<i>U.S. Racial, Ethnic and Cultural History</i>		HST 368 China since 1900	3
HST 310 African American History to 1876	3	HST 369 Japan to 1800	3
HST 311 African American History since 1876	3	HST 370 Japan since 1800	3
HST 312 African American Women	3	HST 451 Special Topics in Asian History	3
HST 317 American Jewish History	3	HST 485 Seminar in Asian History (W)	3
HST 319 Asian American History	3	<i>The History of a Specific Area of the World - Modern Europe</i>	
HST 324 History of Sport in America	3	HST 335 Europe in the Age of Revolution, 1700-1870	3
HST 327 History of Mexican Americans in the United States	3	HST 336 Contemporary Europe, 1870 to Present	3
HST 378 Native Americans in North American History to 1830	3	HST 337 European Power, Culture, and Thought: Renaissance to Enlightenment	3
HST 379 Native Americans in North American History from 1830	3	HST 338 European Power, Culture, and Thought: The Modern Era	3
HST 454 Special Topics in American History	3	HST 341 Modern Britain since 1688	3
HST 455 Special Topics in Modern History	3	HST 342 Modern Eastern Europe	3
HST 480 Seminar in American History (W)	3	HST 344 Russia in the Twentieth Century	3
HST 487 Seminar in Comparative History (W)	3	HST 347 Modern France	3
History 454, 455, 480, and 487 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of History.		HST 348 Modern Germany	3
<i>Political, Constitutional and Legal History</i>		HST 392 History of the Holocaust	3
HST 302 Revolutionary America	3	HST 412 Women in Modern European History	3
HST 305 The Making of the Modern United States	3	HST 452 Special Topics in European History	3
HST 306 Modern United States	3	HST 483 Seminar in Modern European History (W)	3
HST 318A United States Constitutional History to 1890	3	History 452 and 483 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of History.	
HST 318B United States Constitutional History from 1877	3	<i>The History of a Specific Area of the World - Latin America</i>	
HST 351 Constitutional and Legal History of England since 1400	3	HST 382 Modern Brazil	3
HST 452 Special Topics in European History	3	HST 383 The Caribbean	3
HST 454 Special Topics in American History	3	HST 384 Modern Mexico	3
HST 455 Special Topics in Modern History	3	HST 453 Special Topics in Latin American History	3
HST 480 Seminar in American History (W)	3	HST 486 Seminar in Latin American History (W)	3
HST 483 Seminar in Modern European History (W)	3	Political Science Cognate. In addition to the PLS 200 foundation course listed in item 3. above, complete the requirements from one of the areas below:	
HST 487 Seminar in Comparative History (W)	3	<i>Political Philosophy</i>	
History 452, 454, 455, 480, 483, and 487 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of History.		a. Both of the following courses:	
<i>Diplomacy and War</i>		PLS 170 Introduction to Political Philosophy	3
HST 304 The American Civil War	3	PLS 201 Introduction to Methods of Political Analysis	4
HST 325 United States Foreign Relations to 1914	3	b. Two of the following courses:	
HST 326 United States Foreign Relations since 1914	3	PLS 371 Classical Political Philosophy	3
HST 390 History of International Relations	3	PLS 372 Modern Political Philosophy	3
HST 392 History of the Holocaust	3	American Political Thought	3
HST 414 World War II: Causes, Conduct and Consequences	3	PLS 422 Seminar in Political Science(W)	4
HST 450 Special Topics in African History	3	Political Science 422 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of Political Science.	
HST 451 Special Topics in Asian History	3	<i>American Political Institutions</i>	
HST 452 Special Topics in European History	3	a. Both of the following courses:	
HST 453 Special Topics in Latin American History	3	PLS 100 Introduction to American Politics	3
HST 454 Special Topics in American History	3	PLS 201 Introduction to Methods of Political Analysis	4
HST 455 Special Topics in Modern History	3	b. Two of the following courses:	
HST 480 Seminar in American History (W)	3	PLS 301 American State Government	3
HST 481 Seminar in Ancient History (W)	3	PLS 302 Urban Politics	3
HST 482 Seminar in Medieval History (W)	3	PLS 310 Public Administration and Policy Making	3
HST 483 Seminar in Modern European History (W)	3	PLS 320 Judicial Politics	3
HST 484 Seminar in African History (W)	3	PLS 321 Constitutional Law	3
HST 485 Seminar in Asian History (W)	3	PLS 324 Congress	3
HST 486 Seminar in Latin American History (W)	3	PLS 325 The Presidency	3
HST 487 Seminar in Comparative History (W)	3	PLS 331 Political Parties and Interest Groups	3
HST 488 Seminar in International Relations (W)	3	PLS 334 Campaigns and Elections	3
History 450, 451, 452, 453, 454, 455, 480, 481, 482, 483, 484, 485, 486 and 487 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of History.		PLS 422 Seminar in Political Science (W)	4
<i>The History of a Specific Area of the World - Africa</i>		Political Science 422 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of Political Science.	
HST 360 African History to 1800	3	<i>Global Issues in Politics</i>	
HST 361 African History since 1800	3	a. The following course:	
HST 364 South Africa: From Shaka Zulu to Mandela	3	PLS 201 Introduction to Methods of Political Analysis	4
HST 421 Women and Gender in Africa	3	b. One of the following courses:	
		PLS 140 Introduction to Comparative Politics	3
		PLS 160 Introduction to International Relations	3
		c. Two of the following courses:	

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PLS 322	Comparative Legal Systems	3
PLS 342	Comparative Political Economy	3
PLS 344	Politics of Developing Areas	3
PLS 351	African Politics	3
PLS 352	Latin American Politics	3
PLS 354	Politics of Asia	3
PLS 356	Politics of Europe and the European Union	3
PLS 357	Politics of English Speaking Democracies	3
PLS 358	Politics of the U.S.S.R. and its Successor States	3
PLS 422	Seminar in Political Science (W)	4
PLS 441	Islam and World Politics	4

Political Science 422 may be used only with approval from the Interdisciplinary Studies in Social Science advisor, in consultation with the Department of Political Science.

Psychology Cognate. In addition to the PSY 101 foundation course listed in item 3. above, complete the following:

- The following course:

PSY 295	Data Analysis in Psychological Research	3
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 Students who have completed Statistics and Probability 315 should consult an academic advisor before completing this course.
- Two of the following courses:

PSY 200	Cognitive Psychology	3
PSY 209	Brain and Behavior	3
PSY 235	Social Psychology	3
PSY 236	Personality	3
PSY 244	Developmental Psychology: Infancy Through Childhood	3
PSY 255	Industrial and Organizational Psychology	3
PSY 270	Community Psychology	3
PSY 280	Abnormal Psychology	3
- One Psychology course at the 300-400 level. 3

Sociology Cognate. In addition to the SOC 100 foundation course listed in item 3. above, complete the following:

- Both of the following courses:

SOC 281	Methods of Social Research I	4
SOC 282	Methods of Social Research II	4
- One of the following courses:

SOC 215	Race and Ethnicity	3
SOC 216	Sex and Gender	3
SOC 330	Social Stratification	3
- One Sociology course at the 300-400 level. 3

Business Emphasis

The Business Emphasis is available as an elective to students who are pursuing a Bachelor of Arts or a Bachelor of Science degree with a major in interdisciplinary studies in social science. To enroll in the business emphasis, students must meet with an interdisciplinary studies in social science advisor.

Requirements for the Business Emphasis (12 credits)

Complete four of the following courses:

ACC 230	Survey of Accounting Concepts	3
FI 320	Introduction to Finance	3
GBL 323	Introduction to Business Law	3
MGT 325	Management Skills and Processes	3
MKT 327	Introduction to Marketing	3

Accounting 230 is not open to students with credit in Accounting 202.

INTERDISCIPLINARY STUDIES IN SOCIAL SCIENCE: SOCIAL SCIENCE EDUCATION

The Interdisciplinary Studies in Social Science: Social Science Education program is a comprehensive teaching major leading to the Bachelor of Arts degree in the College of Social Science. It is available for teacher certification and is only available to students pursuing teacher certification. Students who complete the requirements for this major and the requirements for teacher certification are recommended for a secondary teaching certificate in social studies. Persons with teacher certification in social studies are qualified to teach history, political science, geography, and economics.

Requirements for the Bachelor of Arts Degree in Interdisciplinary Studies in Social Science: Social Science Education

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Interdisciplinary Studies in Social Science: Social Science Education.

The University's Tier II writing requirement for the Interdisciplinary Studies in Social Science: Social Science Education major is met by completing History 480 or 481 or 482 or 483 or 484 or 485 or 486 or 487 or 488. Those courses are referenced in item 3. below.

2. Students in the Interdisciplinary Studies in Social Science: Social Science Education major are not required to complete the College of Social Science requirements referenced under the heading *Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees* in the *College of Social Science* section of this catalog.

3. The following requirements for the major:

	CREDITS	
a. All of the following courses (43 credits):		
EC 201	Introduction to Microeconomics	3
EC 202	Introduction to Macroeconomics	3
GEO 204	World Regional Geography	3
GEO 221	Introduction to Geographic Information	3
GEO 330	Geography of the United States and Canada	3
HST 140	World History to 1500	4
HST 150	World History since 1500	4
HST 201	Historical Methods and Skills	3
HST 202	U.S. History to 1876	4
HST 203	U.S. History since 1876	4
HST 320	History of Michigan	3
PLS 100	Introduction to American National Government	3
PLS 140	Government and Politics of the World	3
b. One of the following courses (3 credits):		
HST 310	African American History to 1876	3
HST 311	African American History since 1876	3
HST 312	African American Women	3
HST 313	Women in the United States to 1869	3
HST 314	Women in the United States since 1869	3
HST 327	History of Mexican Americans in the United States	3
HST 378	Native Americans in North American History to 1830	3
HST 379	Native Americans in North American History from 1830	3
c. One of the following courses (3 credits):		
PLS 313	Public Policy Analysis	3
PLS 320	The American Judicial Process	3
PLS 321	American Constitutional Law	3
PLS 324	American Legislative Process	3
PLS 325	American Executive Process	3
d. One of the following courses (3 credits):		
HST 480	Seminar in American History (W)	3
HST 481	Seminar in Ancient History (W)	3
HST 482	Seminar in Medieval History (W)	3
HST 483	Seminar in Modern European History (W)	3
HST 484	Seminar in African History (W)	3
HST 485	Seminar in Asian History (W)	3
HST 486	Seminar in Latin American History (W)	3
HST 487	Seminar in Comparative History (W)	3
HST 488	Seminar in International Relations (W)	3
e. Completion of the requirements for Teacher Certification in the Department of Teacher Education, which includes all of the following courses (20 credits):		
TE 150	Reflections on Learning	3
TE 250	Human Diversity, Power, and Opportunity in Social Institutions	3
TE 302	Learners and Learning in Contexts – Secondary (W)	4
TE 407	Teaching Subject Matter to Diverse Learners – Secondary (W)	5
TE 408	Crafting Teaching Practices – Secondary (W)	5
f. The following course if the teaching major and minor are in different subject matter:		
TE 409	Crafting Teaching Practices in the Secondary Teaching Minor	1

INTERDEPARTMENTAL GRADUATE SPECIALIZATIONS

GRADUATE SPECIALIZATION IN ENVIRONMENTAL POLICY

The Graduate Specialization in Environmental Policy, which is administered by the College of Social Science, provides students with foundational skills and knowledge in environmental law, economics and policy and an opportunity to gain substantive expertise in the fundamental aspects of environmental policy.

The graduate specialization is available as an elective to students who are enrolled in master's degree programs at Michigan State University. With the approval of department and college that administer the student's degree program, the courses that are used to satisfy the specialization may also be used to satisfy the requirements for the master's or doctoral degree.

Students who plan to complete the requirements for the graduate specialization must consult the graduate advisor for the specialization in the College of Social Science.

Requirements for the Graduate Specialization in Environmental Policy

Complete a total of 9 credits from the following:

- | | CREDITS |
|---|---------|
| 1. Both of the following courses: | |
| AFRE 829 Economics of Environmental Resources | 3 |
| PPL 807 Public Policy | 3 |
| 2. Complete 3 credits of additional course work that focus on policy that meets the interests of the student. The course must be approved by the student's academic advisor for the specialization. | |
| 3. Completion of an examination consisting of a paper on the environmental policy aspects of a problem selected by the student and approved by the advisor for the specialization. | |

GRADUATE SPECIALIZATION IN GLOBAL URBAN STUDIES

The Graduate Specialization in Global Urban Studies, which is administered by the College of Social Science, offers interdisciplinary doctoral-level study, integrated with programs offered by disciplinary departments and is available as an elective to students who are enrolled in doctoral degree programs at Michigan State University.

The Graduate Specialization in Global Urban Studies addresses political, spatial, cultural, and economic processes and issues in urban areas across the United States and the world, as well as the global processes that impact and unite urban areas. Course work includes foci on urban areas in the United States and abroad; urban areas in comparative context regionally, nationally and internationally; and how the forces of globalization change urban areas.

With the approval of the department and college that administers the student's degree program, the courses that

are used to satisfy the specialization may also be used to satisfy the requirements for the doctoral degree.

Requirements for the Graduate Specialization in Global Urban Studies

- | | CREDITS |
|--|---------|
| 1. Both of the following courses (6 credits): | |
| SSC 800 The World System of Cities | 3 |
| SSC 886 Global Urban Research Practicum | 3 |
| 2. Complete two of the following courses. Each course must be from a different sphere. Students may select other courses from other departments or disciplines with the approval of the specialization advisor. (6 or 7 credits) | |
| Political Sphere | |
| PLS 808 Issues in Urban Policy and Services | 3 |
| PLS 822 Urban Government and Politics | 3 |
| Spatial Sphere | |
| GEO 413 Urban Geography | 3 |
| GEO 453 Metropolitan Environments: Urban Form and Land Use | 3 |
| UP 823 Urban Land Management | 4 |
| Social/Cultural Sphere | |
| ANP 815 Transnational Processes and Identities (D) | 3 |
| HST 410 History of Western Urbanization | 3 |
| SOC 838 Comparative Urban Theory | 3 |
| Economic Sphere | |
| AEC 991 Advanced Topics in Agricultural Economics | 3 |
| EC 840 International Trade: Theory and Commercial Policy | 3 |

INTERDEPARTMENTAL GRADUATE SPECIALIZATION IN INFANCY AND EARLY CHILDHOOD

The Interdepartmental Graduate Specialization in Infancy and Early Childhood is available as an elective for students who are enrolled in master's and doctoral degree programs in the departments of Anthropology, Communicative Sciences and Disorders; Counseling, Educational Psychology and Special Education; Food Science and Human Nutrition; Human Development and Family Studies; Kinesiology; Psychology; and Sociology, in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education; in the Master of Social Work degree programs in the School of Social Work; in the Master of Science in Nursing degree program in the College of Nursing; and in the graduate-professional degree programs in the College of Human Medicine and the College of Osteopathic Medicine. The College of Social Science administers the specialization in collaboration with the School of Social Work, the cooperating units, an executive committee, and an advisory committee comprised of faculty members from each participating unit.

The quality of life during the first five years of human development provides the foundation upon which all subsequent development is built. As a result of advances in biomedical technology, social-cultural conditions, and legislation, increasing attention is being directed toward the optimal development of infants and their families.

The specialization is designed to prepare practitioners to meet the challenges of service delivery for very young children and their families and is based on the philosophy that an interdisciplinary educational program is the best educational experience for professionals who will work with infants, very young children, and their families. The specialization is also designed to provide a knowledge base that will facilitate the work of graduates who pursue careers in agencies, institutions, and government organizations that offer services

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to very young children, as well as those who pursue careers in teaching and research relevant to the needs of infants, very young children, and their families.

The Interdepartmental Graduate Specialization in Infancy and Early Childhood will:

1. Provide an opportunity for graduate students to obtain a comprehensive and contemporary academic experience in the field of infancy and early childhood development.
2. Help graduate students with an interest in working with very young children to become aware of their professional obligations and responsibilities.
3. Develop an intellectual environment that will foster the growth of research and teaching in the area of human infancy and early childhood development, as well as sensitize students to clinical, educational, and social policy issues related to early human development.
4. Increase public awareness of the critical importance of the early years of human development.

A student who is enrolled in a master's, educational specialist, doctoral, or graduate-professional degree program in one of the 12 participating academic units and who wishes to complete the requirements for an Interdepartmental Graduate Specialization in Infancy and Early Childhood should send their application to the director of the specialization. Qualified applicants must have a minimum grade-point average of 3.0. Once accepted into the specialization, students must identify a faculty member from their own discipline who is able to oversee their study in infancy and early childhood development, and to chair their guidance committee. Students are encouraged to actively solicit input from at least one faculty member from a discipline other than their home department, who will serve as a representative on the student's guidance committee.

Students should work closely with their advisors within their academic units to develop meaningful experiences that are directly related to infancy and early childhood development studies. Credits that are used to meet the requirements for the specialization may also be counted toward the requirements for the student's degree program at the discretion of the academic unit in which the student is enrolled.

Students who are pursuing the Interdepartmental Graduate Specialization in Infancy and Early Childhood are required to attend monthly seminars with members of the specialization faculty, staff, and other students in the program.

Requirements for the Specialization in Infancy and Early Childhood

Students must complete a minimum of 12 credits for the Graduate Specialization in Infancy and Early Childhood. The student's program of study must be approved by the student's guidance committee. The student must:

1. Master competencies through a variety of experiences including completion of a portfolio that demonstrates mastery of infancy and early childhood foundations, and a final oral or written examination across the following areas: theory, practice, policy, and research.
2. Complete 12 credits of course work including:
 - a. *Master's students.* A minimum of 4 credits of the Graduate Specialization in Infancy and Early Childhood seminar. Students should enroll in an 890 Independent Study through their home department. If an 890 course is not available, students may enroll for SW 890 Independent Study.
 - b. *Doctoral students.* A minimum of 6 credits of the Graduate Specialization in Infancy and Early Childhood seminar. Students should enroll in an 890

Independent Study through their home department. If an 890 course is not available, students may enroll for SW 890 Independent Study.

- c. All students are required to complete an additional 6 to 8 credits of course work from two disciplines outside of their home unit. Students may choose courses from the following:

<i>Anthropology</i>		
ANP 423	Psychological Anthropology	3
ANP 470	Food, Hunger, and Society	3
<i>Audiology and Speech Sciences</i>		
ASC 823E	Assessment of Child Language Disorders	3
ASC 823F	Language Intervention: Early Stages	3
ASC 823G	Language Intervention: Later Stages	3
ASC 991	Special Topics in Communication Sciences and Disorders	3
ASC 992	Seminar in Communication Sciences and Disorders	3
<i>Counseling, Educational Psychology and Special Education</i>		
CEP 801	Psychological Development: Learner Differences and Commonalities	3
CEP 903	Cognitive Development Across the Lifespan	3
CEP 904	Social-Emotional Development across the Lifespan	3
<i>Family and Child Ecology</i>		
FCE 411	Developmental Study of a Child	2
FCE 811	Child Development: Ecological Perspectives	3
FCE 814	Parenthood and Parent Education	3
FCE 821	Early Childhood Education: Curricular Approaches	3
FCE 822	Assessment of the Young Child	3
FCE 823	Infant Programs and Practices	3
FCE 825	Families with Special Needs Children: An Ecological Perspective	3
FCE 838	Early Literacy Development	3
FCE 845	Foundations of Family Study	3
FCE 895	Families in Poverty	3
FCE 896	Child Development Across Cultures	3
FCE 898	Play in Human Development	3
<i>Human Nutrition and Foods</i>		
HNF 453	Nutrition and Human Development	3
HNF 840	Human Nutrition and Chronic Diseases	3
<i>Kinesiology</i>		
KIN 860	Growth and Motor Behavior	3
KIN 890	Independent Study in Kinesiology	3
KIN 893	Internship in Kinesiology	3
KIN 894	Field Experience in Kinesiology	3
KIN 990	Independent Study in Kinesiology	3
<i>Pediatrics and Human Development</i>		
PHD 523	Genetics for Medical Practice	1
<i>Psychology</i>		
PSY 424	Child and Family Psychopathology	3
PSY 829	Child and Family Assessment	4
PSY 950	Advanced Child and Family Interventions	3
PSY 992	Seminar in Psychology	3
<i>Sociology</i>		
SOC 475	Sociology of Health Care Systems	3
SOC 476	Social Psychology of Health	3
<i>Social Work</i>		
SW 811	Social Work Perspectives in Human Development	3
SW 822A	Social Welfare Policy and Services: Children, Youth, and Families	3
SW 873	Social Work in Educational Settings	3
SW 874	Assessment and Testing in School Social Work	3
SW 875	School Social Work Intervention: Children with Special Needs	3
SW 891	Special Topics in Graduate Social Work	3

3. Complete a semester-long internship.

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GRADUATE SPECIALIZATION IN INTERNATIONAL DEVELOPMENT

The Graduate Specialization in International Development are available as electives for students who are enrolled in master's and doctoral degree programs at Michigan State University. The College of Social Science administers the specialization. The graduate academic advisor for international development, located in the college, coordinates the specialization on behalf of the Dean.

The Specialization in International Development is designed to:

1. Provide an opportunity for graduate students to obtain a comprehensive and contemporary academic experience in the field of international development studies.
2. Sensitize graduate students with an interest in development studies to their professional obligations and responsibilities.
3. Develop an intellectual environment that will foster the growth of research and teaching in the area of development studies.

The graduate academic advisor for international development in the College of Social Science is responsible for establishing a guidance committee for the specialization for each student. With the approval of the graduate academic advisor for international development in the College of Social Science, a guidance committee that has responsibility for overseeing a student's master's or doctoral degree program will normally oversee the student's program of study for the specialization. At least one member of the committee must be a member of the international development core faculty who will serve as the student's academic advisor for the specialization.

Students who elect the specialization may be required to study the foreign language most relevant to their educational and career objectives, to acquire practical experience in development work, and to complete courses in addition to the courses that are used to satisfy the requirements for the specialization.

Although separate graduate specializations in international development have been established for master's and doctoral students, a given student may receive certification of completion of either the specialization for master's students or the specialization for doctoral students, but not for both of the specializations.

With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the degree.

Requirements for the Graduate Specialization in International Development

The student must complete a concentration within international development such as gender and health, gender and work, rural development, environment and development, development administration, nongovernmental organizations in development, or politics of development. Any course that was used to satisfy the requirements for the undergraduate Specialization in International Development may not be used to satisfy the requirements for the Graduate Specialization in International Development. The student's program of study must be approved by the student's guidance committee for the specialization and must meet the requirements specified below:

CREDITS

Master's Student: The student must complete 12 credits as outlined below. At least half of the credits must come from outside the student's major.

- (1) Complete two of the Core Courses listed below. Only one of the courses may be at the 400 level. (6 credits)
- (2) Complete at least two additional courses of at least 3 credits each, which are relevant to the student's concentration within international development (6 credits)

Doctoral Student: The student must complete 18 credits as outlined below:

- (1) Complete two of the Core Courses listed below. Only one of the courses may be at the 400 level (6 credits)
- (2) Complete at least four additional courses of at least 3 credits each, which are relevant to the student's concentration within international development (12 credits)
- (3) Pass a written comprehensive examination on the student's concentration within international development. With the approval of the department or school and college that administer the student's degree program, this examination may be incorporated into the comprehensive examinations that are required for the degree.

Core Courses:

	CREDITS
AEC 861 Agriculture in Economic Development	3
ANP 867 Archaeological Theory	3
EC 410 Issues in the Economics of Developing Countries	3
GEO 454 Spatial Aspects of Regional Development	3
PLS 853 Political Economy of Development Policy	3
RD 826 International Development and Sustainability	3
SOC 832 International Inequality and Development	3
WS 403 Women and Change in Developing Countries	3

INTERDEPARTMENTAL GRADUATE SPECIALIZATION IN COGNITIVE SCIENCE

The Interdepartmental Graduate Specialization in Cognitive Science are available for students who are enrolled in master's and doctoral degree programs in Audiology and Speech Sciences; Computer Science; Ecology, Evolution, Behavior; Geography; Linguistics and Germanic, Slavic, Asian and African Languages; Neuroscience; Philosophy; Physics and Astronomy; Physiology; Psychiatry; Psychology; Telecommunication; and Zoology. The College of Social Science administers the specialization.

One of the most important remaining mysteries in science is the nature of mind, whether mind be embodied in the neurons of the brain or in the silicon stuff of computer chips in an artificial brain-like system. Cognitive Science explores how biological systems process information to produce thought and adaptive behavior and whether artificial systems can be endowed with the same capabilities. The scientific study of the nature of mind requires a concerted effort by investigators from many different theoretical perspectives, empirical traditions, and academic disciplines. The program will make available to students an interdisciplinary field that encompasses approaches to solving the problems of understanding the mind from a number of sharply different directions. Students will learn about, and engage in, research on these problems under more than one disciplinary umbrella. The specialization is supervised by the Cognitive Science Graduate Affairs Committee.

Students seeking admission to the specialization must contact the Director of the Cognitive Science Program. To be admitted, a student must have completed a bachelor's degree with a grade-point average of at least 3.0 and have been admitted to a master's or doctoral program in one of the participating departments. Students should submit a cover

letter and a personal statement describing their interest in cognitive science and their objectives in seeking admission. Additional documentation may be requested.

Requirements for the Specialization in Cognitive Science

The Specialization in Cognitive Science is offered at both the master’s and the doctoral level. No student may receive certification at both levels. During the first year of the master’s or doctoral program, the student and the major professor select a guidance committee to assist in planning both the student’s degree program and specialization. At least one member of a master’s student’s guidance committee and two members of a doctoral student’s guidance committee shall be members of the Cognitive Science faculty, with one of the latter from a discipline outside the student’s major department.

Credits that are used to meet the requirements of the specialization may also be used to satisfy the requirements for the student’s major at the discretion of the department or college. Courses that are used to satisfy the requirements for the specialization must be approved by the student’s guidance committee and should demonstrate competence in at least two areas of cognitive science.

Master’s Students must:

1. Complete 18 credits of course work as specified below.
2. Participate in a research project outside their major department, either by completing one semester of work in a laboratory project or by enrolling in an independent study course involving collaborative work with a member of the cognitive science faculty.

Plan A students will also complete a thesis reflecting the integration of the student’s discipline and Cognitive Science.

Doctoral Students must:

1. Complete 18 credits or course work as specified below.
2. Participate in a research project outside their major department, either by completing one semester of work in a laboratory project or by enrolling in an independent study course involving collaborative work with a member of the cognitive science faculty.
3. Complete a dissertation that reflects the integration of the student’s discipline and Cognitive Science.

Required Core Courses

PSY 863 Seminar in Cognitive Science	1
At least 16 additional credits in courses relevant to Cognitive Science.	
At least 6 of these credits, chosen from the following, must be in courses outside the student’s major.	
ASC 813 Neuroanatomy and Neurophysiology of Speech, Language, and Hearing	3
ASC 823A Acquired Language Disorders	3
ASC 914A Speech Production and Perception I	4
ASC 914B Speech Production and Perception II	4
CSE 802 Pattern Recognition and Analysis	4
CSE 803 Computer Vision	3
CSE 841 Artificial Intelligence	3
CSE 845 Knowledge-Based Systems	4
CSE 847 Machine Learning	3
CSE 848 Evolutionary Computation	3
CSE 885 Artificial Neural Networks	3
CSE 941 Selected Topics in Artificial Intelligence	3
LIN 824 Phonological Theory I	3
LIN 834 Syntactic Theory I	3
LIN 837 Advanced Studies in Semantics and Pragmatics	3
LIN 850 Advanced Studies in Child Language Acquisition	3
PHL 860 Seminar in Metaphysics and Epistemology	3
PHL 880 Seminar in Philosophy of Science	3
PSY 801 Sensation and Perception	3
PSY 802 Basic Cognitive Processes	3
PSY 803 Higher Order Cognitive Processes	3
PSY 814 Psycholinguistics	3
PSY 851 Neuropsychology	4
ZOL 822 Topics in Ethology and Behavioral Ecology	3
Other course may be substituted with prior approval of the Cognitive Science Graduate Affairs Committee.	

DEPARTMENT of ANTHROPOLOGY

Todd Fenton, Chairperson

Anthropology takes humans and their cultures, throughout the world and through the entirety of human history, as its central object of study. Blending aspects of natural and social sciences, anthropology examines humanity’s evolutionary background and development, the organization of social and cultural life, the nature of culture as a system of meaning to organize and interpret experience, the evolution of societies, and the interrelationships between environment, culture, and shared ways of thinking and feeling.

Providing an excellent foundation for a diverse, liberal education, the study of anthropology fosters critical thinking and prepares students for careers in education, medicine, tourism, business and industry, government service, and other walks of life in which a broad knowledge of cultural dynamics, ethnic diversity and human relations is important. Engagement in diverse experiential learning opportunities are encouraged in field and lab settings.

The strength and vitality of anthropology lies in the ability to approach fundamental issues concerning cultural and biological diversity from multiple perspectives. Major points of orientation within anthropology include the search for patterning of cultural behavior amidst the immense variation found within and among cultures, the study of principles of cultural dynamics, the analysis of processes of change and stability within social and cultural structures, cross-cultural comparisons of different societies, the study of patterns of development of societies from simple to complex, and the functioning of cultural institutions as parts of overall sociocultural systems. Anthropology faculty specialize in sociocultural anthropology, archaeology, medical anthropology, biological anthropology, and linguistic anthropology, bringing multiple vantage points brought to bear on these themes.

UNDERGRADUATE PROGRAM

Requirements for the Bachelor of Arts Degree in Anthropology

1. The University requirements for bachelor’s degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Anthropology.
 - The University’s Tier II writing requirement for the Anthropology major is met by completing Anthropology 489. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree.
3. The following required major courses (30 credits):

a. All of the following courses:		CREDITS
ANP 201 Introduction to Cultural Anthropology	3	
ANP 203 Introduction to Archaeology	3	
ANP 206 Introduction to Physical Anthropology	3	
ANP 489 Anthropology Capstone Course (W)	3	
b. One area course from Anthropology 410, 411, 414, 415, 416, 417, 419, 432, 433, 451, 452, 453, 455.		
c. One topical/analytical course from Anthropology 320, 321, 325,		

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330, 362, 363, 364, 370, 420, 422, 423, 425, 426, 428, 430, 431, 436, 439, 440, 441, 443, 461, 462.

- d. One anthropological methods course selected from Anthropology 429, 441, 463, and 464.
- e. Four additional Anthropology courses, at least three of which must be at the 300–400 level. Anthropology 101 may not be used to meet this requirement.

Requirements for the Bachelor of Science Degree in Anthropology

1. The University requirements for the bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Anthropology.

The University's Tier II writing requirement for the Anthropology major is met by completing Anthropology 489. That course is referenced in item 3. a. below.

2. The College of Social Science requirements for the Bachelor of Science degree.

3. The following requirements for the major (33 credits):

- a. All of the following courses (12 credits):

ANP 201	Introduction to Cultural Anthropology	3
ANP 203	Introduction to Archaeology	3
ANP 206	Introduction to Physical Anthropology	3
ANP 489	Anthropology Capstone Course (W)	3

- b. One of the following area courses (3 credits):

ANP 410	Anthropology of Latin America	3
ANP 411	North American Indian Ethnography	3
ANP 415	China: Culture and Society	3
ANP 417	Introduction to Islam in Africa	3
ANP 419	Anthropology of the Middle East	3
ANP 432	American Indian Women	3
ANP 433	Contemporary American Indian Communities	3
ANP 437	Asian Emigrant Communities: A Global Perspective	3

- c. One of the following topical/analytical courses (3 credits):

ANP 310	Archeology of Human Migrations	3
ANP 320	Social and Cultural Theory	3
ANP 321	Anthropology of Social Movements	3
ANP 325	Anthropology of the Environment and Development	3
ANP 330	Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity	3
ANP 362	Archaeology of Foragers to Farmers	3
ANP 363	Rise of Civilization	3
ANP 364	Pseudoarchaeology	3
ANP 370	Culture, Health, and Illness	3
ANP 420	Language and Culture	3
ANP 422	Religion and Culture	3
ANP 425	Issues in Medical Anthropology	3
ANP 426	Urban Anthropology	3
ANP 436	Globalization and Justice: Issues in Political and Legal Anthropology	3
ANP 439	Human Rights: Anthropological Perspectives	3
ANP 440	Hominid Fossils	3
ANP 441	Osteology and Forensic Anthropology	4
ANP 443	Human Adaptability	3
ANP 461	Method and Theory in Historical Archaeology	3
ANP 486	Environmental Archaeology	3

- d. One of the following anthropological methods courses (3 credits):

ANP 412	Method and Practice in Digital Heritage	3
ANP 429	Ethnographic Field Methods	4
ANP 441	Osteology and Forensic Anthropology	4
ANP 463	Laboratory Methods in Archaeology	3
ANP 464	Field Methods in Archaeology	2 to 6

- e. Complete 12 credits of Anthropology courses, at least 9 credits of which must at the 300-level or above. ANP 101 or 200 may not be used to fulfill this requirement.

4. Other Required Courses (12 credits):

Complete 12 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation

Requirement for the Bachelor of Science degree and may not concurrently satisfy a University requirement.

- a. One of the following courses (3 or 4 credits):

STT 200	Statistical Methods	3
STT 201	Statistical Methods	3
STT 315	Introduction to Probability and Statistics for Business	3
STT 421	Statistics I	3
STT 464	Statistics for Biologists	3

- b. Complete at least 9 credits from the following courses:

ANTR 211	Human Tissues and Cells for Medical Illustrators	3
ANTR 350	Human Gross Anatomy for Pre-Health Professionals	3
ANTR 355	Human Gross Anatomy Laboratory	1
ANTR 440	Human Anatomic Variation	2
BMB 200	Introduction to Biochemistry	4
BMB 400	Introduction to Bioinformatics	3
BMB 401	Comprehensive Biochemistry	4
BS 161	Cell and Molecular Biology	3
BS 162	Organismal and Population Biology	3
BS 171	Cell and Molecular Biology Laboratory	2
BS 172	Organismal and Population Biology Laboratory	2
CEM 141	General Chemistry	4
CEM 142	General and Inorganic Chemistry	3
CEM 143	Survey of Organic Chemistry	3
CEM 151	General and Descriptive Chemistry	4
CEM 152	Principles of Chemistry	3
CEM 161	Chemistry Laboratory I	1
CEM 162	Chemistry Laboratory	1
CEM 251	Organic Chemistry I	3
CEM 252	Organic Chemistry II	3
CMSE180	Introduction to Data Science	4
CMSE201	Computational Modeling and Data Analysis I	4
CMSE202	Computational Modeling and Data Analysis II	4
ENT 404	Fundamentals of Entomology	3
ENT 460	Medical Entomology	3
ENT 461	Field Ecology of Disease Vectors	3
EPI 280	Applied Analytical Methods of Health Studies I	3
EPI 380	Applied Analytical Methods of Health Studies II	3
EPI 390	Disease in Society: Introduction to Epidemiology and Public Health	4
EPI 465	Bayesian Statistical Methods	3
EPI 490	Advanced Topics/Methods in Global Public Health and Epidemiology	3
FOR 419	Applications of Geographic Information Systems to Natural Resources Management	4
FW 110	Conservation and Management of Marine Resources	3
FW 471	Ichthyology	4
FW 472	Limnology	3
GEO 201	Introduction to Plant Geography	3
GEO 206	Physical Geography	3
GEO 206L	Physical Geography Laboratory	1
GEO 221	Introduction to Geographic Information	3
GEO 221L	Introduction to Geographic Information Laboratory	1
GEO 302	Climates of the World	3
GEO 306	Environmental Geomorphology	3
GEO 324	Remote Sensing of the Environment	4
GEO 325	Geographic Information Systems	3
GEO 425	Problems in Geographic Information Science (W)	3
GLG 201	The Dynamic Earth	4
GLG 202	Geology of Michigan	3
GLG 303	Oceanography	3
GLG 304	Physical and Biological History of the Earth	4
GLG 306	Environmental Geomorphology	3
GLG 321	Mineralogy and Geochemistry	4
GLG 361	Igneous and Metamorphic Geochemistry and Petrology	4
GLG 401	Global Tectonics and Earth Structure (W)	4
GLG 411	Hydrogeology	3
GLG 412	Glacial Geology and the Record of Climate Change	4
GLG 421	Environmental Geochemistry	4
GLG 431	Sedimentology and Stratigraphy	4
GLG 433	Vertebrate Paleontology	4
GLG 434	Evolutionary Paleobiology	4

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GLG 446	Ecosystems Modeling, Water and Food Security	3
GLG 471	Applied Geophysics	4
IBIO 150	Integrating Biology: From DNA to Populations	3
IBIO 306	Invertebrate Biology	4
IBIO 313	Animal Behavior	3
IBIO 328	Comparative Anatomy and Biology of Vertebrates	4
IBIO 341	Fundamental Genetics	4
IBIO 353	Marine Biology (W)	4
IBIO 355	Ecology	3
IBIO 355L	Ecology Laboratory (W)	1
IBIO 357	Global Change Biology (W)	3
IBIO 360	Biology of Birds	4
IBIO 365	Biology of Mammals	4
IBIO 384	Biology of Amphibians and Reptiles (W)	4
IBIO 445	Evolution (W)	3
IBIO 446	Environmental Issues and Public Policy	3
MMG 141	Introductory Human Genetics	3
MMG 365	Medical Microbiology	3
MMG 365L	Medical Microbiology Laboratory	1
MMG 400	Introduction to Bioinformatics	3
MMG 404	Human Genetics	3
PLB 105	Plant Biology	3
PLB 106	Plant Biology Laboratory	1
PLB 203	Biology of Plants	4
PLB 400	Introduction to Bioinformatics	3
STT 224	Introduction to Probability and Statistics for Ecologists	3
STT 231	Statistics for Scientists	3
STT 301	Computational Methods for Data Science	3
STT 351	Probability and Statistics for Engineering	3
STT 422	Statistics II	3
STT 430	Introduction to Probability and Statistics	3
STT 461	Computations in Probability and Statistics	3

MINOR IN ANTHROPOLOGY

The Minor in Anthropology, which is administered by the Department of Anthropology, provides a basic foundation for the breadth of study within the field of anthropology, and a grounding in general anthropological theory. Students obtain knowledge of at least one advanced topic in the field and command of the anthropological literature in at least one geographical area.

This minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts or Bachelor of Science Degree in Anthropology. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult the undergraduate advisor in the Department of Anthropology.

Requirements for the Minor in Anthropology

	CREDITS
Complete 18 credits in the Department of Anthropology from the following:	
1. Both of the following courses (6 credits):	
ANP 201 Introduction to Cultural Anthropology	3
ANP 320 Social and Cultural Theory	3
2. The following course (3 credits):	
ANP 206 Introduction to Physical Anthropology	3
3. One of the following courses (3 credits):	
ANP 203 Introduction to Archaeology	3
ANP 363 Rise of Civilization	3
4. Complete 3 credits in an area course chosen from a list of approved courses available from the undergraduate advisor.	
5. Complete 3 credits in a topics course chosen from a list of approved courses available from the undergraduate advisor.	

MINOR IN DIGITAL CULTURAL HERITAGE AND HISTORY

The Digital Cultural Heritage and History minor will provide students with an understanding of how digital tools, methods, and computational approaches can be used to capture, analyze, preserve, provide access to, and present cultural, archaeological, and historical data, content, collections, and materials. The minor focuses on: (1) the legal, political, and ethical issues that shape and inform the practice of digital cultural heritage and history; (2) the methods and approaches used to digitize, document, and preserve endangered cultural heritage; (3) the use of digital methods and computational approaches in cultural heritage and history for public and community outreach, engagement, and collaboration; (4) how institutions such as museums, libraries, world heritage sites, and archives use digital methods and computational approaches to preserve and provide access to collections of cultural, historical, and archaeological materials; (5) the application of computational approaches and digital methods to the analysis and interpretation of cultural heritage and historical data. The minor is both applied and experiential, not only asking students to explore and understand the impact that digital methods and computational approaches have in the domains of cultural heritage and history, but providing them with critical skills and opportunities to build digital applications and experiences. The minor has a strong ethos of openness, thoughtfully arguing for the value of open access, open source, and open data within digital cultural heritage and history as well as strongly encouraging the use of open source tools, frameworks, and technologies for applied work.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult the undergraduate advisor in the Department of Anthropology.

Requirements for the Minor in Digital Cultural Heritage and History

Complete a minimum of 15 credits from the following:	CREDITS
1. The following course (3 credits):	
HST 251 Doing Digital History	3
2. One of the following courses (3 to 6 credits):	
ANP 465 Field Methods in Digital Heritage	6
GEO 221 Introduction to Geographic Information	3
HST 489 Seminar in Digital History (W)	3
PLS 202 Introduction to Data Analytics and the Social Sciences	3
3. Two of the following courses (6 or 7 credits):	
CSE 102 Algorithmic Thinking and Programming	3
CSE 231 Introduction to Programming I	4
DH 285 Introduction to Digital Humanities	3
GD 160 Digital Graphic Design: Tools and Methods	3
MI 101 Understanding Media and Information	3
MI 201 Introduction to Information Science	3
MI 220 Methods for Understanding Users	3
MI 250 Introduction to Applied Programming	3
4. The following capstone course (3 credits):	
ANP 412 Method and Practice in Digital Heritage	3

COLLEGE OF SOCIAL SCIENCE

GRADUATE STUDY

The Department of Anthropology offers programs of study leading to the Master of Arts and Doctor of Philosophy degrees.

Graduate education in Anthropology at MSU is directed toward development of high achievement in scholarship among a new generation of anthropologists, including a commitment to research, public engagement, and the ethical practice of anthropology. The Department of Anthropology at MSU takes pride in the diversity of our own community of scholars, including our graduate students and faculty, and is committed to maintaining and supporting this diversity both in our department and in the profession. The department also emphasizes the importance of collaborative work with the people and communities whom we study, and the need to share our research with a variety of audiences.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Anthropology may elect College of Social Sciences specializations in Environmental Science and Policy; Gender, Justice and Environmental Change; Global Urban Studies, International Development; and other graduate specializations. Dual degree programs are also possible, including special programs for professional doctoral degrees. Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Anthropology may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Infancy and Early Childhood*.

Master of Arts

Anthropologists study humans in relation to themselves, their past, their environment, and their biological heritage. As a discipline, Anthropology spans the social and natural sciences and the humanities, and is equipped with various tools and approaches to study human problems. Our knowledge and skills contribute critical perspectives on contemporary transformations within academia and in society at large.

Anthropology at MSU provides training in cultural anthropology, linguistic anthropology, archaeology, and physical anthropology. While a traditional four-field department, the graduate program provides opportunities for students to engage in research across the subdisciplines. The program also has a number of well-regarded subdisciplinary specialties including medical anthropology and forensic anthropology.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Students applying for admission to the master's program in anthropology will be considered regardless of the field of their previous academic training. It is, however, recommended that students have earned at least 12 undergraduate credits in anthropology before entering the program. Admission on other

than a provisional status is normally contingent upon the possession of a bachelor's degree from a recognized college or university, and a junior–senior undergraduate grade–point average of 3.0 or better in academic studies.

Requirements for the Master of Arts Degree in Anthropology

The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete a total of 30 credits distributed as follows:
Requirements for Both Plan A and Plan B

	CREDITS
1. Both of the following courses (6 credits):	
ANP 830 Cultural and Linguistic Anthropological Theory: Key Issues and Debates	3
ANP 840 Biocultural Evolution	3
2. Completion of a methods course appropriate for the student's subdiscipline. The course must be approved by the student's guidance committee.	
3. Completion of additional elective credits approved by the student's guidance committee. At least 21 of the 30 credits required for the degree must be earned in Anthropology.	

Additional Requirements for Plan A

1. Complete 4 credits of Anthropology 899 Master's Thesis Research.
2. Prepare an approved thesis proposal.
3. Pass an oral examination in defense of the thesis.

Additional Requirements for Plan B

1. Pass a final evaluation with a guidance committee of at least three faculty, at least two of whom should be from the Department of Anthropology.

Doctor of Philosophy

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Students applying for admission to the Doctor of Philosophy degree program in Anthropology will be considered regardless of the field of their previous academic training. It is, however, recommended that students have earned at least 12 undergraduate credits in anthropology before entering the program. Admission on other than a provisional status is normally contingent upon the possession of a bachelor's degree from a recognized college or university, and a junior–senior undergraduate grade–point average 3.0 or better in academic studies.

Requirements for the Doctor of Philosophy Degree in Anthropology

Students must complete the following:

	CREDITS
1. Both of the following courses (6 credits):	
ANP 830 Cultural and Linguistic Anthropological Theory: Key Issues and Debates	3
ANP 840 Biocultural Evolution	3
2. Completion of a methods course appropriate for the student's subdiscipline. The course must be approved by the student's guidance committee.	
3. Completion of additional elective credits approved by the student's guidance committee.	
4. Successful completion of the comprehensive examination, including preparation of a dissertation research proposal.	
5. Successful completion of 24 credits of ANP 999 Doctoral Dissertation Research and defense of the doctoral dissertation.	

PROFESSIONAL APPLICATIONS IN ANTHROPOLOGY

Master of Arts

The Master of Arts in Professional Applications in Anthropology will allow students to select a flexible but highly focused plan of study to prepare for positions as practicing anthropologists in government or the private sector. In addition to specialized training within the field of anthropology, students will be expected to elect courses in a field related to the practice of anthropology such as geographical information systems (GIS), cartography, resource development, management of nonprofit organizations, museum studies, or another practice-oriented specialty that is approved by the student's guidance committee. Students will also obtain experience as practicing professionals.

This program includes three areas of professional development: (1) in-depth knowledge of the discipline of anthropology; (2) demonstrated command of communication and presentation skills, as shown in the writing and public presentation of a master's paper; (3) demonstrated practical experience, obtained either as part of past employment, or as an internship within the public or private sector.

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Admission

Students applying for admission to the master's program in professional applications in anthropology will be considered regardless of the field of their previous academic training. It is, however, recommended that students have earned at least 12 undergraduate credits in anthropology before entering the program. Admission on other than a provisional status is normally contingent upon the possession of a bachelor's degree from a recognized college or university, and a junior-senior undergraduate grade-point average of 3.0 or better in academic studies.

Requirements for the Master of Arts Degree in Professional Applications in Anthropology

Students who are enrolled in the Master of Arts degree program with a major in Professional Applications in Anthropology must complete a minimum of 30 credits, 15 which must be earned in anthropology, under Plan B (without thesis). The student's program of study must be approved by the student's guidance committee. Normally students complete the requirements for the Master of Arts degree in two years.

The student must meet the following requirements:

1. Completion of Anthropology 840, 855, and 901.
2. A methods course in anthropology.
3. Completion of additional courses in anthropology and other disciplines.
4. Satisfactory completion and presentation of a master's paper, which is submitted to the Department.
5. Completion of an approved internship, Anthropology 900, unless this requirement is specifically waived by the student's guidance committee.

RESEARCH OPPORTUNITIES

The African, Asian, and Latin American Studies Centers offer unique opportunities for the support of anthropological research. The University Museum, International Studies and Programs, the Center for Advanced Studies in International Development (CASID), the Office of Women in Development (WID), the Agricultural Experiment Station, Urban Affairs Programs, the Hispanic Research Institute, and the Midwest Universities Consortium for International Activities, Incorporated (MUCIA), also support research. A program of study may be developed in cooperation with the College of Human Medicine.

SCHOOL of CRIMINAL JUSTICE

Thomas J. Holt, Director

Free and democratic society requires a commitment to safety and security as well as to core values of justice, equity, and civil liberty. Indeed, the appropriate balance of security and liberty is an ongoing challenge of free societies. Public and private agencies at various levels provide for security, safety, justice, and freedom through efforts to prevent crime and to appropriately respond to crime when it does occur.

The academic study of criminal justice through the Bachelor of Arts, Master of Arts, Master of Science, and Doctor of Philosophy degree programs in the School of Criminal Justice is based on the belief that the study of the causes of crime and delinquency must be combined with the study of the institutions and processes involved in the prevention and response to crime and delinquency. Additionally, the systematic study of crime, criminal behavior, and criminal justice and security processes should be informed by multidisciplinary theory and research. The challenges posed by crime and security in contemporary society necessitate well-educated professionals prepared for careers in criminal justice, security, and related areas.

The School of Criminal Justice offers an undergraduate minor in security management, graduate specializations in security management, forensic science, and in judicial administration, and Master of Arts and Master of Science degrees in Criminal Justice, and a Master of Science in Forensic Science, Law Enforcement Intelligence and Analysis, and Judicial Administration; and a Doctor of Philosophy degree in Criminal Justice.

COLLEGE OF SOCIAL SCIENCE

UNDERGRADUATE PROGRAMS

Bachelor of Arts

CRIMINAL JUSTICE

The Bachelor of Arts degree program in criminal justice is designed to prepare students for entry level positions in public and private agencies identified with criminal justice administration. Such agencies apprehend offenders, adjudicate alleged offenses, redirect emergent criminal careers, and promote industrial and commercial security. Such agencies also encourage and emphasize community responsibility for the success of their programs.

The bachelor's program in criminal justice provides a basic orientation to the institutions and processes of criminal justice and offers students wide exposure to all of the major disciplines of the criminal justice system. The program promotes general knowledge through core and social science courses. It provides students with the opportunity to pursue interests in the following areas: juvenile justice, police administration, adult corrections, and security.

Requirements for the Bachelor of Arts Degree in Criminal Justice

1. The requirements of the University as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Criminal Justice.

The University's Tier II writing requirement for the Criminal Justice major is met by completing one of the following courses: Criminal Justice 424, 426, 427, 430, 465, or 491. Those courses are referenced in item 3. a. (3) below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major:

	CREDITS
a. The following courses in the School of Criminal Justice (30 credits):	
(1) All of the following Prerequisite Courses (12 credits):	
CJ 110 Introduction to Criminal Justice	3
CJ 220 Criminology	3
CJ 275 Criminal Procedure	3
CJ 292 Methods of Criminal Justice Research	3
(2) Two of the following courses (6 credits):	
CJ 335 Policing	3
CJ 365 Corrections	3
CJ 355 Juvenile Justice	3
CJ 385 Private Security	3
CJ 395 Race and Justice	3
(3) Twelve credits from the following courses including 3 credits in Criminal Justice 424, 427, 430, 465, or 491. At least 9 credits must be at the 400-level.	
CJ 210 Introduction to Forensic Science	3
CJ 235 Investigation Procedures	3
CJ 422 Comparative and Historical Criminal Justice	3
CJ 424 Crime, Mass Media, and Society (W)	3
CJ 425 Gender, Sexuality, Crime, and Justice	3
CJ 426 Violence Against Women (W)	3
CJ 427 Criminology and Public Policy (W)	3
CJ 429 Interdisciplinary Topics in Cybersecurity	3
CJ 430 Advanced Seminar in Policing (W)	3
CJ 432 Community Policing	3
CJ 433 Law Enforcement Intelligence Operations	3
CJ 434 Police Administration	3
CJ 439 Homeland Security	3
CJ 445 Cyber-Crime and Cyber-Security	3
CJ 465 Critical Issues in Corrections (W)	3
CJ 466 Corrections Organizations and Systems	3
CJ 471 Law of Corrections	3
CJ 474 Law and Criminal Justice Policy	3
CJ 485 Critical Issues in Private Security	3

CJ 490 Independent Study	1 to 3
CJ 491 Topics in Criminal Justice	2 to 4
CJ 493 Undergraduate Research in Criminal Justice	1 to 3

MINOR IN SECURITY MANAGEMENT

The complexities of modern society have combined to generate a variety of threats to business organizations, information networks, government installations and operations, and individuals. The Minor in Security Management is designed for students who are interested in private and government security.

The minor, which is administered by the School of Criminal Justice, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The minor should be of particular interest to students who are enrolled in certain programs in the Eli Broad College of Business and the College of Social Science, and to students who are enrolled in the Bachelor of Science degree program in Computer Science.

The Minor in Security Management is designed to help students to understand:

1. The business and technical aspects of protecting private and government assets.
2. The administrative, management, technical, and legal problems of asset protection and loss prevention.
3. Concepts related to protecting personal and personnel rights, proprietary information, facilities, and other assets of an organization.
4. Security's relationship to the value of freedom and democratic principles in our society.

With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

Requirements for the Minor in Security Management

The student must complete:

	CREDITS
1. All of the following courses (12 credits):	
ACC 230 Survey of Accounting Concepts	3
CJ 235 Investigation Procedures	3
CJ 385 Private Security	3
CJ 485 Critical Issues in Private Security	3
2. One of the following courses (3 credits):	
CJ 429 Interdisciplinary Topics in Cyber Security	3
CJ 445 Cyber-Crimes and Cyber-Security (W)	3
3. One of the following courses (3 credits):	
CSE 101 Computing Concepts and Competencies	3
FI 320 Introduction to Finance	3
MGT 325 Management Skills and Processes	3
MKT 327 Introduction to Marketing	3

GRADUATE STUDY

The School of Criminal Justice is at the forefront of education in the nature of crime, administration of criminal justice, security management and administration, and the legal system. Throughout the program there is an emphasis on the relationship between theory and practice as well as the interconnection of the activities of the many agencies and professions involved in the systems of justice and private

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security. Through their research, teaching, and practice, graduates can contribute to the development of improved systems for the prevention and control of crime and delinquency.

The School of Criminal Justice offers a professionally and managerially oriented Master of Science degree program for advanced students, many of whom are criminal justice professionals. The Master of Science degree is offered on campus and the Master of Arts degree through online delivery. The Master of Science in Forensic Science offers concentrations in forensic anthropology, biology, and chemistry and is only offered on-campus. The School also offers a Master of Science degree in Law Enforcement Intelligence and Analysis which is available only online. A Graduate Certificate in Cyber Criminology and Cyber Security is also available.

The Doctor of Philosophy is designed to produce graduates who can apply interdisciplinary theory and a variety of research methodologies to the study of crime causation, social reaction, and the justice system. The Ph.D. in Criminal Justice permits students to emphasize the study of crime, crime control, and justice administration while simultaneously developing a strong foundation in social science theory and research methods. It prepares students for careers in college and university teaching and research, as well as for advanced public policy positions.

CRIMINAL JUSTICE

Master of Arts

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

While a criminal justice undergraduate major comparable to that offered by this school is not required for admission to the Master of Arts degree program, the applicant must have a background of education and occupational experience appropriate to the successful pursuit of graduate work. Occupational experience is highly desirable before undertaking graduate study in some fields of criminal justice.

All applicants must have at least 12 credits of undergraduate course work in political science, economics, sociology, psychology, anthropology, history, social work, or any combination thereof. At least 6 of these credits must be in sociology, psychology, social work, or any combination of such courses.

Regular Status

To be considered for admission to the Master of Arts degree in Criminal Justice, an applicant must:

1. submit a personal statement regarding their academic and professional goals.
2. submit scores from a GRE general exam taken within the last five years. The GRE exam is waived for candidates with a cumulative undergraduate grade-point average of

3.2 or higher from an accredited and recognized institution, and for applicants with a completed graduate degree.

Applicants insufficiently prepared for graduate study in criminal justice may have to complete collateral course work or pursue individualized study to satisfy deficiencies. Collateral course work does not count towards degree requirements.

Requirements for the Master of Arts Degree in Criminal Justice

The program is available under Plan B (without thesis) and online only. The student must complete a total of 30 credits distributed as follows:

	CREDITS
1. All of the following courses (18 credits):	
CJ 801 Crime Causation, Prevention and Control	3
CJ 810 Proseminar in Criminal Justice	3
CJ 812 Criminal Justice Management Seminar	3
CJ 857 Criminal Justice Behavior and Ethics	3
CJ 889 Fundamentals of Basic and Translational Research	3
CJ 896 Policy Analysis under Conditions of Change	3
2. Complete 6 credits of 800-level criminal justice electives.	
3. Complete 6 credits of electives approved by the student's academic advisor.	
4. Completion of a final examination or evaluation.	

Master of Science

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

While a criminal justice undergraduate major comparable to that offered by this school is not required for admission to the Master of Science degree program, the applicant must have a background of education and occupational experience appropriate to the successful pursuit of graduate work in the concentration elected. Applicants insufficiently prepared for graduate study in criminal justice may have to complete collateral course work or pursue individualized study to satisfy deficiencies. Occupational experience is highly desirable before undertaking graduate study in some fields of criminal justice.

All applicants must have at least 12 credits of undergraduate course work in political science, economics, sociology, psychology, anthropology, history, social work, or any combination thereof. At least 6 of these credits must be in sociology, psychology, social work, or any combination of such courses.

Regular Status

1. A bachelor's degree from a recognized educational institution.
2. An undergraduate grade-point average of 3.20 or higher.
3. Satisfactory scores on the Graduate Record Examination General Test. The GRE exam is waived for candidates with a cumulative undergraduate grade-point average of 3.2 or higher from an accredited and recognized institution and for applicants with a completed graduate degree.
4. Evidence of personal traits and characteristics considered important for scholarly performance.

COLLEGE OF SOCIAL SCIENCE

- Occupational experience is given weight in the selection of master's degree candidates whenever such experience is important to the study of a specific concentration or is an important factor in obtaining appropriate employment after completion of the Master of Science degree.

Provisional Status

A limited number of applicants who do not satisfy the school's regular admission requirements may be accepted provisionally. These students will be judged on the basis of their potential contribution to the field of criminal justice. Students should not be enrolled on a provisional basis for more than one semester. The student must be admitted on a regular basis to be considered a degree candidate. To qualify for admission to regular status, the student must complete a minimum of 10 credits in criminal justice graduate course work with a grade-point average of 3.20 or higher.

Requirements for the Master of Science Degree in Criminal Justice

The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete a total of 30 credits distributed as follows:

CREDITS

Requirements for Both Plan A and Plan B

- Core Courses (15 credits)

CJ 801	Crime Causation, Prevention, and Control	3
CJ 810	Proseminar in Criminal Justice	3
CJ 811	Design and Analysis in Criminal Justice Research	3
CJ 812	Criminal Justice Management Seminar	3
CJ 887	Quantitative Methods in Criminal Justice Research	3
- Plan A**
 - Complete 6 credits of Criminal Justice 899 Master's Thesis Research with a grade of 3.0 or better.
 - Pass an oral examination in defense of the thesis.
 - Complete 3 credits of electives approved by the academic advisor.

Plan B

- Complete Criminal Justice 896 Policy Analysis under Conditions of Change with a grade of 3.0 or better.
 - Pass an oral examination covering the policy analysis paper completed by successfully completing Criminal Justice 896.
 - Complete 6 credits of electives approved by the academic advisor.
- Criminal Justice electives approved by an academic advisor (6 credits)

CYBERCRIME AND DIGITAL INVESTIGATION

Master of Science

The Master of Science degree in Cybercrime and Digital Investigation prepares students for successful careers related to the investigation of or response to cybercrime in both the public sector (law enforcement, government) and private industry. Students gain an understanding of the diverse nature of cybercrime threats that affect individuals and organizations' economic and physical safety. They also will recognize the risks posed by nation-states and terrorist organizations in online spaces, whether to intellectual property, economic operations, or national security and be capable of assessing these threats, understanding their impact to various individual and organization targets, the limits of current legal and cybersecurity policy and practice, and clearly communicate these concerns to diverse audiences.

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Admission

To be considered for admission to the Master of Science degree in Cybercrime and Digital Investigation students must:

- have a bachelor's degree from a recognized educational institution, including a background of education, occupational experience appropriate to the successful pursuit of graduate study, and evidence of personal traits and characteristics considered important for scholarly performance.
- have at least 12 credits of undergraduate course work in political science, economics, sociology, psychology, anthropology, history, social work, or any combination thereof. At least 6 of these credits must be in sociology, psychology, social work, or any combination of such courses.
- have a cumulative undergraduate grade-point average of at least 3.20 or higher.
- have satisfactory scores on the Graduate Record Examination General Test. The GRE exam is waived for candidates with a cumulative undergraduate grade-point average of 3.2 or higher from an accredited and recognized institution, and for applicants with a completed graduate degree.

Students who have deficiencies for regular admission to the program may be admitted provisionally. These deficiencies may require additional course work to make up the deficiencies. This course work will not count towards the requirements for the degree. Occupational experience is highly desirable before pursuing graduate study in some fields of criminal justice.

Requirements for the Master of Science Degree in Cybercrime and Digital Investigation

At least 30 credits are required for the degree under Plan B (without thesis). The student's program of study is planned and approved in consultation with their advisor. The program is available only online.

CREDITS

- All of the following courses (18 credits):

CJ 801	Crime Causation, prevention and Control	3
CJ 811	Design and Analysis in Criminal Justice Research	3
CJ 874	Cybercrime, Deviance and Virtual Society	3
CJ 877	Cyber Terror and Cyber Warfare	3
CJ 881	Legislative and Policy Responses to Cybercrime	3
CJ 882	Analysis of Contemporary Cyberthreats	3
- Complete 12 credits from the following:

CJ 822	Comparative Criminal Justice	3
CJ 823	Globalization of Crime	3
CJ 872	Open Source Information Analysis	3
CJ 875	Digital Forensic Investigations	3
CJ 876	Data Systems/Infrastructure	3
CJ 878	Economic Cybercrimes and Fraud	3
CJ 879	Interpersonal Cybercrime	3
- Completion of a final oral examination or evaluation.

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Doctor of Philosophy

The Doctor of Philosophy degree in criminal justice focuses on criminal justice and criminology and theory-based knowledge of crime, criminal justice organizations and processes and the law. During the course of doctoral study, students are expected to develop the depth, breadth and consistency of their training in research methods and their applications of analytical capabilities to administrative and policy issues.

CRIMINAL JUSTICE

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

To be eligible for admission to the Doctor of Philosophy program in Criminal Justice, an applicant must have:

1. Completed an undergraduate degree in criminal justice or related social science field.
2. An overall grade-point average of at least 3.2 in the most recent academic degree (master's or bachelor's).
3. Satisfactory scores on the Graduate Record Examination (GRE) General Test as judged by the faculty.
4. Evidence of experience in social science research, such as the completion of a master's thesis.

Requirements for the Doctor of Philosophy Degree in Criminal Justice

Students who are enrolled in the Doctor of Philosophy degree program in Criminal Justice must complete a minimum of 60 credits.

1. Completion of 18 credits in Criminal Justice 801, 810, 901, 906, 909, and 910.
2. Students admitted directly from an undergraduate degree program must take Criminal Justice 811 and 887 as prerequisites to Criminal Justice 906, 907, 909, and 910. Criminal Justice 811 and 887 may not be counted toward doctoral program requirements.
3. Completion of 12 credits of additional elective courses at the 800 level or above as approved by the student's guidance committee.
4. Completion of two 3-credit doctoral research methods courses in the College of Social Science as approved by the student's guidance committee.
5. Satisfactory completion of 24 credits of Criminal Justice 999 and defense of a doctoral dissertation.

Normally students complete the requirements for the Doctor of Philosophy degree in four years.

FORENSIC SCIENCE

Master of Science

Several colleges and departments within Michigan State University cooperate to offer the Master of Science in Forensic Science. These include the College of Natural Science in

cooperation with the departments of Chemistry; Pharmacology and Toxicology, Statistics and Probability, and Zoology as well as the Center for Advanced Microscopy, and the College of Social Science in cooperation with the Department of Anthropology and the School of Criminal Justice. The School of Criminal Justice is the primary administrative unit.

This program is designed to give all students a broad, theoretical and practical background in the scientific, legal and investigative aspects of forensic science while providing the opportunity to study one of the major disciplines in depth. Students enrolled in this program must complete a concentration in one of the following areas: forensic chemistry, or forensic anthropology.

A thesis is required of all students pursuing Plan A and opportunities exist for an internship in a practicing United States or international forensic science laboratory.

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Admission

To be considered for admission to the Master of Science degree program in forensic science, an applicant must have:

1. completed a Bachelor of Science or Bachelor of Arts degree in a discipline appropriate to the desired concentration. For example, a student who desires to complete the concentration in forensic chemistry must have a bachelor's degree in chemistry or a closely allied science such as biochemistry.
2. a cumulative grade-point average of at least 3.0 for all course work in the bachelor's degree.
3. satisfactory scores in the Graduate Record Examination General Test as judged by the program faculty. No substantive area GRE exams are required.

Requirements for the Master of Science Degree in Forensic Science

The program is available under Plan A (with thesis) or Plan B (without thesis). Each student will have a thesis advisory committee comprised of the academic advisor and two other program faculty. The student must complete at least 38 credits as follows:

	CREDITS
1. The following courses (6 credits):	
CJ 804 Crime Scene Investigation	1
CJ 805 Survey in Forensic Science	3
CJ 817 Law and Forensic Science	2
2. One of the following concentrations:	
Forensic Chemistry (18 credits):	
CEM 832 Mass Spectrometry	3
CEM 835 Advanced Analytical Chemistry II	3
CJ 819 Forensic Analysis of Drugs and Alcohol	3
CJ 820 Forensic Chemistry and Microscopic Evidence	3
NSC 820 Scanning Electron Microscopy; Energy Dispersive X-ray Microanalysis	3
PHM 431 Pharmacology of Drug Addiction	3
Forensic Anthropology (15 credits):	
ANP 441 Osteology and Forensic Anthropology	4
ANP 842 Human Osteology	4
ANP 843 Bioarcheology	3
ANP 844 Topics in Forensic Anthropology	4
Students must enroll for Anthropology 844 twice, in increments of 2 credits.	
3. Complete an additional 8 to 11 credits of electives chosen in consultation with the student's academic advisor.	

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Additional Requirements for Plan A

1. Complete 6 credits in Forensic Science 899 Master's Thesis Research.
2. Attend at least one Master's Seminar Series lecture per semester.
3. Pass an oral examination in defense of the thesis.

Additional Requirements for Plan B

1. Complete 6 credits in Forensic Science 890 Independent Study.
2. Attend at least one Master's Seminar Series lecture per semester.
3. Completion of a final examination or evaluation.

LAW ENFORCEMENT INTELLIGENCE AND ANALYSIS

Master of Science

The Master of Science degree in Law Enforcement Intelligence and Analysis is a Plan B (without thesis), online program designed for working law enforcement professionals to enhance their education and training in the critical field of intelligence. Criminal justice students wishing to enter a law enforcement career with a specialized graduate degree may also apply.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

To be considered for admission to the Master of Science degree program in Law Enforcement Intelligence and Analysis, an applicant must:

1. submit a personal statement regarding their academic and professional goals.
2. submit scores from a GRE general exam taken within the last five years. The GRE exam is waived for candidates with a cumulative undergraduate GPA of 3.2 or higher from an accredited and recognized college or university, and for applicants with a completed graduate degree.

The School of Criminal Justice recognizes that many applicants have been out of the academic environment for some time, and other factors may be considered in the admission process. A limited number of applicants who do not satisfy the school's regular admission requirements may be admitted on a provisional basis. The decision to grant provisional admission is based on the student's potential contributions to the field of criminal justice. A student may be enrolled on a provisional basis for only two semesters and must be admitted on a regular basis to be considered a degree candidate. To qualify for regular status, a student must complete a minimum of 12 credits of graduate course work in criminal justice with a GPA of 3.0 or higher.

Requirements for the Master of Science Degree in Law Enforcement Intelligence and Analysis

CREDITS

The student must complete at least 30 credits under Plan B (without thesis).

1. All of the following courses (12 credits):

CJ 802	Proseminar in Law Enforcement Intelligence Operations	3
CJ 811	Design and Analysis in Criminal Justice Research	3
CJ 837	The Intelligence Process and Counterterrorism	3
CJ 870	Introduction to Crime Analysis	3
2. Five of the following courses (15 credits):

CJ 801	Crime Causation, Prevention, and Control	3
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CJ 803	Foundations in Homeland Security	3
CJ 810	Proseminar in Criminal Justice	3
CJ 822	Comparative Criminal Justice	3
CJ 823	Globalization of Crime	3
CJ 838	Issues in Terrorism	3
CJ 839	Analytic Thinking and Intelligence	3
CJ 856	Advanced Topics in Policing	3
CJ 871	Advanced Crime Analysis	3
CJ 872	Open Source Information Analysis	3
CJ 894	Practicum	3
GEO 802	Geospatial Technology	3

3. The following course (3 credits):

CJ 897	Comprehensive Threat Assessment	3
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4. Complete a final examination or evaluation.

GRADUATE CERTIFICATE IN CYBER CRIMINOLOGY AND CYBER SECURITY

The Graduate Certificate in Cyber Criminology and Cyber Security is designed to provide graduates the knowledge of cybercrime/cyberterrorism, the understanding of basic principles of cybersecurity, and digital forensics skills to prepare individuals for successful careers in the fields of digital forensics, law enforcement investigations, cyber security, or intelligence analysis, whether in government or the private sector. Students leave the program with ability to understand and identify the range of cybercrimes that occur, as well as the facilitating role of technology in myriad real world offenses, and will be able to identify the basic system and network structures that support the Internet and online communications, and understand and communicate basic cybersecurity strategies in practice in various organizations. Students will be able to utilize forensic techniques to appropriately seize and analyze digital forensic evidence from devices to yield digital evidence.

Requirements for the Graduate Certificate in Cyber Criminology and Cyber Security

CREDITS

Students must complete 15 credits from all of the following courses:

CJ 872	Open Source Information Analysis	3
CJ 874	Cybercrime, Deviance and Virtual Society	3
CJ 875	Digital Forensic Investigations	3
CJ 876	Data Systems/Infrastructure	3
CJ 877	Cyber Terror and Cyber Warfare	3

GRADUATE SPECIALIZATION IN FORENSIC SCIENCE

The Graduate Specialization in Forensic Science provides a thorough understanding of the broad field of forensic science and prepares students for the role of court-qualified expert. Students study scientific, technical, and ethical issues and the relationship of their own area of expertise to the criminal justice system. The legal aspects of forensic science presented include the study of court-qualified expert qualifications, types of scientific evidence likely to be admissible in court, and how evidence may become inadmissible for scientific and technical reasons. Students will participate in a mock trial drawing on their systemic understanding of their field of expertise and their ability to explain methodology and evidence to laypersons.

This graduate specialization is available as an elective to students who are enrolled in doctoral degree programs at

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Michigan State University. The Graduate Specialization in Forensic Science, which is administered by the School of Criminal Justice, is designed for individuals in a discipline that typically does not lend itself to full-time employment in a crime laboratory but may require participation in the criminal justice system in order to offer expert advice. Completion of this specialization will provide students with knowledge of the United States legal system, scientific evidence, and intricacies of testifying, all of which are requisite to becoming an effective court-qualified expert in the courtroom.

With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the specialization may also be used to satisfy the requirements for the doctoral degree. The student's program of study must be approved by the student's advisor for the specialization.

Requirements for the Graduate Specialization in Forensic Science

CREDITS

The student must complete 9 credits from the following:

- All of the following courses (6 credits):

CJ 805 Survey of Forensic Science	3
CJ 817 Law and Forensic Science	2
FRS 890 Independent Study	1

Independent study will entail a substantial literature and legal essay reviewing the student's specialized field as it relates to the forensic sciences and the legal system.
- Complete a 3 credit 800 or 900-level course that is relevant to the discipline, such as forensic anthropology or forensic entomology, and is approved by the student's advisor and the Director of the Forensic Science program.

GRADUATE SPECIALIZATION IN JUDICIAL ADMINISTRATION

Management of the courts and the judicial process in contemporary society requires expert knowledge and complex skills. The courts need qualified professionals who can ensure that the public receives timely and just resolution to cases requiring judicial intervention.

The Specialization in Judicial Administration, which is administered by the School of Criminal Justice within the College of Social Science, is available online as an elective to students who are enrolled in master's degree programs at Michigan State University with the exception of student's pursuing the Master of Science in Judicial Administration. This specialization is designed to meet the educational needs of students currently working in the judicial system. It prepares students to understand the purposes and responsibilities of the courts; leadership and its role in guiding the courts; and interaction with the community. It provides opportunities to learn how to obtain and manage human resources including staff education and development, budgets, and fiscal resources; manage cases and information technology effectively; envision and plan strategically; and implement and manage auxiliary court programs and required services, which complement and support the core functions of the courts.

With the approval of the department or school and college that administers the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the master's

degree. The student's program of study must be approved by the student's guidance committee for the specialization.

Requirements for the Graduate Specialization in Judicial Administration

CREDITS

The student must:

- Complete all of the following core courses (12 credits):

CJ 812 Criminal Justice Management Seminar	3
CJ 829 National and Global Trends in Court Planning	3
CJ 860 Historical Foundations/Contemporary Frameworks of Judicial Administration	3
CJ 864 Elements of Essential Court Operations	3

Equivalent courses may be substituted with approval of the Criminal Justice academic advisor.

GRADUATE SPECIALIZATION IN SECURITY MANAGEMENT

The complexities of modern society have combined to generate a variety of threats to business organizations, information networks, government installations and operations, and individuals. The Graduate Specialization in Security Management is designed for students who are interested in private and government security.

The specialization, which is administered by the School of Criminal Justice, is available as an elective to students who are enrolled in master's degree programs at Michigan State University. The specialization should be of particular interest to students who are enrolled in certain programs in the Eli Broad College of Business and the College of Social Science. The Specialization in Security Management is designed to help students to understand:

- The business and technical aspects of protecting private and government assets.
- The administrative, management, technical, and legal problems of asset protection and loss prevention.
- Concepts related to protecting personal and personnel rights, proprietary information, facilities, and other assets of an organization.
- Security's relationship to the value of freedom and democratic principles in our society.

With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the master's degree.

Requirements for the Graduate Specialization in Security Management:

The student must complete:

CREDITS

- All of the following courses (15 credits):

CJ 801 Crime Causation, Prevention, and Control	3
CJ 811 Design and Analysis in Criminal Justice Research	3
CJ 812 Criminal Justice Management Seminar	3
CJ 885 Security Management	3
CJ 886 Security Administration	3

An equivalent course may be substituted for Criminal Justice 811 and 812 with approval of a Criminal Justice advisor.
- One of the following courses (3 credits):

LIR 823 Organizational Behavior in Labor and Industrial Relations	3
MGT 824 Management and Organizational Behavior	3

PLS 810	Proseminar in Public Administration	3
PSY 860	Industrial and Organizational Psychology	3

DEPARTMENT of ECONOMICS

Steven Haider, Chairperson

Economics is the study of how various entities make choices with scarce resources. Microeconomics focuses on the choices made by individuals and firms, and macroeconomics looks at the behavior of the economy as a whole. The study of economics is one of the most practical and adaptable disciplines. Those who focus on it gain a broad skill-set that can be utilized in complex and changing environments, and that can contribute to the understanding and improvement of lives at the individual, group, organizational, and societal levels.

The Department of Economics offers both undergraduate and graduate degrees. Both programs offer courses that teach fundamental communication and analytical skills necessary to succeed in a wide variety of academic and professional careers.

The mission of the Department of Economics at Michigan State University consists of three interrelated components: providing the highest quality instruction to our undergraduate and graduate students, conducting cutting-edge research in economics, and providing leadership and service to our professional communities.

UNDERGRADUATE PROGRAMS

The Department of Economics offers Bachelor of Arts and Bachelor of Science degrees, as well as a minor. Jointly with the Department of Political Science, it also offers a Linked Bachelor of Arts or Science/Master of Public Policy degree program.

The economics degree programs provide students with substantive knowledge of the domestic and international economy and include the study of institutions, concepts, policy, and tools of analysis. Our students prepare for careers in business such as banking, financial markets, insurance, management, and consulting; positions in national, state, and local governments; teaching; and graduate study in economics and related fields including business administration, finance, public policy, and law.

The department stresses flexibility in each undergraduate program and requires a strong core of economic theory, supplemented by mathematics, statistics, and computer science. All students are afforded substantial elective space and are encouraged to develop programs of study that are tailored to their individual interests and goals.

The Linked Bachelor of Arts or Science/Master of Public Policy program allows qualified students interested in professional careers in policy analysis, program management or policy advocacy the opportunity to complete both their bachelor's and master's degrees in a total of five years.

Beyond the introductory courses in microeconomics and macroeconomics, the department offers courses in a number of areas of emphasis. These areas of emphasis are listed below, along with their respective course offerings.

<i>Microeconomics</i>		
EC 251H	Microeconomics and Public Policy	
EC 301	Intermediate Microeconomics	
EC 401	Advanced Microeconomics	
<i>Macroeconomics and Monetary Theory</i>		
EC 252H	Macroeconomics and Public Policy	
EC 302	Intermediate Macroeconomics	
EC 330	Money, Banking, and Financial Markets	
EC 402	Advanced Macroeconomics	
<i>Development</i>		
EC 310	Economics of Developing Countries	
EC 410	Issues in the Economics of Developing Countries (W)	
EC 413	Economic Analysis of Asia (W)	
EC 414	Economic Analysis of Sub-Saharan Africa (W)	
<i>Econometrics</i>		
EC 420	Introduction to Econometric Methods	
EC 421	Advanced Econometric Methods	
EC 422	Advanced Data Analysis in Economics	
<i>Public Economics</i>		
EC 335	Taxes, Government Spending and Public Policy	
EC 435	Public Expenditures (W)	
EC 436	Public Revenues (W)	
<i>International Economics</i>		
EC 340	Survey of International Economics	
EC 440	International Trade (W)	
EC 441	International Finance (W)	
<i>Industrial Organization</i>		
EC 360	Private Enterprise and Public Policy	
EC 460	American Industry: Structure and Behavior (W)	
<i>Labor Economics</i>		
EC 380	Labor Relations and Labor Market Policy	
EC 480	Analysis of Labor Markets (W)	
<i>Economics of Education</i>		
EC 485	Economics of Education (W)	
<i>Law and Economics</i>		
EC 425	Law and Economics (W)	
<i>Health and Welfare</i>		
EC 495	Economics of Poverty and Income Distribution (W)	
EC 498	Economics of Health Care (W)	
<i>Urban Economics</i>		
EC 438	Urban Economics (W)	
<i>Environmental Economics</i>		
EC 450	Economics of Environmental Policy (W)	
<i>Behavioral Economics</i>		
EC 404	Behavioral Economics (W)	
<i>Undergraduate Research</i>		
EC 499	Senior Seminar for Economics Majors (W)	

ECONOMICS

The Bachelor of Arts Degree in Economics emphasizes the use of quantitative techniques in the analysis of economic theories.

Requirements for the Bachelor of Arts Degree in Economics

1. The graduation requirements of the University as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Economics.

The University's Mathematics requirement for the Bachelor of Arts degree in Economics is met by completing Mathematics 124, 132, or 152H.

The University's Tier II writing requirement for the Economics major is met by completing one of the following courses: Economics 404, 406, 410, 412, 413, 414, 425, 435, 436, 438, 440, 441, 450, 460, 480, 485, 495, 498, or 499. Those courses are referenced in item 3. c. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

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CREDITS

3. The following requirements for the major (36 or 37 credits):
Students may elect to complete more economics courses than those needed to complete the requirements for the major, with the understanding that the grades earned in such courses will be included in the computation of the grade-point average for courses in the major to meet College of Social Science graduation requirements. In order to be eligible to enroll in Economics 499, as referenced in item 3. below, students must have a grade-point average of 2.0 across attempted Economics courses.

- a. All of the following courses in the Department of Economics (15 credits):

EC 201	Introduction to Microeconomics	3
EC 202	Introduction to Macroeconomics	3
EC 301	Intermediate Microeconomics	3
EC 302	Intermediate Macroeconomics	3
EC 420	Introduction to Econometric Methods	3

A minimum grade of 2.0 must be achieved in both Economics 201 and 202. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

Economics 251H may be substituted for Economics 201 and 301. Students who elect this substitution, and who do not take Economics 252H, may satisfy the requirement referenced in item 3. a. by completing at least 2 to 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. d.

Economics 252H may be substituted for Economics 202 and 302. Students who elect this substitution, and who do not take Economics 251H, may satisfy the requirement referenced in item 3. a. by completing at least 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. d.

Economics 251H and 252H may be substituted for the following group of courses: Economics 201, 202, 301, and 302. Students who elect this substitution may satisfy the requirement referenced in item 3. a. by completing at least 5 to 6 credits in two Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. d.

Students who elect to use Economics 251H as a substitute for Economics 201 and/or Economics 252H as a substitute for Economics 202 must achieve a minimum grade of 2.0 in the course substitute. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

- b. One of the following courses in the international area (3 credits):

EC 306	Comparative Economic Systems	3
EC 310	Economics of Developing Countries	3
EC 340	Survey of International Economics	3
EC 406	Economic Analysis of Russia and the Commonwealth of Independent States (W)	3
EC 410	Issues in the Economics of Developing Countries (W)	3
EC 412	Economic Analysis of Latin America (W)	3
EC 413	Economic Analysis of Asia (W)	3
EC 414	Economic Analysis of Sub-Saharan Africa (W)	3
EC 440	International Trade (W)	3
EC 441	International Finance (W)	3

The course used to fulfill this requirement may not be used to fulfill requirement c. below.

- c. One of the following courses (3 credits):

EC 404	Behavioral Economics (W)	3
EC 406	Economic Analysis of Russia and the Commonwealth of Independent States (W)	3
EC 410	Issues in the Economics of Developing Countries (W)	3
EC 412	Economic Analysis of Latin America (W)	3
EC 413	Economic Analysis of Asia (W)	3
EC 414	Economic Analysis of Sub-Saharan Africa (W)	3
EC 425	Law and Economics (W)	3
EC 435	Public Expenditures (W)	3
EC 436	Public Revenues (W)	3
EC 438	Urban Economics (W)	3
EC 440	International Trade (W)	3
EC 441	International Finance (W)	3
EC 450	Economics of Environmental Policy (W)	3
EC 460	American Industry: Structure and Behavior (W)	3
EC 480	Analysis of Labor Markets (W)	3
EC 485	Economics of Education (W)	3
EC 495	Economics of Poverty and Income Distribution (W)	3
EC 498	Economics of Health Care (W)	3
EC 499	Senior Seminar for Economics Majors (W)	3

The course used to fulfill this requirement may not be used to fulfill requirement b. above.

- d. Nine additional credits in economics courses, of which at least 6 credits must be at the 400-level.

- e. One of the following courses (3 credits):

MTH 124	Survey of Calculus I	3
MTH 132	Calculus I	3
MTH 152H	Honors Calculus I	3

The course used to fulfill this requirement may also be used to fulfill the University mathematics requirement.

- f. One of the following courses (3 credits):

STT 315	Introduction to Probability and Statistics for Business	3
STT 351	Probability and Statistics for Engineering	3
STT 421	Statistics I	3
STT 430	Introduction to Probability and Statistics	3
STT 442	Probability and Statistics II: Statistics	3

- g. One of the following courses (3 or 4 credits):

CSE 102	Algorithmic Thinking and Programming	3
CMSE201	Computational Modeling and Data Analysis I	4

In addition to the requirements for the major, students may elect to complete an optional cognate in business. The requirements for the cognate are met by completing four of the following courses (12 credits):

ACC 230	Survey of Accounting Concepts	3
FI 320	Introduction to Finance	3
GBL 323	Introduction to Business Law	3
MGT 325	Management Skills and Processes	3
MKT 327	Introduction to Marketing	3

Students may substitute Accounting 201 and 202 for Accounting 230.

Bachelor of Science

The Bachelor of Science Degree in Economics emphasizes the use of advanced math and science in the analysis of economic theories. The program offers students more emphasis on mathematics, statistics, and computer science, as preparation for those who wish to pursue graduate training in economics.

Requirements for the Bachelor of Science Degree in Economics

1. The graduation requirements of the University as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Economics.

The University's Mathematics requirement for the Bachelor of Science degree in Economics is met by completing Mathematics 132, or 152H.

The University's Tier II writing requirement for the Economics major is met by completing one of the following courses: Economics 404, 406, 410, 412, 413, 414, 425, 435, 436, 438, 440, 441, 450, 460, 480, 485, 495, 498, or 499. Those courses are referenced in item 3. c. below.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

CREDITS

3. The following requirements for the major (30 credits):

Students may elect to complete more economics courses than those needed to complete the requirements for the major, with the understanding that the grades earned in such courses will be included in the computation of the grade-point average for courses in the major to meet College of Social Science graduation requirements. In order to be eligible to enroll in Economics 499, as referenced in item 3. c. and 3. e. below, students must have a grade-point average of 2.0 across attempted Economics courses.

- a. All of the following courses (15 credits):

EC 201	Introduction to Microeconomics	3
EC 202	Introduction to Macroeconomics	3
EC 301	Intermediate Microeconomics	3
EC 302	Intermediate Macroeconomics	3
EC 420	Introduction to Econometric Methods	3

A minimum grade of 2.0 must be achieved in both Economics 201 and 202. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

Economics 251H may be substituted for Economics 201 and 301. Students who elect this substitution, and who do not take Economics

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252H, may satisfy the requirement referenced in item 3. a. by completing at least 2 to 3 credits in Economics courses at the 300-400 level, in addition to the credits referenced in item 3. f.

Economics 252H may be substituted for Economics 202 and 302. Students who elect this substitution, and who do not take Economics 251H, may satisfy the requirement referenced in item 3. a. by completing at least 3 credits in Economics courses at the 300-400 level, in addition to the credits referenced in item 3. f.

Economics 251H and 252H may be substituted for the following group of courses: Economics 201, 202, 301, and 302. Students who elect this substitution may satisfy the requirement referenced in item 3. a. by completing at least 5 to 6 credits in two Economics courses at the 300-400 level, in addition to the credits referenced in item 3. f.

Students who elect to use Economics 251H as a substitute for Economics 201 and/or Economics 252H as a substitute for Economics 202 must achieve a minimum grade of 2.0 in the course substitute. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

b. One of the following courses in the international area (3 credits):

EC 306	Comparative Economic Systems	3
EC 310	Economics of Developing Countries	3
EC 340	Survey of International Economics	3
EC 406	Economic Analysis of Russia and the Commonwealth of Independent States (W)	3
EC 410	Issues in the Economics of Developing Countries (W)	3
EC 412	Economic Analysis of Latin America (W)	3
EC 413	Economic Analysis of Asia (W)	3
EC 414	Economic Analysis of Sub-Saharan Africa (W)	3
EC 440	International Trade (W)	3
EC 441	International Finance (W)	3

The course used to fulfill this requirement may not be used to fulfill requirement 3. c. below.

c. One of the following courses (3 credits):

EC 404	Behavioral Economics (W)	3
EC 406	Economic Analysis of Russia and the Commonwealth of Independent States (W)	3
EC 410	Issues in the Economics of Developing Countries (W)	3
EC 412	Economic Analysis of Latin America (W)	3
EC 413	Economic Analysis of Asia (W)	3
EC 414	Economic Analysis of Sub-Saharan Africa (W)	3
EC 425	Law and Economics (W)	3
EC 435	Public Expenditures (W)	3
EC 436	Public Revenues (W)	3
EC 438	Urban Economics (W)	3
EC 440	International Trade (W)	3
EC 441	International Finance (W)	3
EC 450	Economics of Environmental Policy (W)	3
EC 460	American Industry: Structure and Behavior (W)	3
EC 480	Analysis of Labor Markets (W)	3
EC 485	Economics of Education (W)	3
EC 495	Economics of Poverty and Income Distribution (W)	3
EC 498	Economics of Health Care (W)	3
EC 499	Senior Seminar for Economics Majors (W)	3

Courses used to fulfill requirement 3. b. above may not be used to fulfill this requirement.

d. One of the following courses (3 credits):

EC 401	Advanced Microeconomics	3
EC 402	Advanced Macroeconomics	3

e. One of the following courses (3 credits):

EC 421	Advanced Econometric Methods	3
EC 499	Senior Seminar for Economics Majors (W)	3

EC 499 may not be used to fulfill this requirement if used to fulfill requirement 3. c. above.

f. Three to six additional elective credits in economics courses to total at least 30 credits in Economics courses in the major. No more than 3 credits may be at the 300-level or below.

g. One of the following courses (3 credits):

MTH 132	Calculus I	3
MTH 152H	Honors Calculus I	3

The course used to fulfill this requirement may also be used to fulfill the University mathematics requirement.

h. One of the following courses (4 credits):

MTH 133	Calculus II	4
MTH 153H	Honors Calculus II	4

The course used to fulfill this requirement may also be used to fulfill the College of Social Science STEM requirement.

i. One of the following courses (3 credits):

STT 351	Probability and Statistics for Engineering	3
STT 430	Introduction to Probability and Statistics	3
STT 442	Probability and Statistics II: Statistics	3

The course used to fulfill this requirement may also be used to fulfill the College of Social Science STEM requirement.

j. A minimum of 7 credits from the following courses:

CSE 231	Introduction to Programming I	4
CMSE201	Introduction to Computational Modeling	4
MTH 234	Multivariable Calculus	4
MTH 235	Differential Equations	3
MTH 254H	Honors Multivariable Calculus	4
MTH 299	Transitions	4
MTH 309	Linear Algebra I	3
MTH 310	Abstract Algebra I and Number Theory	3
MTH 314	Matrix Algebra with Computational Applications	3
MTH 320	Analysis I	3
MTH 340	Ordinary Differential Equations I	3
STT 441	Probability and Statistics I: Probability	3
STT 461	Computations in Probability and Statistics	3

Students may count only one of CSE 231 or CMSE 201 in this requirement. The courses used to fulfill this requirement may also be used to fulfill the College of Social Science STEM requirement.

In addition to the requirements for the major, students may elect to complete an optional cognate in business. The requirements for the cognate are met by completing four of the following courses (12 credits):

ACC 230	Survey of Accounting Concepts	3
FI 320	Introduction to Finance	3
GBL 323	Introduction to Business Law	3
MGT 325	Management Skills and Processes	3
MKT 327	Introduction to Marketing	3

Students may substitute Accounting 201 and 202 for Accounting 230.

MINOR IN ECONOMICS

The Minor in Economics, which is administered by the Department of Economics, provides a basic foundation for the breadth of study within the field of economics and a grounding in general economic theory.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts or Bachelor of Science Degree in Economics. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult an undergraduate advisor in the Department of Economics.

Requirements for the Minor in Economics

Complete 18 credits of economics course work with a minimum grade-point average of 2.0 in courses used in fulfillment of the requirements for the minor.

1. All of the following courses (9 credits):

EC 201	Introduction to Microeconomics	3
EC 202	Introduction to Macroeconomics	3
EC 301	Intermediate Microeconomics	3

Economics 251H may be substituted for Economics 201 and 301.

Students who elect this substitution may satisfy the requirement referenced in item 3. by completing at least 8 additional credits in Economics course work at the 300-400 level.

Economics 252H may be substituted for Economics 202.

Economics 251H and 252H may be substituted for the following group of courses: Economics 201, 202, 301, and 302. Economics 302 is not required for the minor. Students who elect this substitution may satisfy

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the requirement referenced in item 3. by completing at least 8 additional credits in Economics course work at the 300-400 level.

2. Complete 3 additional credits in Economics at the 400-level.
3. Complete 6 additional credits in Economics at the 300-400 level.

TEACHER CERTIFICATION OPTIONS

The economics disciplinary minor is available for teacher certification for students who are pursuing a major with a teacher certification option in comparative cultures and politics, international relations, political theory and constitutional democracy, social relations and policy, interdisciplinary studies in social science, interdisciplinary studies in social science: social science education, or history. Students who elect the economics disciplinary minor must contact the Department of Economics.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts or Bachelor of Science Degree in Economics Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Economics undergraduate students during the fall semester of their junior year in order to begin the program during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

GRADUATE STUDY

The Department of Economics offers a Doctor of Philosophy degree in Economics and a Master of Public Policy degree jointly with the Department of Political Science. Students who are admitted to the Doctor of Philosophy program may obtain a Master of Arts degree in Economics.

The doctoral degree prepares students for professional careers in research, teaching, government, and business. Doctoral students must qualify in general economic theory, methods, and two fields of specialization. The fields of specialization include:

- Advanced Economic Theory
- Advanced Macroeconomics
- Econometrics
- Development

Environmental and Resource Economics
Industrial Organization
International Economics
Labor Economics
Macroeconomics
Public Economics

Substitution of a field in another discipline is possible. The master degree is offered to students who are admitted to the doctoral program that satisfy the master degree requirements.

The Master of Public Policy program provides students with the requisite skills to address complex societal problems, reconcile conflicting political and ethical values in policymaking, make informed decisions about program activities, and provide effective leadership in policy development and implementation.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Economics may elect specializations in environmental and resource economics. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Environmental and Resource Economics* in the *College of Agriculture and Natural Resources* section of this catalog.

Admission

Before admission to graduate work, a student should have acquired a minimum of 25 credits in the social sciences, mathematics, statistics, agricultural economics, accounting, or business administration, or in some combination of these fields. Students with limited economics in their undergraduate programs will have to correct such deficiencies by completing collateral courses, not to count toward the degree, which serve as prerequisites for the graduate economics courses.

Applicants to the graduate programs are required to submit scores on the Graduate Record Examination General Test; in addition, applicants should arrange to have three letters of recommendation and transcripts of all prior collegiate course work supplied to the department.

Master of Arts

The Master of Arts degree is available to students enrolled in the Ph.D. degree program in Economics or, with departmental approval, as a second degree for students enrolled in other graduate degree programs. Only the Plan B (without thesis) option is available. Course requirements include the first-year core sequence in the Ph.D. program in Economics, which prepares students for continuing in the Ph.D. program or for professional careers that call for high-level training in economic theory and quantitative analysis methods.

In addition to meeting the requirements of the university, of the College of Social Science, and the Department of Economics, students must meet the requirements specified below.

Requirements for the Master of Arts Degree in Economics

	CREDITS
1. Complete all of the following courses (22 credits):	
EC 811A Mathematical Applications in Economics	2
EC 811B The Structure of Economic Analysis	2
EC 812A Microeconomics I	3
EC 812B Microeconomics II	3
EC 813A Macroeconomics I	3
EC 813B Macroeconomics II	3
EC 820A Econometrics IA	3
EC 820B Econometrics IB	3
2. Complete three additional Economics courses at the 800-900 level totaling at least 8 credits.	
3. Obtain a master's level pass on the written comprehensive examination in microeconomic theory, macroeconomic theory, and econometrics.	

Academic Standards

To remain in the program and receive the M. A. degree in economics, a student must:

- Maintain at least a 3.00 grade-point average.
- Earn a grade of 3.0 or higher in required 800–900 level economics courses.
- The accumulation of grades below 3.0 (including N grades in the P-N grading system) in more than two courses of 3 or more credits each removes the student from the degree program; this policy does not apply to courses below the 400-level unless the courses are required for the student's program.

Doctor of Philosophy

Students may be admitted to the Doctor of Philosophy degree in Economics only for a fall semester.

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Requirements for the Doctor of Philosophy Degree in Economics

- Complete the core courses in economic theory, mathematical methods in economics, and econometrics.
- Pass a comprehensive examination in microeconomic theory, macroeconomic theory, and econometrics.
- Complete other course requirements as specified in the document The Doctoral Program in Economics, available from the Department of Economics.
- Demonstrate competence in two fields of specialization and advanced methods.
- Present a research paper at the Department of Economics spring conference.
- Present a dissertation proposal to the student's guidance committee.
- Write an acceptable dissertation and defend it successfully in a public oral examination.

Academic Standards

Refer to the *Doctor of Philosophy* degree statement in the *College of Social Science* section.

DEPARTMENT of GEOGRAPHY, ENVIRONMENT, and SPATIAL SCIENCES

Alan F. Arbogast, Chairperson

The discipline of geography, as the study of place and space, concerns itself with the analysis and explanation of the occurrence, distribution, and interrelationships of physical and cultural patterns on the earth's surface. The discipline is also interested in how the earth's physical and human landscapes change over time. Geography can be classified both as a social science and a natural science as it examines human beings and their environment and serves as a bridge between the physical and cultural worlds. The undergraduate program is designed to prepare students for various careers in business, industry, education and government.

Strengths of the department include physical geography (climate, geomorphology, soils, vegetation), economic geography, environmental change, spatial technologies (GIS, remote sensing, cartography), health/medical geography, urban geography, and nature-society interactions.

UNDERGRADUATE PROGRAMS

The Department of Geography, Environment, and Spatial Sciences offers programs in economic geography, environmental geography, human geography, and geographic information science leading to the Bachelor of Arts and Bachelor of Science degrees. Minors in Geography and Geographic Information Science are also available.

ECONOMIC GEOGRAPHY

The Bachelor of Science degree in Economic Geography provides a comprehensive program for students interested in the roles of space, place, location, scale, key agents, and forces in the economic sphere. The program prepares students to succeed in commercial, non-government organizations, nonprofits, or governmental realms as well as the pursuit of graduate degrees, with emphases on spatial planning and control of issues ranging from transport and markets to poverty and inequality. Students attain substantial quantitative and technical skills as well as practical skills for solving problems drawn from local, regional, and global settings.

Requirements for the Bachelor of Science Degree in Economic Geography

- The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Economic Geography.

The University's Tier II writing requirement for the Economic Geography major is met by completing Geography 480. That course is referenced in item 3. below.

COLLEGE OF SOCIAL SCIENCE

2. The requirements of the College of Social Science for the Bachelor of Science degree.

3. The following courses with a minimum 2.0 grade-point average across all attempted GEO courses (42 or 43 credits):

CREDITS

a. One of the following courses (3 or 4 credits):

LB 118	Calculus I	4
MTH 124	Survey of Calculus I	3
MTH 132	Calculus I	3
MTH 152H	Honors Calculus I	3

b. The following course (3 credits):

EC 201	Introduction to Microeconomics	3
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c. Both of the following courses (6 credits):

GEO 113	Introduction to Economic Geography	3
GEO 151	Introduction to Human Geography	3

d. Both of the following courses (6 credits):

GEO 221	Introduction to Geographic Information	3
GEO 363	Introduction to Quantitative Methods for Geographers	3

e. Three of the following courses (9 credits):

GEO 413	Urban Geography	3
GEO 414	Geography of Transportation	3
GEO 415	Location Theory and Land Use Analysis	3
GEO 418	The Ghetto	3
GEO 453	Metropolitan Environments: Urban Forms and Land Uses	3
GEO 459	Tourism in Regional Development	3

f. The following course (3 credits):

GEO 480	Senior Seminar (W)	3
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g. Six additional credits in Geography courses at the 300-level and above.

h. Two courses outside the Department of Geography, Environment, and Spatial Sciences (6 credits):

AFRE320	Environmental Economics	3
CE 341	Transportation Engineering	3
CE 448	Transportation Planning	3
CSUS320	Environmental Planning and Management	3
CSUS474	Advanced Topics in Tourism Management	3
EC 301	Intermediate Microeconomics	3
EC 306	Comparative Economic Systems	3
EC 310	Economics of Developing Countries	3
EC 340	Survey of International Economics	3
UP 314	Methods for Investigation of Urban Systems	4
UP 353	Land Use Planning	4

In addition to the requirements for the major, students may elect to complete a cognate in business. The requirements for the cognate are met by completing four of the following courses (12 credits):

ACC 230	Survey of Accounting Concepts	3
FI 320	Introduction to Finance	3
GBL 323	Introduction to Business Law	3
MGT 325	Management Skills and Processes	3
MKT 327	Introduction to Marketing	3

4. Other Required Courses (12 credits):

Complete 12 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation Requirement for the Bachelor of Science degree and may not concurrently satisfy a University requirement.

AST 101	The Celestial Clockworks	1
AST 207	The Science of Astronomy	3
AST 208	Planets and Telescopes	3
BE 101	Introduction to Biosystems Engineering	1
BE 230	Engineering Analysis for Biological Systems	3
BS 161	Cell and Molecular Biology	3
BS 162	Organismal and Population Biology	3
BS 171	Cell and Molecular Biology Laboratory	2
BS 172	Organismal and Population Biology Laboratory	2
CE 221	Statics	3
CE 273	Civil and Environmental Engineering Measurements	2
CE 274	Graphics for Civil and Environmental Engineers	1
CE 275	GIS for Civil and Environmental Engineers	1
CEM 141	General Chemistry	4
CEM 142	General and Inorganic Chemistry	3
CEM 143	Survey of Organic Chemistry	3
CEM 151	General and Descriptive Chemistry	4

CEM 152	Principles of Chemistry	3
CEM 161	Chemistry Laboratory I	1
CEM 162	Chemistry Laboratory II	1
CEM 251	Organic Chemistry I	3
CEM 252	Organic Chemistry II	3
CEM 255	Organic Chemistry Laboratory	2
CEM 262	Quantitative Analysis	3
CHE 201	Material and Energy Balances	3
CHE 210	Modeling and Analysis of Transport Phenomena	3
CMSE201	Computational Modeling and Data Analysis I	4
CMSE202	Computational Modeling and Data Analysis II	4
CSE 102	Algorithmic Thinking and Programming	3
CSE 201	Fundamentals of Information Technology	3
CSE 220	Programming in C	3
CSE 231	Introduction to Programming I	3
CSE 232	Introduction to Programming II	3
CSE 260	Discrete Structures in Computer Science	4
CSS 101	Introduction to Crop Science	3
CSS 210	Fundamentals of Soil Science	3
CSUS200	Introduction to Sustainability	3
ECE 101	Introduction to Electrical and Computer Engineering	1
ECE 201	Circuits and Systems I	3
ECE 202	Circuits and Systems II	3
ECE 203	Electric Circuits and Systems Laboratory	1
ECE 230	Digital Logic Fundamentals	3
ECE 280	Electrical Engineering Analysis	3
EGR 100	Introduction to Engineering Design	2
EGR 102	Introduction to Engineering Modeling	2
EGR 292	Applications in Environmental Studies	2
ENE 280	Principles of Environmental Engineering and Science	3
ENT 110	Applied Entomology of Economic Plants	3
ENT 111	Basics of Applied Entomology	2
ENT 205	Pests, Society and Environment	3
FOR 101	Michigan's Forests	3
FOR 202	Introduction to Forestry	3
FOR 204	Forest Vegetation	3
FOR 222	Forestry Field Methods	2
FW 101	Fundamentals of Fisheries and Wildlife Ecology and Management	3
FW 110	Conservation and Management of Marine Resources	3
FW 181	Introduction to Science, Technology, the Environment, and Public Policy	3
FW 207	Great Lakes: Biology and Management	3
GLG 201	The Dynamic Earth	4
GLG 202	Geology of Michigan	3
ME 201	Thermodynamics	3
ME 222	Mechanics of Deformable Solids	3
ME 280	Graphic Communications	2
MSE 200	Materials and Society	2
MSE 250	Materials Science and Engineering	3
MSE 260	Electronic, Magnetic, Thermal, and Optical Properties of Materials	3
MTH 114	Trigonometry	3
MTH 126	Survey of Calculus II	3
MTH 133	Calculus II 4	
MTH 201	Elementary Mathematics for Teachers I	3
MTH 202	Elementary Mathematics for Teachers II	3
MTH 234	Multivariable Calculus	4
MTH 235	Differential Equations	3
PHY 102	Physics Computations	1
PHY 170	Investigations in Physics	3
PHY 183	Physics for Scientists and Engineers I	4
PHY 184	Physics for Scientists and Engineers II	4
PHY 191	Physics Laboratory for Scientists, I	1
PHY 192	Physics Laboratory for Scientists, II	1
PHY 215	Thermodynamics and Modern Physics	3
PHY 231	Introductory Physics I	3
PHY 232	Introductory Physics II	3
PHY 251	Introductory Physics Laboratory I	1
PHY 252	Introductory Physics Laboratory II	1
PLB 105	Plant Biology	3
PLB 106	Plant Biology Laboratory	1
PLB 203	Biology of Plants	4
PLB 218	Plants of Michigan	3
STT 180	Introduction to Data Science	4
STT 200	Statistical Methods	3
STT 201	Statistical Methods	4

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STT 224	Introduction to Probability and Statistics for Ecologists	3
STT 231	Statistics for Scientists	3
STT 250	Statistics and Probability for K-8 Teachers	4

ENVIRONMENTAL GEOGRAPHY

The Bachelor of Science degree in Environmental Geography provides comprehensive academic training in the environment and how its many aspects interrelate across the landscape. Geographic knowledge is essential for understanding rapid social and environmental change in a globalized society. Environmental geographers describe, analyze, and explain the arrangement of the Earth's physical features. With training in both the natural and social sciences, environmental geographers have a wide range of career opportunities in public and private sectors. They find work in consulting, government, tourism, teaching, environmental analysis, non-profit organizations, and natural resource management. Environmental scientists are increasingly in demand for jobs that require expertise in bridging the gap between the social science and physical science aspects of natural systems.

In addition to the general environmental geography degree, a concentration is offered in atmospheric and climate sciences. The concentration is designed primarily for students who plan to enter a graduate program in atmospheric and/or climate sciences, or are interested in employment in the fields of applied atmospheric science and climatology and the delivery of weather and climate services. The concentration will be noted on the student's transcript.

Requirements for the Bachelor of Science Degree in Environmental Geography

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Environmental Geography.

The University's Tier II writing requirement for the Geography major is met by completing Geography 480. That course is referenced in item 3. a. below.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

3. The following courses with a minimum 2.0 grade-point average across all attempted GEO courses (39 to 61 credits):

	CREDITS
a. One of the following courses (3 or 4 credits):	
LB 118 Calculus I	4
MTH 124 Survey of Calculus I	3
MTH 132 Calculus I	3
MTH 152H Honors Calculus I	3
Students in the Atmospheric and Climate Sciences concentration must take MTH 132 or 152H.	
b. Two of the following courses (6 or 7 credits):	
GEO 203 Introduction to Meteorology	3
GEO 206 Physical Geography	3
and	
GEO 206L Physical Geography Laboratory	1
GEO 306 Environmental Geomorphology	3
Students who choose GEO 206 must also enroll in GEO 206L either concurrently or in a subsequent term.	
Students in the Atmospheric and Climate Sciences concentration must take GEO 203 and may substitute GEO 201 for either GEO 206 or 306.	
c. One of the following courses (3 credits):	
GEO 113 Introduction to Economic Geography	3
GEO 151 Introduction to Human Geography	3
GEO 204 World Regional Geography	3
GEO 330 Geography of the United States	3
GEO 331 Geography of Canada	3
GEO 333 Geography of Michigan and the Great Lakes Region	3
GEO 335 Geography of Latin America	3

GEO 336	Geography of Europe	3
GEO 337	Geography of Asia-Pacific	3
GEO 338	Geography of Africa	3
GEO 339	Geography of the Middle East and North Africa	3
GEO 340	Geography of Eurasia	3

d. One of the following courses (3 or 4 credits):

GEO 221	Introduction to Geographic Information	3
GEO 221L	Introduction to Geographic Information Laboratory	1

GEO 363 Introduction to Quantitative Methods for Geographers

		3
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Students who choose GEO 221 must also enroll in GEO 221L either concurrently or in a subsequent term.

e. The following course (3 credits):

GEO 480	Senior Seminar (W)	3
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f. One of the following:

- Students not pursuing a concentration:
 - Twelve additional credits in GEO courses including at least 6 credits at the 300-level and above and 6 credits at the 400-level.
 - Nine additional credits in courses from the College of Agriculture and Natural Resources or the College of Natural Science at the 300-level and above.
- A concentration in Atmospheric and Climate Sciences.

Atmospheric and Climate Sciences Concentration

1. All of the following courses (24 credits):

MTH 133	Calculus II	4
MTH 234	Multivariable Calculus	4
MTH 235	Differential Equations	3
CEM 141	General Chemistry	4
CEM 161	Chemistry Laboratory I	1
PHY 183	Physics for Scientists and Engineers I	4
PHY 184	Physics for Scientists and Engineers II	4

2. Four of the following courses (12 to 16 credits):

CSE 231	Introduction to Programming I	4
GEO 302	Climates of the World	3
GEO 303	Severe and Hazardous Weather	3
GEO 402	Agricultural Climatology	3
GEO 403	Dynamic Meteorology (W)	3
GEO 405	Weather Analysis and Forecasting	4
GEO 409	Global Climate Change and Variability	3
GLG 303	Oceanography	3
GLG 411	Hydrogeology	3
GLG 412	Glacial Geology and the Record of Climate Change	4
GLG 421	Environmental Geochemistry	4

Students in the concentration may use GEO courses in items c., d., and e. above towards the College of Social Science college distribution requirement.

4. Other Required Courses (12 credits):

Complete 12 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation Requirement for the Bachelor of Science degree and may not concurrently satisfy a University requirement.

AST 101	The Celestial Clockworks	1
AST 207	The Science of Astronomy	3
AST 208	Planets and Telescopes	3
BE 101	Introduction to Biosystems Engineering	1
BE 230	Engineering Analysis for Biological Systems	3
BS 161	Cell and Molecular Biology	3
BS 162	Organismal and Population Biology	3
BS 171	Cell and Molecular Biology Laboratory	2
BS 172	Organismal and Population Biology Laboratory	2
CE 221	Statics	3
CE 273	Civil and Environmental Engineering Measurements	2
CE 274	Graphics for Civil and Environmental Engineers	1
CE 275	GIS for Civil and Environmental Engineers	1
CEM 141	General Chemistry	4
CEM 142	General and Inorganic Chemistry	3
CEM 143	Survey of Organic Chemistry	3
CEM 151	General and Descriptive Chemistry	4
CEM 152	Principles of Chemistry	3
CEM 161	Chemistry Laboratory I	1
CEM 162	Chemistry Laboratory II	1
CEM 251	Organic Chemistry I	3
CEM 252	Organic Chemistry II	3
CEM 255	Organic Chemistry Laboratory	2

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CEM 262	Quantitative Analysis	3
CHE 201	Material and Energy Balances	3
CHE 210	Modeling and Analysis of Transport Phenomena	3
CMSE201	Computational Modeling and Data Analysis I	4
CMSE202	Computational Modeling and Data Analysis II	4
CSE 102	Algorithmic Thinking and Programming	3
CSE 201	Fundamentals of Information Technology	3
CSE 220	Programming in C	3
CSE 231	Introduction to Programming I	3
CSE 232	Introduction to Programming II	3
CSE 260	Discrete Structures in Computer Science	4
CSS 101	Introduction to Crop Science	3
CSS 210	Fundamentals of Soil Science	3
CSUS200	Introduction to Sustainability	3
ECE 101	Introduction to Electrical and Computer Engineering	1
ECE 201	Circuits and Systems I	3
ECE 202	Circuits and Systems II	3
ECE 203	Electric Circuits and Systems Laboratory	1
ECE 230	Digital Logic Fundamentals	3
ECE 280	Electrical Engineering Analysis	3
EGR 100	Introduction to Engineering Design	2
EGR 102	Introduction to Engineering Modeling	2
EGR 292	Applications in Environmental Studies	2
ENE 280	Principles of Environmental Engineering and Science	2
ENT 110	Applied Entomology of Economic Plants	3
ENT 111	Basics of Applied Entomology	2
ENT 205	Pests, Society and Environment	3
FOR 101	Michigan's Forests	3
FOR 202	Introduction to Forestry	3
FOR 204	Forest Vegetation	3
FOR 222	Forestry Field Methods	2
FW 101	Fundamentals of Fisheries and Wildlife Ecology and Management	3
FW 110	Conservation and Management of Marine Resources	3
FW 181	Introduction to Science, Technology, the Environment, and Public Policy	3
FW 207	Great Lakes: Biology and Management	3
GLG 201	The Dynamic Earth	4
GLG 202	Geology of Michigan	3
ME 201	Thermodynamics	3
ME 222	Mechanics of Deformable Solids	3
ME 280	Graphic Communications	2
MSE 200	Materials and Society	2
MSE 250	Materials Science and Engineering	3
MSE 260	Electronic, Magnetic, Thermal, and Optical Properties of Materials	3
MTH 114	Trigonometry	3
MTH 126	Survey of Calculus II	3
MTH 133	Calculus II	4
MTH 201	Elementary Mathematics for Teachers I	3
MTH 202	Elementary Mathematics for Teachers II	3
MTH 234	Multivariable Calculus	4
MTH 235	Differential Equations	3
PHY 102	Physics Computations	1
PHY 170	Investigations in Physics	3
PHY 183	Physics for Scientists and Engineers I	4
PHY 184	Physics for Scientists and Engineers II	4
PHY 191	Physics Laboratory for Scientists, I	1
PHY 192	Physics Laboratory for Scientists, II	1
PHY 215	Thermodynamics and Modern Physics	3
PHY 231	Introductory Physics I	3
PHY 232	Introductory Physics II	3
PHY 251	Introductory Physics Laboratory I	1
PHY 252	Introductory Physics Laboratory II	1
PLB 105	Plant Biology	3
PLB 106	Plant Biology Laboratory	1
PLB 203	Biology of Plants	4
PLB 218	Plants of Michigan	3
STT 180	Introduction to Data Science	4
STT 200	Statistical Methods	3
STT 201	Statistical Methods	4
STT 224	Introduction to Probability and Statistics for Ecologists	3
STT 231	Statistics for Scientists	3
STT 250	Statistics and Probability for K-8 Teachers	4

GEOGRAPHIC INFORMATION SCIENCE

The Bachelor of Science Degree in Geographic Information Science provides a rigorous, in-depth program for students interested in the application of information technology to the spatial dimensions of the Earth's human and physical systems. It is an ideal program for those pursuing a career in the spatial technology sector, or for those considering graduate study in geography and related disciplines. Students attain substantial general quantitative and technical skills, as well as practical experience in the application of skills to solving problems drawn from local, regional, and global settings.

Requirements for the Bachelor of Science Degree in Geographic Information Science

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Geographic Information Science.

The University's Tier II writing requirement for the Geographic Information Science major is met by completing Geography 425. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

3. The following required major courses with a minimum 2.0 grade-point average across all attempted GEO courses (41 to 44 credits):

	CREDITS
a. One of the following courses (3 or 4 credits):	
LB 118 Calculus I	4
MTH 124 Survey of Calculus I	3
MTH 132 Calculus I	3
MTH 152H Honors Calculus I	3
b. Two of the following courses (7 or 8 credits):	
CMSE201 Computational Modeling and Data Analysis I	4
CMSE202 Computational Modeling and Data Analysis II	4
CSE 231 Introduction to Programming I	4
CSE 232 Introduction to Programming II	4
c. One of the following courses (3 credits):	
GEO 113 Introduction to Economic Geography	3
GEO 151 Introduction to Human Geography	3
GEO 206 Physical Geography	3
GEO 333 Geography of Michigan and the Great Lakes Region	3
d. All of the following courses (18 credits):	
GEO 221 Introduction to Geographic Information	3
GEO 221L Introduction to Geographic Information Laboratory	1
GEO 324 Remote Sensing of the Environment	4
GEO 325 Geographic Information Systems	3
GEO 363 Introduction to Quantitative Methods for Geographers	3
GEO 424 Advanced Remote Sensing	4
e. Two of the following courses (6 to 8 credits):	
GEO 326 Cartographic Design and Production	4
GEO 426 Thematic Cartography	4
GEO 428 Digital Terrain Analysis	3
GEO 429 Geoprocessing	3
GEO 453 Metropolitan Environments: Urban Forms and Land Uses	3
GEO 498 Internship in Geography	3
f. The following course (3 credits):	
GEO 425 Problems in Geographic Information Science (W)	3

4. Other Required Courses (12 credits): Complete 12 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation Requirement for the Bachelor of Science degree and may not concurrently satisfy a University requirement.

AST 101 The Celestial Clockworks	1
AST 207 The Science of Astronomy	3
AST 208 Planets and Telescopes	3

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BE 101	Introduction to Biosystems Engineering	1
BE 230	Engineering Analysis for Biological Systems	3
BS 161	Cell and Molecular Biology	3
BS 162	Organismal and Population Biology	3
BS 171	Cell and Molecular Biology Laboratory	2
BS 172	Organismal and Population Biology Laboratory	2
CE 221	Statics	3
CE 273	Civil and Environmental Engineering Measurements	2
CE 274	Graphics for Civil and Environmental Engineers	1
CE 275	GIS for Civil and Environmental Engineers	1
CEM 141	General Chemistry	4
CEM 142	General and Inorganic Chemistry	3
CEM 143	Survey of Organic Chemistry	3
CEM 151	General and Descriptive Chemistry	4
CEM 152	Principles of Chemistry	3
CEM 161	Chemistry Laboratory I	1
CEM 162	Chemistry Laboratory II	1
CEM 251	Organic Chemistry I	3
CEM 252	Organic Chemistry II	3
CEM 255	Organic Chemistry Laboratory	2
CEM 262	Quantitative Analysis	3
CHE 201	Material and Energy Balances	3
CHE 210	Modeling and Analysis of Transport Phenomena	3
CMSE201	Computational Modeling and Data Analysis I	4
CMSE202	Computational Modeling and Data Analysis II	4
CSE 102	Algorithmic Thinking and Programming	3
CSE 201	Fundamentals of Information Technology	3
CSE 220	Programming in C	3
CSE 231	Introduction to Programming I	3
CSE 232	Introduction to Programming II	3
CSE 260	Discrete Structures in Computer Science	4
CSS 101	Introduction to Crop Science	3
CSS 210	Fundamentals of Soil Science	3
CSUS200	Introduction to Sustainability	3
ECE 101	Introduction to Electrical and Computer Engineering	1
ECE 201	Circuits and Systems I	3
ECE 202	Circuits and Systems II	3
ECE 203	Electric Circuits and Systems Laboratory	1
ECE 230	Digital Logic Fundamentals	3
ECE 280	Electrical Engineering Analysis	3
EGR 100	Introduction to Engineering Design	2
EGR 102	Introduction to Engineering Modeling	2
EGR 292	Applications in Environmental Studies	2
ENE 280	Principles of Environmental Engineering and Science	3
ENT 110	Applied Entomology of Economic Plants	3
ENT 111	Basics of Applied Entomology	2
ENT 205	Pests, Society and Environment	3
FOR 101	Michigan's Forests	3
FOR 202	Introduction to Forestry	3
FOR 204	Forest Vegetation	3
FOR 222	Forestry Field Methods	2
FW 101	Fundamentals of Fisheries and Wildlife Ecology and Management	3
FW 110	Conservation and Management of Marine Resources	3
FW 181	Introduction to Science, Technology, the Environment, and Public Policy	3
FW 207	Great Lakes: Biology and Management	3
GLG 201	The Dynamic Earth	4
GLG 202	Geology of Michigan	3
ME 201	Thermodynamics	3
ME 222	Mechanics of Deformable Solids	3
ME 280	Graphic Communications	2
MSE 200	Materials and Society	2
MSE 250	Materials Science and Engineering	3
MSE 260	Electronic, Magnetic, Thermal, and Optical Properties of Materials	3
MTH 114	Trigonometry	3
MTH 126	Survey of Calculus II	3
MTH 133	Calculus II	4
MTH 201	Elementary Mathematics for Teachers I	3
MTH 202	Elementary Mathematics for Teachers II	3
MTH 234	Multivariable Calculus	4
MTH 235	Differential Equations	3
PHY 102	Physics Computations	1
PHY 170	Investigations in Physics	3
PHY 183	Physics for Scientists and Engineers I	4

PHY 184	Physics for Scientists and Engineers II	4
PHY 191	Physics Laboratory for Scientists, I	1
PHY 192	Physics Laboratory for Scientists, II	1
PHY 215	Thermodynamics and Modern Physics	3
PHY 231	Introductory Physics I	3
PHY 232	Introductory Physics II	3
PHY 251	Introductory Physics Laboratory I	1
PHY 252	Introductory Physics Laboratory II	1
PLB 105	Plant Biology	3
PLB 106	Plant Biology Laboratory	1
PLB 203	Biology of Plants	4
PLB 218	Plants of Michigan	3
STT 180	Introduction to Data Science	4
STT 200	Statistical Methods	3
STT 201	Statistical Methods	4
STT 224	Introduction to Probability and Statistics for Ecologists	3
STT 231	Statistics for Scientists	3
STT 250	Statistics and Probability for K-8 Teachers	4

HUMAN GEOGRAPHY

The Bachelor of Arts degree in Human Geography provides comprehensive academic training in the human dimensions of the environment, particularly how people are affected by the environment, and how they alter and change it. Geographic knowledge is essential for understanding rapid social and environmental change in a globalized society. Human geographers describe, analyze, and explain the arrangement of the Earth's cultures. With training in both the natural and social sciences, human geographers have a wide range of career opportunities in public and private sectors. They find work in consulting, government, urban and regional planning, locational analysis, marketing, real estate, tourism, transportation, and teaching. Geographers are increasingly in demand for jobs that require expertise in geospatial techniques, such as geographic information systems (GIS), global positioning systems (GPS), remote sensing, and cartography.

Requirements for the Bachelor of Arts Degree in Human Geography

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Human Geography.

The University's Tier II writing requirement for the Geography major is met by completing Geography 480. That course is referenced in item 3. a. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following courses with a minimum 2.0 grade-point average (34 to 35 credits):

	CREDITS
a. Both of the following courses (6 credits):	
GEO 113 Introduction to Economic Geography	3
GEO 151 Introduction to Human Geography	3
b. One of the following courses (3 or 4 credits):	
GEO 203 Introduction to Meteorology	3
GEO 206 Physical Geography	3
and	
GEO 206L Physical Geography Laboratory	1
GEO 306 Environmental Geomorphology	3
Students who choose Geography 206 must also enroll in Geography 206L either concurrently or in a subsequent term.	
c. One of the following courses (3 credits):	
GEO 204 World Regional Geography	3
GEO 330 Geography of the United States and Canada	3
GEO 333 Geography of Michigan and the Great Lakes Region	3
GEO 335 Geography of Latin America	3
GEO 336 Geography of Europe	3

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- | | | |
|----------|--|---|
| GEO 337 | Geography of Asia-Pacific | 3 |
| GEO 338 | Geography of Africa | 3 |
| GEO 339 | Geography of the Middle East and North Africa | 3 |
| d. | All of the following courses (7 credits): | |
| GEO 221 | Introduction to Geographic Information | 3 |
| GEO 221L | Geographic Information Laboratory | 1 |
| GEO 363 | Introduction to Quantitative Methods for Geographers | 3 |
| e. | The following course (3 credits): | |
| GEO 480 | Senior Seminar | 3 |
| f. | Twelve additional credits in Geography courses including at least 6 credits at the 300-level and above and 6 credits at the 400-level. | |

MINOR IN ENVIRONMENT AND HEALTH

The Minor in Environment and Health, administered by the Department of Geography, Environment and Health, enhances the education and training of students who are interested in issues relating to the environment and health, including students who wish to prepare themselves for advanced degree programs in environmental studies, health studies or careers in related fields.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.

Requirements for the Minor in Environment and Health

Complete a minimum of 15 credits from the following:

- | | CREDITS |
|--|---------|
| 1. The following course (3 credits): | |
| GEO 151 Introduction to Human Geography | 3 |
| 2. One of the following courses (3 or 4 credits): | |
| EC 498 Economics of Health Care (W) | 3 |
| GEO 235 Geography of Environment and Health | 3 |
| GEO 435 Geography of Health and Disease | 3 |
| HDFS 225 Lifespan Human Development in the Family | 3 |
| HST 425 American and European Health Care since 1800 | 4 |
| SOC 252 Introduction to Environmental Sociology | 3 |
| SOC 451 Dynamics of Population | 3 |
| 3. Two of the following courses (6 credits): | |
| ANS 427 Environment Toxicology and Society | 3 |
| EEM 260 World Food, Population and Poverty | 3 |
| ENT 205 Pests, Society, and Environment | 3 |
| EPI 390 Disease in Society: Introduction to Epidemiology and Public Health | 4 |
| HNF 385 Public Health Nutrition | 3 |
| PHL 453 Ethical Issues in Global Public Health | 3 |
| 4. The following capstone course (3 credits): | |
| ANP 370 Culture, Health and Illness | 3 |

MINOR IN GEOGRAPHY

The Minor in Geography, which is administered by the Department of Geography, Environment, and Spatial Sciences, provides a fundamental foundation to the breadth of study within the field of geography as well as grounding in general geographic theory.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts or Bachelor of

Science Degrees in Geography. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult an undergraduate advisor in the Department of Geography.

Requirements for the Minor in Geography

CREDITS

Complete a minimum of 21 credits in the Department of Geography, Environment, and Spatial Sciences from the following:

- | | |
|--|---|
| 1. A minimum of 9 credits from the following: | |
| GEO 113 Introduction to Economic Geography | 3 |
| GEO 151 Introduction to Human Geography | 3 |
| GEO 203 Introduction to Meteorology | 3 |
| GEO 206 Physical Geography | 3 |
| and | |
| GEO 206L Physical Geography Laboratory | 1 |
| GEO 221 Introduction to Geographic Information | 3 |
| 2. A minimum of 3 credits from the following: | |
| GEO 204 World Regional Geography | 3 |
| or | |
| Any 300-level GEO course. | |
| 3. Complete a minimum of 9 additional credits in Geography courses, of which 6 credits must be at the 400-level. The courses must be approved by the student's academic advisor. | |

MINOR IN GEOGRAPHIC INFORMATION SCIENCE

The Minor in Geographic Information Science, which is administered by the Department of Geography, Environment, and Spatial Sciences provides a fundamental foundation to the breadth of study within the field of geographic information science.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Science Degree in Geographic Information Science. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult an undergraduate advisor in the Department of Geography, Environment, and Spatial Sciences.

Requirements for the Minor in Geographic Information Science

CREDITS

Complete a minimum of 21 credits in the Department of Geography, Environment, and Spatial Sciences from the following:

- | | |
|--|---|
| 1. Both of the following courses (4 credits): | |
| GEO 221 Introduction to Geographic Information | 3 |
| GEO 221L Introduction to Geographic Information Laboratory | 1 |
| 2. One of the following courses (3 credits): | |
| GEO 490 Independent Study | 3 |
| GEO 498 Internship in Geography | 3 |
| Both Geography 490 and 498 must have geographic information science, remote sensing, or cartography content to fulfill this requirement. Students should obtain advisor approval prior to enrolling in a section of either of these courses. | |
| 3. Complete a minimum of 14 credits from the following courses: | |
| GEO 324 Remote Sensing of the Environment | 4 |
| GEO 325 Geographic Information Systems | 3 |
| GEO 363 Introduction to Quantitative Methods for Geographers | 3 |

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GEO 419	Application of Geographic Information Systems to Natural Resources Management	4
GEO 423	Cartographic Design and Production	4
GEO 424	Advanced Remote Sensing	4
GEO 425	Problems in Geographic Information Science (W)	3
GEO 426	Thematic Cartography	4
GEO 428	Digital Terrain Analysis	4
GEO 453	Metropolitan Environments: Urban Forms and Land Uses	3
Additional courses as approved by the student's academic advisor.		

TEACHER CERTIFICATION OPTIONS

A geography disciplinary minor is available for secondary teacher certification.

Students who elect the geography disciplinary minor must contact the Department of Geography, Environment, and Spatial Sciences to plan their programs of study.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the Department of *Teacher Education* section of this catalog.

GRADUATE STUDY

The Department of Geography, Environment, and Spatial Sciences offers programs in the discipline of geography leading to the Master of Science and Doctor of Philosophy degrees.

Students who are enrolled in master's or doctoral degree programs in the Department of Geography, Environment, and Spatial Sciences may elect an Interdepartmental Specialization in Cognitive Science. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Cognitive Science*. For additional information, contact the Department of Geography, Environment, and Spatial Sciences.

GEOGRAPHY

Master of Science

The master's program in geography is designed to enable the student to achieve professional competence in the discipline. This program is intended to increase substantive and technical proficiency.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

All students seeking the master's degree in geography are expected to have completed courses in physical, human, and regional geography; in quantitative methods; and in geographic information science. Applicants who have not completed all of these requirements may be admitted provisionally, and must remedy all course deficiencies before the degree is granted. Any course work complete to correct course deficiencies may not be counted towards the requirements for the degree.

Regular Status: The requirements for admission to the program include:

1. A bachelor's degree from a recognized college or university preferably with an undergraduate major in geography or at least 14 credits in geography and related fields.
2. A grade-point average of at least 3.40 at the time of application in both (1) all geography courses and (2) all courses completed during the junior and senior years.
3. Satisfactory scores on the Graduate Record Examination General Test.

Requirements for the Master of Science Degree in Geography

The Master of Science in Geography is available only under Plan A (with thesis). The student must complete a total of 30 credits distributed as follows:

	CREDITS
1. Both of the following courses (7 to 9 credits):	
GEO 886 Research Design in Geography	3
GEO 899 Master's Thesis Research	4 to 6
2. One of the following four seminars (3 credits):	
GEO 871 Seminar in Physical Geography	3
GEO 872 Seminar in Human Geography	3
GEO 873 Seminar in Human-Environment Geography	3
GEO 874 Seminar in Geographic Information Science	3
3. Complete 3 or 4 credits in a geospatial technology course at the 400 level or 800-level. A list of courses available to fulfill this requirement is available from the student's guidance committee. Course work used to fulfill this requirement must be taken while enrolled as a graduate student at Michigan State University.	
4. Complete 3 or 4 credits at the 400 or 800-level in an area of cartography, geographic information science, remote sensing, quantitative methods, qualitative methods, world language, or programming. A list of courses available to fulfill this requirement is available from the student's guidance committee. Course work used to fulfill this requirement must be taken while enrolled as a graduate student at MSU. The course used to fulfill requirement 3. above may not be used to fulfill this requirement.	
5. Complete an additional 10 to 14 credits of course work taken inside or outside of the department. The course work must be approved by the student's guidance committee.	
6. Presentation of a research paper or poster at a professional meeting.	
7. Pass a final oral examination in defense of the thesis.	

Doctor of Philosophy

The Ph.D. program in geography is designed to develop the student's ability to conduct original research with special reference to:

1. understanding of scientific inquiry.
2. knowledge of the geographic discipline.
3. understanding of a specialized area of geography such as people/environment, physical geography, regional development, or economic-regional science.
4. proficiency with analytical and technical skills particularly with respect to spatial data analysis and manipulation.
5. skills in communicating the results of research.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

Admission

Admission to the doctoral program is based upon an evaluation of the student's academic records related to both the bachelor's and master's degrees, Graduate Record Examination (GRE) General Test scores, letters of

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recommendation, written statements, and other pertinent information such as professional experience and related achievements. Typical entrants to the doctoral program present a grade–point average of 3.60 or higher in a recognized master's degree program, which usually includes a thesis, and satisfactory scores on the GRE.

Requirements for the Doctor of Philosophy Degree in Geography

The student must:

1. Complete at least 56 credits while enrolled in the doctoral program including the following courses:

	CREDITS
a. The following courses (6 credits):	
GEO 886 Research Design in Geography	3
GEO 986 Theory and Methods in Geography	3
b. At least two of the following four seminars (6 credits):	
GEO 871 Seminar in Physical Geography	3
GEO 872 Seminar in Human Geography	3
GEO 873 Seminar in Human-Environment Geography	3
GEO 874 Seminar in Geographic Information Science	3
c. One advanced-level tool course (3 credits). Tool courses may be in such areas as computer science, foreign language, statistics or mathematics, cartography, remote sensing, geographic information science and social science or physical science research methods. The courses may be administered by the Department of Geography, Environment, and Spatial Sciences or by another department or school.	
d. Courses that focus on a specialized area of geography and related course work (17 or 18 credits)	
2. In consultation with the student's guidance committee, submit a manuscript to a refereed journal.

DEPARTMENT of HISTORY

Lisa M. Fine, Chairperson

The Department of History offers courses which deal with human societies in all geographical regions and time–periods. Courses in African, Asian, Latin American, European, and North American history focus on issues of race, ethnicity, politics, military affairs, sexuality, and gender while providing insight into the human condition as a whole.

All courses in history have the goal of helping students learn how to think and write historically in a critical manner. History courses emphasize learning how to identify viewpoints, gather and organize information, present conclusions in essays and on the internet, distinguish facts from interpretations, recognize historical relationships and patterns, and appreciate the relevance of historical insight to the understanding of current events and problems.

By involving all students in the process of careful analysis of evidence and thoughtful, cogent expression of ideas, the department seeks to equip students with intellectual skills which have multiple uses in the larger society outside the university. Its programs, in addition to providing a liberal education, are designed to serve as professional preparation in various fields, including teaching; the law; federal, state, and local government; work in historical societies and museums; Web site development and research.

UNDERGRADUATE PROGRAMS

The department offers a Bachelor of Arts degree in History, a Bachelor of Arts degree in Global History, and a Bachelor of Arts degree in History Education for student's pursuing teacher certification. Students interested in teacher certification should contact the student affairs advisor in the College of Education. A Minor in Defense Studies and Leadership is also available.

GLOBAL HISTORY

Requirements for the Bachelor of Arts Degree in Global History

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Global History.

The University's Tier II writing requirement for the Global History major is met by completing one of the following courses: History 481, 482, 483, 484, 485, 486, 487, 488, or 489. Those courses are referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.
3. The following requirements for the major:

- | | CREDITS |
|---|---------|
| a. The following course (3 credits): | |
| HST 201 Historical Methods and Skills | 3 |
| b. Two of the following courses (8 credits): | |
| HST 140 World History to 1500 | 4 |
| HST 150 World History since 1500 | 4 |
| HST 205 The Ancient Mediterranean and the Medieval World | 4 |
| HST 206 European History since 1500 | 4 |
| HST 208 Introduction to African History, Culture and Society | 4 |
| HST 209 Traditional East Asia | 4 |
| HST 210 Modern East Asia | 4 |
| HST 211 Colonial Latin America | 4 |
| HST 212 National Latin America | 4 |
| c. Three courses at the 300-400 level focused on one of the following geographic areas: Africa, Asia, Europe, Latin America. The courses must be approved by the student's academic advisor. (9 credits) | |
| d. Two courses at the 300-400 level focused on a geographic area other than the area chosen in item c. above. The courses must be approved by the student's academic advisor. (6 credits) | |
| e. One 3-credit senior seminar course chosen from HST 481, 482, 483, 484, 485, 486, 487, or 488. The course must be related to the area of historical concentration chosen in item c. above. Completion of this requirement satisfies both the department's Tier II writing and capstone requirement. | |
| f. Completion of one experiential learning course, a history study abroad or study away course, an internship with a historical focus (HST 493), or an additional senior seminar course focused on any area of the world or topic not used in fulfillment of requirement e. above. The course must be approved by the student's academic advisor. (3 credits) | |
| g. Completion of an area studies minor appropriate to the geographical area of concentration referenced in requirement c. above. History courses taken in the minor may also be used to fulfill requirements in the major. | |
| h. Second-year competency in a foreign language related to the geographical area of concentration reference in item c. above. This requirement may be satisfied by placing into a 300-level foreign language course based on a Michigan State University placement test. | |

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HISTORY

Requirements for the Bachelor of Arts Degree in History

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in History.

The University's Tier II writing requirement for the History major is met by completing one of the following courses: History 480, 481, 482, 483, 484, 485, 486, 487, 488 or 489. Those courses are referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major (36 credits):

	CREDITS
a. One of the following courses (3 credits):	
HST 201 Historical Methods and Skills	3
HST 201H Historical Methods and Skills for Honors Students	3
b. Three of the following courses (12 credits):	
HST 140 World History to 1500	4
HST 150 World History since 1500	4
HST 202 U.S. History to 1876	4
HST 203 U.S. History since 1876	4
HST 205 The Ancient Mediterranean and the Medieval World	4
HST 206 European History since 1500	4
HST 208 Introduction to African History, Culture and Society	4
HST 209 Traditional East Asia	4
HST 210 Modern East Asia	4
HST 211 Colonial Latin America	4
HST 212 National Latin America	4
c. Two of the following courses (6 credits):	
HST 480 Seminar in American History (W)	3
HST 481 Seminar in Ancient History (W)	3
HST 482 Seminar in Medieval History (W)	3
HST 483 Seminar in Modern European History (W)	3
HST 484 Seminar in African History (W)	3
HST 485 Seminar in Asian History (W)	3
HST 486 Seminar in Latin American History (W)	3
HST 487 Seminar in Comparative History (W)	3
HST 488 Seminar in International Relations (W)	3
HST 489 Seminar in Digital History (W)	3
The completion of this requirement satisfies the department's capstone course requirement. With the prior approval of the undergraduate advisor and internship coordinator, an internship taken for at least 3 credits may be substituted for the capstone course requirement.	
Exception: credits in History 490 or 499H may not be used to satisfy this requirement.	
d. Twelve credits in History courses at the 300-400 level.	
e. Three additional credits in a History course.	
f. At least two courses totaling 6 credits from at least three of the following geographical areas: Africa, Asia, Europe, Latin American, the United States, or the world. This requirement may be fulfilled by the courses referenced in items 3. b. through 3. e.	
g. At least two courses totaling 6 credits whose emphasis is on the period before 1800. This requirement may be fulfilled by the courses referenced in items 3. b. through 3. e.	
h. At least two courses totaling 6 credits whose emphasis is on the period after 1800. This requirement may be fulfilled by the courses referenced in items 3. b. through 3. e.	

HISTORY EDUCATION

The Bachelor of Arts degree in History Education is designed to train students teach history in elementary and secondary schools.

Requirements for the Bachelor of Arts Degree in History Education

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in History Education.

The University's Tier II writing requirement for the History Education major is met by completing one of the following courses: History 480, 481, 482, 483, 484, 485, 486, 487, or 488. Those courses are referenced in item 3.c. below.

2. Students in the History Education major are not required to complete the College of Social Science requirements referenced under the heading *Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees* in the *College of Social Science* section of this catalog.

3. The following requirements for the major:

	CREDITS
a. All of the following courses (22 credits):	
HST 140 World History to 1500	4
HST 150 World History since 1500	4
HST 201 Historical Methods and Skills	3
HST 202 U.S. History to 1876	4
HST 203 U.S. History since 1876	4
HST 320 History of Michigan	3
b. One 300-400 level history course that is not on the United States. The course must be approved by the student's academic advisor and may not have been used to fulfill any other requirement.	
c. One of the following courses (3 credits):	
HST 480 Seminar in American History (W)	3
HST 481 Seminar in Ancient History (W)	3
HST 482 Seminar in Medieval History (W)	3
HST 483 Seminar in Modern European History (W)	3
HST 484 Seminar in African History (W)	3
HST 485 Seminar in Asian History (W)	3
HST 486 Seminar in Latin American History (W)	3
HST 487 Seminar in Comparative History (W)	3
HST 488 Seminar in International Relations (W)	3
d. Two 300-400 level history courses approved by the student's academic advisor. These courses may not be used to fulfill any other requirement.	
4. All of the following courses (9 credits):	
GEO 204 World Regional Geography	3
GEO 221 Introduction to Geographic Information	3
GEO 330 Geography of the United States and Canada	3
5. A secondary disciplinary teaching minor chosen from the list of approved secondary education minors for teacher certification. Refer to the Teacher Certification section of the Department of Teacher Education. (20 to 26 credits)	
6. All of the following courses (20 or 21 credits):	
TE 150 Reflections on Learning	3
TE 250 Human Diversity, Power and Opportunity in Social Institutions	3
TE 302 Learners and Learning in Contexts - Secondary (W)	4
TE 407 Teaching Subject Matter to Diverse Learners - Secondary (W)	5
TE 408 Crafting Teaching Practice - Secondary (W)	5
Students whose teaching major and minor are in different subject matter are also required to complete the following course:	
TE409 Crafting Teaching Practices in the Secondary Teaching Minor	1

MINOR IN DEFENSE STUDIES AND LEADERSHIP

The Minor in Defense Studies and Leadership, which is administered by the Department of History, provides students with a broad perspective on the military with analysis of all service branches of the Armed Forces from a historical and social scientific perspective. It also prepares current cadets for active duty service.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult an undergraduate advisor in the Department of History.

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Requirements for the Minor in Defense Studies and Leadership

	CREDITS
Students must complete 22 credits from the following:	
1. One course from each of the following groups (4 to 6 credits):	
a. AS 111 Foundation of the United States Air Force I	1
MS 110 Army Leadership and Officer Development	1
b. AS 112 Foundation of the United States Air Force II	1
MS 120 Introduction to Army Leadership and Problem-Solving	1
c. AS 211 The Evolution of USAF Air and Space Power I	1
MS 210 Values and Ethics of Army Leaders	2
d. AS 212 The Evolution of USAF Air and Space Power II	1
MS 220 Army Doctrine and Team Development	2
2. One of the following groups of courses (6 credits):	
a. AS 321 Air Force Leadership Studies I	3
AS 322 Air Force Leadership Studies II	3
b. MS 310 Leading and Problem Solving in Army Units	3
MS 320 Army Small Unit Tactics and Leadership	3
3. One of the following groups of courses (6 credits):	
a. AS 421 National Security Affairs	3
AS 422 National Security Affairs and Preparation for Active Duty	3
b. MS 410 Adaptive Army Leadership	3
MS 420 Army Leadership in a Complex World	3
4. One of the following courses (3 credits):	
HST 304 The American Civil War	3
HST 326 United States Foreign Relations Since 1914	3
HST 328 Military History of the United States 1900-Present	3
HST 390 History of International Relations	3
HST 414 World War II: Causes, Conduct and Consequences	3
5. One of the following courses (3 credits):	
CJ 422 Comparative and Historical Criminal Justice	3
CJ 439 Homeland Security	3
CJ 473 Comparative Constitutional Law	3
PLS 140 Introduction to Comparative Politics	3
PLS 344 Politics of Developing Areas	3
PLS 362 American Foreign Policy and National Security	3
PLS 363 International and Domestic Political Conflict	3
PSY 255 Industrial and Organizational Psychology	3
SOC 331 Political Sociology	3

MINOR IN HISTORY

The Minor in History, which is administered by the Department of History, provides foundational skills needed for the study of history, breadth of historical knowledge, and advanced study of one or more historical topics. Students obtain research, reasoning and writing skills that form the core of historical study and develop capacities to integrate knowledge from diverse historical subfields based on this common set of skills.

The minor is available as an elective to students enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts degree in History, History Education, or Global History. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to apply to the program should consult the undergraduate advisor in the Department of History.

Requirements for the Minor in History

	CREDITS
Complete 15 credits in History as follows:	
1. The following course (3 credits):	
HST 201 Historical Methods and Skills	3
2. Complete 12 credits in History courses, of which 6 of those credits must be at the 300-400 level. A maximum of 3 credits in advanced placement or transfer credit may be used towards this requirement. Courses used in	

fulfillment of this requirement must be approved by the undergraduate advisor in the Department of History.

TEACHER CERTIFICATION OPTIONS

The history education disciplinary major leading to the Bachelor of Arts degree is available for secondary teacher certification.

A history disciplinary minor is also available for secondary teacher certification.

Students who elect the history education disciplinary major or the history disciplinary minor must contact the Department of History.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

GRADUATE STUDY

Graduate programs in the Department of History are designed primarily for students whose career goals require a doctoral degree. The department welcomes applicants who are prepared to pursue a rigorous program of graduate study.

HISTORY

Master of Arts

The Master of Arts degree program in history is designed for students who desire a general course of advanced study in the field.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Admission to graduate study in the Department of History is primarily to the doctoral program. However, under certain circumstances, the department will consider applications for admission to the Master of Arts in History from students who wish to earn a master's degree in preparation for a career in a supporting discipline or profession that does not require a Ph.D. Please consult with the Departmental Graduate Studies Director if you wish to apply for the Master of Arts in History.

To be considered for admission to the Master of Arts degree program in history, an applicant must:

1. Have an official transcript forwarded from the applicant's undergraduate institution(s) that verifies conferral of a baccalaureate degree.
2. Have the results of the Graduate Record Examination (GRE) General Test forwarded to the department.
3. Submit a writing sample to the department that the applicant considers to be a fair representation of the applicant's ability to conduct scholarly research and produce academic writing.
4. Submit a statement (500-1000 words) that clearly indicates the primary field of intended study and addresses the applicant's goals in pursuing a Master of Arts degree in History.

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5. Have at least two individuals, preferably scholars with whom the applicant has had course work or other professional contact, submit letters of recommendation to the department.

An international applicant is required to have fulfilled the university's English language proficiency requirement as described in the *Graduate Education* section of this catalog in one of the following three ways:

1. Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the Test of English as a Foreign Language with no subscore below 55 (paper version) or 21 (computer version).
2. Have an average score of 85 or higher on the Michigan English Language Assessment Battery with no subscore below 83.
3. Have an average score of 85 or higher on the Michigan State University English Language Center Test with no subscore below 83.

Guidance Committee

Before completing 8 credits in history courses, the student, with the assistance of the Graduate Director, must constitute a guidance committee of at least two faculty members in the Department of History who represent different fields of history. Until the student's guidance committee has been established, the student's program of study must be approved by the Graduate Director.

Requirements for the Master of Arts Degree in History

The program is available under both Plan A (with thesis) and Plan B (without thesis). A total of 30 credits is required for the degree under either Plan A or Plan B. The student's program of study must be approved by the student's guidance committee. The student must meet the requirements specified below:

Requirements for Both Plan A and Plan B

1. Complete HST 803 Seminar in Methodology of Historical Research (3 credits).
2. Complete at least 15 credits in 800-900 level history courses including one 3 credit course in historiography relevant to the student's program of study.
3. Competency in a foreign language. Credits in courses in foreign language may not be counted toward the requirements for the Master of Arts or Doctor of Philosophy in History degree programs.

Additional Requirements for Plan A

1. Complete 6 credits of HST 899 Master's Thesis Research.
2. Pass a final oral examination that covers the student's program of study and thesis.

Additional Requirements for Plan B

1. Pass a certifying examination, consisting of three parts, one testing the major area and two tests in each of the student's minor areas.

GRADUATE CERTIFICATE IN AMERICAN STUDIES

The Graduate Certificate in American Studies, which is administered by the Department of History, is designed for students who wish to study the culture, history, and civilization of the United States from an inter- and multidisciplinary perspective. Students may pursue the program to complement disciplinary master's or doctoral degree programs such as English, History, Anthropology, African American and African Studies, Chicano/Latino Studies, Philosophy, Religious

Studies, Theatre, Music, or History of Art. Students who are enrolled in the program explore the techniques, materials, and perspectives of American studies, American history, and American literature, as well as other related disciplines or thematic units.

The certificate is available as an elective to students who are enrolled in master's and doctoral programs at Michigan State University. Students must meet the requirements of the certificate specified below, in addition to the requirements for the student's primary degree program.

The student's program of study must be approved the Graduate Chairperson in the Department of History.

Requirements for the Graduate Certificate in American Studies

Students must complete a minimum of 12 credits, of which 6 credits must come from units other than the student's primary degree program. Students pursuing a dual degree, 6 credits must come from units other than the student's two degree programs.

	CREDITS
1. Complete one of the following courses (3 credits):	
HST 800 Historiography of the United States to 1865	3
HST 801 Historiography of the United States Since 1865	3
HST 807 Readings in Early American and U.S. History	3
2. Complete one of the following courses (3 credits):	
ENG 818 Studies in Genre and Media	3
ENG 819 Special Topics in Language and Literature	3
ENG 826 Special Topics Seminar	3
3. Complete 6 credits in course work from English, History, Anthropology, African American and African Studies, Chicano/Latino Studies, Philosophy, Religious Studies, Theatre, Music, or History of Art. A list of approved courses is available in the Department of History. Courses, if appropriate, may be used from other departments with approval of the Graduate Chairperson.	

Doctor of Philosophy

The program leading to the doctoral degree with a major in history is designed to provide wide knowledge in several fields of history, specialized competence in a limited area, and research techniques that will prepare the student for a career in teaching, research, government service, private industry, and other areas of professional historical activity.

The following primary fields of study are available to doctoral students in the department:

- African-American history
- African history
- American history
- Comparative Black history
- East Asian history
- Latin American and Caribbean history
- Science and medicine
- Women and gender history

The department recognizes the high importance of developing among its doctoral candidates a proficiency in college teaching. To the limit of its resources, it undertakes to provide experience in teaching in the form of graduate assistantships, along with organized discussions of the ends and means of the teaching career.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Students are admitted to the program for fall semester only. The department must receive all application materials by December 1. Decisions on admission are announced by late February. In making admissions decisions, the department considers the competencies of the faculty and the needs of students and the profession.

To be considered for admission to the Doctor of Philosophy degree program in history, an applicant must:

1. Have an official transcript forwarded from the applicant's undergraduate institution(s) that verifies conferral of a baccalaureate degree. If the applicant completed graduate course work or a graduate degree, official transcript(s) reflecting that work must also be submitted.
2. Have the results of the Graduate Record Examination (GRE) General Test forwarded to the department.
3. Submit a writing sample to the department that the applicant considers to be a fair representation of the applicant's ability to conduct scholarly research and produce academic writing.
4. Submit a statement (500-1000 words) that clearly indicates the primary field of intended study, the faculty members with whom the applicant would like to work, and the reasons for choosing the field and faculty.
5. Submit a personal statement (500-1000 words) that addresses the applicant's background as well as his or her goals in pursuing a Doctor of Philosophy degree in History.
6. Have at least three individuals, preferably scholars with whom the applicant has had course work or other professional contact, submit letters of recommendation to the department.

An international applicant is required to have fulfilled the university's English language proficiency requirement as described in the *Graduate Education* section of this catalog in one of the following three ways:

1. Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the Test of English as a Foreign Language with no subscore below 55 (paper version) or 21 (computer version).
2. Have an average score of 85 or higher on the Michigan English Language Assessment Battery with no subscore below 83.
3. Have an average score of 85 or higher on the Michigan State University English Language Center Test with no subscore below 83.

Applicants for doctoral study should understand that the department can offer no assurance that all of the areas of professional specialization will be available to students at any particular time. It is essential that persons with specific, clearly defined academic interests communicate with the Graduate Director before making firm plans to enroll in the doctoral program.

Guidance Committee

Students entering the doctoral program will be guided by the graduate director in the selection of courses for the first year.

By the end of the second semester, students should choose their major professor and their guidance committee. The committee shall consist of at least four members: two represent the student's major field, one of whom shall chair the student's guidance committee and direct the dissertation. In addition, two faculty members, one from each of the student's chosen two minor fields, will serve on the committee.

Requirements for the Doctor of Philosophy Degree in History

The student must:

1. Complete HST 803 Seminar in Methodology of Historical Research (3 credits) in the first semester of their first year.
2. Complete at least 12 credits in additional 800-900 level courses in a major field of history as specified by the student's guidance committee. The major field should be the field in which the student plans to focus research for the dissertation. The available major fields of history are referenced above.
3. Complete at least 6 credits in each of the student's two minor fields or in one minor field of history and in one minor field in a related discipline.
4. Student must demonstrate knowledge of two foreign languages before they may take the comprehensive examinations. This requirement for students formally admitted to the Ph.D. program can be fulfilled by one of these three options:
 - a. Competency in two foreign languages.
 - b. With approval of the student's guidance committee, the student may substitute certification in humanities computing for the second foreign language.
 - c. With the approval of the student's guidance committee, the second foreign language may be waived.
5. Pass the written and oral comprehensive examinations:
 - a. Written examinations must be completed within a six-month period by the end of a student's third year.
 - b. An oral examination must be completed no later than two weeks after the student successfully passes the written examination.
 - c. A defense of the dissertation prospectus needs to take place either at the time of the oral examination or in a separate defense within six weeks of the oral examination.
6. Complete 24 credits of HST 999 Doctoral Dissertation Research.
7. Pass a final oral examination in defense of the dissertation.

DEPARTMENT of HUMAN DEVELOPMENT and FAMILY STUDIES

Adrian Blow, Chairperson

The Department of Human Development and Family Studies is committed to improving the health and well-being of individuals and families across the lifespan through research and preparation of graduates for research, teaching, and professional practice. Recognizing, understanding and addressing the central role of diversity and interdependence among families and communities in the process of human development are core values of the department.

Areas of study include child development, youth development, lifespan human development and family diversity, family community services, and couple and family therapy. Knowledge of basic research and the application of research to improving the lives of individuals in the context of the family, the community, and policy are emphasized. Practical experiences in real-world settings are incorporated into all areas of study. The Child Development Laboratory and

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the Couple and Family Therapy Clinic are part of the department.

At the undergraduate level, the focus is on the application of knowledge about individual development and family processes to early childhood education, child and youth services in the community, and services for adults. At the graduate level, this focus is widened to include courses and research experiences with the goal of improving the training of early childhood teachers, preparing professionals who will serve youth in a variety of contexts, and training therapists who provide services to families, couples, and individuals. The department graduate programs also prepare scholars who study child development in the context of family processes, diverse families and family problems, and the process and outcome of therapeutic interventions.

UNDERGRADUATE PROGRAMS

CHILD DEVELOPMENT

Bachelor of Arts

The Bachelor of Arts in Child Development degree program combines a basic education in child development and family studies with a broad general education and preparation related to employment in early childhood education settings. Students will choose either a concentration in Elementary Education Teacher Certification, which requires admission to the teacher preparation program, or a concentration in Preschool Teaching in an Early Childhood Setting.

Elementary Education Teacher Certification course work prepares graduates to work in the early grades of primary schools, kindergarten through third grade and to meet the requirements to earn an Elementary Education Teaching Certificate (kindergarten through fifth grade) with an Early Childhood General and Special Education Endorsement.

The Preschool Teaching in an Early Childhood Setting concentration prepares graduates to work in early childhood settings such as Head Start and preschools and in other child-related fields such as policy, health care, or administration. Students in the Preschool Teaching in an Early Childhood Setting concentration will be required to complete an independent study experience such as study abroad, study away, experiential learning, internship, or undergraduate research. The child development major is appropriate for students interested in working with young children, birth through age eight.

Requirements for the Bachelor of Arts Degree in Child Development

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Child Development. Students pursuing the Elementary Education Teacher Certification concentration will be required to complete more than 120 credits.
The University's Tier II writing requirement for the Child Development major is met by completing Human Development and Family Studies 321. This course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree except for students pursuing the Elementary Education Teacher Certification concentration.
3. The following requirements for the major:

- a. All of the following courses (27 credits):

CEP	240	Diverse Learners in Multicultural Perspective	3
HDFS	211	Child Growth and Development	3
HDFS	320	Interaction with Children in Groups	3
HDFS	320L	Interaction with Children – Laboratory	1
HDFS	321	Curriculum for Children (W)	3
HDFS	321L	Curriculum for Children – Laboratory	1
HDFS	322	Infant Development and Program Planning	3
HDFS	322L	Interaction and Curriculum for Infants and Toddlers Laboratory	1
HDFS	421	Assessment of the Young Child	3
HDFS	424	Student Teaching in an Early Childhood Program	6
- b. One of the following concentrations:

Elementary Education Teacher Certification
Completion of an Integrated Teaching Major in Integrated Science, Language Arts, Mathematics, or Social Studies. For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

Preschool Teaching in an Early Childhood Setting

 1. All of the following courses (15 credits):

HDFS	145	The Individual, Couples and Family	3
HDFS	414	Parenting	3
HDFS	442	Ethnic Families in America	3
HDFS	472	Evaluation of Human Service Programs	3
HDFS	473	Administration of Early Childhood Programs	3

EARLY CARE AND EDUCATION

The Bachelor of Arts in Early Care and Education is a collaborative, multi-institutional limited enrollment program. This degree focuses on the intellectual, social, emotional, and biological development of children. It includes planning and design of related human services and care/educational settings and preparation related to employment in early childhood education settings. The program provides instruction in parent-child relations, parenting practices, special needs of children, parental and environmental influences on child development, caregiver-child interactions, external support services, and related public policy issues. Designed for active-duty military, spouses, retired and Department of Defense employees, rural head start teachers and off-campus students, the program provides flexibility for working professionals who need to maintain employment while advancing their educational opportunity.

The College of Social Science, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIEDA), offers this program by faculty from multiple land-grant universities: Michigan State University, Iowa State University, University of Missouri, University of Nebraska, Oklahoma State University, South Dakota State University, and Texas Tech University.

Students will earn this degree from their home institution while also enrolling for courses at other participating institutions.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

Admission

To be admitted, students must apply via their home institution and plan their course of study under the guidance of their academic advisor. Michigan State University students follow established University admission procedures to the College of Social Science and the Early Care and Education major.

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Students must have a minimum of 30 credits applicable to the graduation requirements of the admitting institution with an earned minimum grade-point average of 2.5.

Michigan State University students should contact the Department of Human Development and Family Studies for guidance on the completion of this program.

Requirements for the Bachelor of Arts Degree in Early Care and Education

1. The University requirements for the bachelor's degree as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Early Care and Education.

The University's Tier II writing requirement for the Early Care and Education major is met by completing Human Development and Family Studies 406.

2. The requirements of the College of Social Science.

3. The following requirements for the major:

a. All of the following courses which are taught online as part of the Great Plains IDEA Alliance (51 credits):

- Child Development (ages 0-3)
- Child Development (ages 4-8)
- Professional Development in Early Care and Education
- Child Guidance and Classroom Environments
- Health, Safety and Nutrition in Early Care and Education
- Practicum I: Child Observations in Classroom Environments
- Development of Curriculum for Children (ages 0-3)
- Development of Curriculum for Children (ages 4-8)
- Assessment and Observations in Early Care and Education
- Understanding and Adapting for Developmental Differences in Early Care and Education
- Practicum II: Lesson Planning
- Working with Families in Early Care and Education
- Technology and Young Children
- Diversity in the Lives of Young Children and Their Families
- Administration and Supervision in Early Childhood Settings
- Practicum III: Capstone Experience (W) [HDFS 406]

Students must have access to a high-quality preschool or head start classroom for their three practicum experiences.

HUMAN DEVELOPMENT AND FAMILY STUDIES

Graduates will be committed to improving the health and well-being of diverse individuals and families across the lifespan through research, teaching, and professional practice. Recognizing, understanding and addressing the central role of diversity and interdependence among families and communities is a core value of graduates. Students gain knowledge of basic research and the application of research to improving the lives of individuals in the context of the family, the community, and policy. Practical experience in real-world settings is incorporated into the degree program. Students are prepared to work in community and governmental agencies and organizations that provide human services within changing societies and serve children, youth, and families. Upon graduation, students may apply for provisional certification as a Family Life Educator and with additional work experience they can earn full certification.

Requirements for the Bachelor of Arts Degree in Human Development and Family Studies

1. The University requirements for the bachelor's degree as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Human Development and Family Studies.

The University's Tier II writing requirement for the Human Development and Family Studies major is met by completing Human Development and Family Studies 345. This course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major.

			CREDITS
a. All of the following courses (46 credits):			
HDFS	145	The Individual, Marriage, and the Family	3
HDFS	225	Lifespan Human Development in the Family	3
HDFS	270	Introduction to Human Development and Family Studies	4
HDFS	345	Principles of Family Studies (W)	3
HDFS	414	Parenting	3
HDFS	442	Ethnic Families in America	3
HDFS	444	Interpersonal Relationships in the Family	3
HDFS	445	Human Sexuality	3
HDFS	447	Management of Human Service Programs	3
HDFS	448	Child and Family Policy	3
HDFS	454	Family Financial Management	3
HDFS	472	Evaluation of Human Service Programs	3
HDFS	481	Research and Quantitative Methods in Human Development and Family Studies	3
HDFS	493	Internship	6

Requirements for the Bachelor of Science Degree in Human Development and Family Studies

1. The University requirements for the bachelor's degree as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Human Development and Family Studies.

The University's Tier II writing requirement for the Human Development and Family Studies major is met by completing Human Development and Family Studies 345. This course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

3. The following requirements for the major.

			CREDITS
a. All of the following courses (46 credits):			
HDFS	145	The Individual, Couples and Families	3
HDFS	225	Lifespan Human Development in the Family	3
HDFS	270	Introduction to Human Development and Family Studies	4
HDFS	345	Principles of Family Studies	3
HDFS	414	Parenting	3
HDFS	442	Ethnic Families in America	3
HDFS	444	Interpersonal Relationships in the Family	3
HDFS	445	Human Sexuality	3
HDFS	447	Management of Human Service Programs	3
HDFS	448	Child and Family Policy	3
HDFS	454	Family Resource Management	3
HDFS	472	Evaluation of Human Service Programs	3
HDFS	481	Research and Quantitative Methods in Human Development and Family Studies	3
HDFS	493	Internship	6
4. Complete 12 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation Requirement for Bachelor of Science Degree. Courses used to fulfill the STEM requirement may not be used to satisfy any other requirement.			
ANP	206	Introduction to Physical Anthropology	3
ANTR	350	Human Gross Anatomy for Pre-Health Professionals	3
BMB	200	Introduction to Biochemistry	4
BS	161	Cell and Molecular Biology	3
CEM	141	General Chemistry	4
CEM	143	Survey of Organic Chemistry	3
CEM	251	Organic Chemistry I	3
CSUS	200	Introduction to Sustainability	3
ENT	205	Pests, Society and Environment	3
EPI	390	Disease in Society: Introduction to Epidemiology and Public Health	4
GEO	203	Introduction to Meteorology	3
GEO	206	Physical Geography	3
HNF	150	Introduction to Human Nutrition	3
LB	270	Medical Terminology	2
MMG	201	Fundamentals of Microbiology	3

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MMG	301	Introductory Microbiology	3
MTH	124	Survey of Calculus I	3
MTH	132	Calculus I	3
NUR	300	Pathophysiology	4
PHM	350	Introduction to Human Pharmacology	3
PSL	250	Introductory Physiology	4
PSL	310	Physiology for Pre-Health Professionals	4
STT	200	Statistical Methods	3

TEACHER CERTIFICATION OPTIONS

The child development disciplinary major leading to the Bachelor of Arts degree is available for teacher certification. A early childhood-general and special education disciplinary minor is available for students pursuing elementary teacher certification.

Students who elect the child development disciplinary major or the early childhood-general and special education disciplinary minor must contact the Department of Human Development and Family Studies.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

GRADUATE STUDY

The Department of Human Development and Family Studies is concerned with human development and with the interaction of individuals and family members throughout the life cycle as they interact with their environment. The department offers the following degree programs:

Graduate Certificate

- Youth Development Specialist
- Youth Program Management and Evaluation

Master of Arts

- Family Community Services
- Youth Development

Master of Science

- Child Development
- Human Development and Family Studies

Doctor of Philosophy

- Human Development and Family Studies

All graduate programs in the department are designed to develop professional competence, to encourage creative thinking, and to prepare students to perform and utilize research. Each student's program is developed within the framework of the area of major interest, taking into consideration his or her professional experience, interests, and educational and career goals.

Careers to which advanced degrees may lead include college teaching, research, extension, marriage and family therapy, and administration in early childhood education centers. Graduates also may be employed as family specialists in community and family agencies.

Opportunities are available within the Department of Human Development and Family Studies for graduate students to participate in ongoing interdisciplinary research and in field experiences in school or community settings. The Child Development Laboratories and the Couple and Family

Therapy Clinic provide opportunities for applied and research experiences.

Students who are enrolled in Master of Arts, Master of Science, and Doctor of Philosophy degree programs in the Department of Human Development and Family Studies may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Infancy and Early Childhood* in the *College of Social Science* section of this catalog.

Master of Arts and Master of Science

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Students with limited undergraduate backgrounds may be required to correct such deficiencies by completing courses which serve as prerequisites to graduate work.

CHILD DEVELOPMENT

The program focuses on the behavioral, psychological, biological and contextual processes that promote positive developmental outcomes in infants and young children. Key contexts of development emphasized in the program include family, early childhood educational settings, and culture. Courses are available in areas such as development across cultures, infant development, language and literacy research and practices, social-emotional development, observational methods for home or the classroom, approaches to early education, intervention and prevention programs, and parenting. Laboratory experiences in early childhood education are available in the Child Development Laboratories, and research experiences are available through work with faculty mentors. Both a thesis (Plan A) and non-thesis (Plan B) option are offered. Those pursuing Plan A are prepared for doctoral study in a variety of related fields.

Admission

Students must have:

1. A bachelor's degree from a recognized college or university.
2. A grade-point average of 3.00 or better during the last two full years of undergraduate study. Those between 2.5 and 3.0 must take the General Record Examination (GRE).
3. A favorable evaluation by at least three professional references.
4. Academic records, references, and experiences that reflect strong qualifications for graduate study.
5. Satisfactory verbal ability and quantitative ability scores on the Aptitude Test of the Graduate Record Examination (GRE) is required for Plan A (Thesis). This option is for those wishing to pursue a research focus and potential doctoral degree.

International applicants must take the Test of English as a Foreign Language (TOEFL) exam: 1) Paper-based version: minimum average score of 550, no subscore below 52; 2) Computer-based version: minimum average score of 213, no

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subscore below 19; 3) Internet-based version: minimum average score of 80; no subscore below 19 for reading, listening, and speaking; no writing subscore below 22.

Requirements for the Master of Science Degree in Child Development

The Master of Science Degree in Child Development is available under Plan A (with thesis) or Plan B (without thesis). A total of 30 credits is required for Plan A and a total of 32 credits is required for Plan B.

	CREDITS
Requirements for Plan A	
1. All of the following courses (a minimum of 12 credits):	
HDFS 810 Theories of Human Development	3
HDFS 811 Child Development: Ecological Perspectives	3
HDFS 821 Prevention, Intervention and Educational Programs in Early Childhood	3
HDFS 892 Seminar in Human Development and Family Studies	1 to 4
2. Both of the following courses approved by the student's advisor (6 credits): A 3 credit research methodology course A 3 credit quantitative methods course	
3. One of the following courses (3 credits):	
HDFS 826 Social-Emotional Development Birth to Eight Years: Biology, Relationships, and Culture	3
HDFS 827 Language and Literacy Development from Infancy to Formal Schooling	3
4. An additional elective course approved by the student's advisor.	
5. Complete 6 credits of HDFS 899 Master's Thesis Research.	

Requirements for Plan B

1. The following course (3 credits):	
HDFS 811 Child Development: Ecological Perspectives	3
2. One of the following courses (3 credits):	
HDFS 449 Special Needs Children and Their Families	3
HDFS 825 Families with Special Needs Children: An Ecological Perspective	3
3. One of the following courses (3 credits):	
HDFS 414 Parenting	3
HDFS 892 Seminar in Human Development and Family Studies	3
HDFS 892 must be approved by the student's advisor to assure appropriate content.	
4. The following course (3 credits):	
HDFS 847 Theories of the Family	3
5. All of the following courses (14 credits):	
HDFS 817 Advanced Practice in Infant and Toddler Early Childhood Programming	3
HDFS 818 Advanced Curricular Adaptations in Diverse Early Childhood Environments	3
HDFS 819 Advanced Teaching Practicum in an Early Childhood Setting	4
HDFS 822 Assessment of the Young Child	3
HDFS 894 Laboratory and Field Experience	1
6. Both of the following courses (6 credits):	
HDFS 473 Administration of Early Childhood Programs	3
HDFS 821 Prevention, Intervention and Educational Programs in Early Childhood Education	3

FAMILY COMMUNITY SERVICES

The Master of Arts in Family Community Services is a collaborative, multi-institutional program offered totally online. This degree is designed to provide a research-based perspective to understand individual, family, interpersonal and community dynamics across the lifespan. Students will acquire knowledge and skills related to the design, implementation, sustainability, and leadership and management of family and community services programs.

The College of Social Science, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA), offers this program with all course work delivered

via the Internet/World Wide Web by faculty from multiple land-grant universities: Michigan State University, Kansas State University, University of Missouri, University of Nebraska-Lincoln, Oklahoma State University, and South Dakota State University.

Students will earn this degree from their home institution while also enrolling for courses at other participating institutions.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

Admission

To be admitted, students must apply via their home institution and plan their course of study under the guidance of their academic advisor. Michigan State University students follow established University admission procedures.

Requirements for the Master of Arts Degree in Family Community Services

The program is available only online and only under Plan B (without thesis). Each student's course of study must be developed and approved in consultation with the academic advisor. The student must complete a total of 36 credits, of which 30 credits is course work required by The Great Plains Interactive Distance Education Alliance (GPIDEA) consortium, distributed as follows:

- Core courses (30 credit hours):
Administration and Management of Human Services Programs
Crises Across the Lifespan
Family Dynamics
Family Resource Management
Foundations and Principles of Family and Community Services
Interpersonal Relationships
Lifespan Development
Parenting Education
Program Design, Evaluation and Implementation
Resilience in Families
- Additional course work (6 credit hours).
This enrollment will vary at each institution. At Michigan State University, students will fulfill this requirement by enrolling in course work approved by the student's academic advisor.
- Pass a final oral examination or evaluation. This will include a formal presentation by the student on a topic determined by the student and the academic advisor.

Michigan State University students should contact the Department of Human Development and Family Studies or consult the Michigan State University Schedule of Courses for current course schedule and other information.

COLLEGE OF SOCIAL SCIENCE

HUMAN DEVELOPMENT AND FAMILY STUDIES

Master of Science

The Master of Science Degree in Human Development and Family Studies is designed to help students gain an understanding of increasingly diverse family units as well as individual family members as they develop across the life course. Depending upon student interest and career goals, focus may be on human development (adolescence, aging), leadership, policy or diversity. Students are prepared to work with and advocate for families, children, youth and adults in a broad range of settings, including extension offices, community agencies, and policy-making contexts. Both a thesis (Plan A) and non-thesis (Plan B) option are offered. Those pursuing Plan A are prepared for doctoral study in a variety of related fields.

Admission

Students must have:

1. A bachelor's degree from a recognized college or university.
2. A grade-point average of 3.00 or better during the last two full years of undergraduate study. Those between 2.5 and 3.0 must take the General Record Examination (GRE).
3. A favorable evaluation by at least three professional references.
4. Academic records, references, and experiences that reflect strong qualifications for graduate study.
5. Satisfactory verbal ability and quantitative ability scores on the Aptitude Test of the Graduate Record Examination (GRE) is required for Plan A (Thesis). This option is for those wishing to pursue a research focus and potential doctoral degree.

International applicants must take the Test of English as a Foreign Language (TOEFL) exam: 1) Paper-based version: minimum average score of 550, no subscore below 52; 2) Computer-based version: minimum average score of 213, no subscore below 19; 3) Internet-based version: minimum average score of 80; no subscore below 19 for reading, listening, and speaking; no writing subscore below 22.

Requirements for the Master of Science Degree in Human Development and Family Studies

The Master of Science Degree in Human Development and Family Studies is available under Plan A (with thesis) or Plan B (without thesis). A total of 30 credits is required for both Plan A and Plan B.

Requirements for Both Plan A and Plan B

- | | CREDITS |
|---|---------|
| 1. All of the following courses (12 credits): | |
| HDFS 810 Theories of Human Development | 3 |
| HDFS 847 Theories of the Family | 3 |
| HDFS 880 Research Design and Measurement | 3 |
| HDFS 892 Seminar in Human Development and Family Studies | 3 |
| Additional courses may be substituted for HDFS 892 with advisor approval. | |

Additional Requirements for Plan A

1. The following course (3 credits):
HDFS 881 Quantitative Methods in Human Development 3
2. Complete 9 credits chosen in consultation with the student's advisor.
3. Complete 6 credits of HDFS 899 Master's Thesis Research.

Additional Requirements for Plan B

1. Both of the following courses (6 credits):
HDFS 481 Research and Quantitative Methods in Human Development and Family Studies 3
HDFS 845 Foundations of Family Study 3
2. Complete 12 credits chosen in consultation with the student's advisor.

Doctor of Philosophy

Human Development and Family Studies is the interdisciplinary study of individuals and relationships across the lifespan in diverse contexts of families, communities, and cultures. Ph.D. candidates are prepared to transform the human experience through applied research rooted in social justice.

Doctoral students collaborate with faculty mentors in experiences related to applied research, developing a focal area of scholarship. Each student completes rigorous course work, including research methodology, comprehensive exams, and the dissertation. Student achievements are documented in a professional portfolio throughout the doctoral program.

The Doctor of Philosophy Degree in Human Development and Family Studies offers three concentrations from which students may choose. They include:

Child Development: focus on behavioral, psychological, biological, educational, and contextual processes that promote positive developmental outcomes in infants and young children.

Lifespan Human Development and Family Diversity: focus on developmental processes across the life course in the context of family, community, schools and other environments within a sociocultural context to include attention to gender, ethnicity, racial socialization, immigration, poverty, disability, and sexual orientation. Study may focus on one life stage (youth, emerging or older adults) or examine an issue (attachment, chronic illness) across the entire life course. Completing a selection of courses on cultures, identities, families or policy, agreed upon by the student and committee members will satisfy the concentration.

Couple and Family Therapy: focus on the application of research and theory to individual, group, couple and family therapy. Accredited by the Commission on Accreditation of Marriage and Family Therapy Education (COAMFTE).

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Admission to the doctoral program in human development and family studies is based on evidence of academic ability, research potential, leadership qualities, and fit of research interests with potential faculty mentors. Admission to the program assumes a background in the behavioral sciences; collateral course work that does not count toward the doctoral degree may be required where background is inadequate. A prospective doctoral student is required to take the general sections of the Graduate Record Examination and include the results with the application. Students who apply for the Human Development and Family Studies Ph.D. program must participate in an interview with a selected faculty committee.

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Students are admitted to the degree program in fall semester only.

Child Development: To be admitted to the doctoral program in human development and family studies with child development as the area concentration, an applicant must have completed at minimum, a bachelor's degree, with a background in the behavioral sciences or related field.

Lifespan Human Development and Family Diversity: To be admitted to the doctoral program in human development and family studies with lifespan human development and family diversity as the area concentration, an applicant must have completed at minimum, a bachelor's degree, with a background in the behavioral sciences or related field.

Couple and Family Therapy: To be admitted to the doctoral program in human development and family studies with couple and family therapy as the area of concentration, an applicant must have completed a master's degree program with a major in marriage and family therapy or related field.

Requirements for the Doctor of Philosophy Degree in Human Development and Family Studies

CREDITS

Students in the doctoral program in human development and family studies are required to complete the following:

- The following course:

HDFS 901 Contemporary Scholarship in Human Development and Family Studies	3
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- Completion of 21 credits in methodology and statistics course work as approved by the student's academic advisor.
- Completion of 24 credits in HDFS 999 Doctoral Dissertation Research.
- Completion of one of the concentrations noted below.
- Successfully pass the comprehensive examination
- Successfully defend the doctoral dissertation.
- One of the following concentrations:

Child Development

Complete all of the following (15 credits):

HDFS 826 Social-Emotional Development Birth to Eight Years: Biology, Relationships, and Culture	3
HDFS 827 Language and Literacy Development from Infancy to Formal Schooling	3

An additional 9 credits of course work chosen in consultation with the student's guidance committee.

Couple and Family Therapy

Complete all of the following (18 credits):

HDFS 888 Diverse Families and Communities: Interventions and Strategies	3
HDFS 903 Evidence-Based Couple and Family Therapy Intervention Programs	3
HDFS 910 Contemporary Couple and Family Therapy Theories	3
HDFS 911 Outcome Research: What Works in Couple and Family Therapy Theories	3
HDFS 994 Advanced Evidence-Based Couple Therapy	3
HDFS 995 Couple and Family Therapy Supervision	3

Clinical Requirements (3 to 12 credits):

HDFS 993 Internship	3 to 12
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Doctoral students are required to complete a total of 1,000 hours of direct client contact before graduating (pre-doctoral and doctoral hours combined).

The Couple and Family Therapy Program at Michigan State University has been accredited by The Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy. Students entering the doctoral concentration in Couple and Family Therapy will be required to meet equivalent of the master's Standard Curriculum of the Commission on Accreditation of Marriage and Family Therapy Education (COAMFTE).

Lifespan Human Development and Family Diversity

Complete all of the following (12 to 15 credits):

HDFS 847 Theories of the Family	3
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A course in diversity chosen in consultation with the student's guidance committee

An additional 6 to 9 credits of course work chosen in consultation

with the student's guidance committee.

YOUTH DEVELOPMENT

The Master of Arts in Youth Development is a collaborative, multiinstitutional program offered totally online. This degree is designed to promote an understanding of communities and families and to prepare students to have an impact on the development of youth in their homes, neighborhoods, and society. American youth born since the early 1980s are projected to be the largest, most ethnically diverse generation of adolescents in the history of the United States, and this program is designed to address that demographic shift.

The curriculum is focused on the promotion of positive development of all young people. It is designed for individuals who wish to work in a variety of youth-related professions, including youth-serving organizations and programs such as Boys and Girls Clubs, community recreation specialties, youth programs sponsored by faith-based institutions, correctional professions, or within U.S. Extension Programs.

The College of Social Science, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA), offers this program with all course work delivered via the Internet/World Wide Web by faculty from multiple land-grant universities: Michigan State University, Kansas State University, University of Missouri, North Dakota State University, Texas Tech University, and the University of Nebraska.

Students will earn this degree from their home institution while also enrolling for courses at other participating institutions.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

To be admitted, students must apply via their home institution and plan their course of study under the guidance of their academic advisor. Michigan State University students follow established university admission procedures.

Requirements for the Master of Arts Degree in Youth Development

The program is available only online and only under Plan B (without thesis). Each student's course of study must be developed and approved in consultation with the academic advisor. Each course is offered at least once every other year. The student must complete a total of 36 credits, of which 28 credits is course work required by The Great Plains Interactive Distance Education Alliance (GPIDEA) consortium, distributed as follows:

- Core courses (28 credits):
 - Administration and Program Management
 - Adolescents and Their Families
 - Community Youth Development
 - Contemporary Youth Issues
 - Foundations of Youth Development
 - Program Design, Evaluation, and Implementation

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Youth Development
Youth in Cultural Contexts
Youth Policy
Youth Professionals as Consumers of Research

2. Additional course work (8 credit hours).
This enrollment will vary at each institution and may require a master's thesis, project, or practicum. At Michigan State University, students will fulfill this requirement by enrolling in course work approved by the student's academic advisor.
3. Pass a final examination or evaluation.

Michigan State University students should contact the Department of Human Development and Family Studies or consult the Michigan State University Schedule of Courses for current course schedule and other information.

GRADUATE CERTIFICATE IN YOUTH PROGRAM MANAGEMENT AND EVALUATION

The Youth Program Management and Evaluation Graduate Certificate is designed to assist youth professionals to develop and apply resources for successful implementation and management of youth-serving organizations. The program addresses the need for advanced education based on research and policy for optimal youth outcomes through a strengths-based curriculum.

The online format and course schedule of the certificate program allow flexibility to accommodate both full-time students and working professionals. The College of Social Science, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA), offers this program with all course work delivered via the World Wide Web at www.gpidea.org.

Admission

To be considered for admission into the Youth Program Management and Evaluation Graduate Certificate applicants must follow established University admission procedures. Students currently pursuing the Master of Arts in Youth Development are not eligible to apply for admission to the Youth Program Management and Evaluation Graduate Certificate. For additional information, refer to the *Admission* section in the *Graduate Education* section of this catalog.

Requirements for the Youth Program Management and Evaluation Graduate Certificate

The program is available totally online. Each course is offered at least once every other year. The student must complete 13 credits of course work in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA).

1. The following course (1 credit):
Foundations of Youth Development
2. Four of the following courses (12 credits):
Administration and Program Management
Contemporary Youth Issues
Program Design, Evaluation and Implementation
Youth Policy
Youth Professionals as Consumers of Research

Graduate Certificate in Youth Development Specialist

The Youth Development Specialist Graduate Certificate is designed to assist youth professionals to train individuals in the second decade of life with the skills necessary for a successful transition into adulthood. The program addresses the need for advanced education in youth issues and does so through a strengths-based curriculum.

The online format and course schedule of the certificate program allows flexibility to accommodate both full-time students and working professionals. The College of Social Science, in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA), offers this program with all course work delivered via the World Wide Web at www.gpidea.org.

Admission

To be considered for admission into the Youth Development Specialist Graduate Certificate applicants must follow established University admission procedures. Students currently pursuing the Master of Arts in Youth Development are not eligible to apply for admission to the Youth Development Specialist Graduate Certificate. For additional information, refer to the *Admission* section in the *Graduate Education* section of this catalog.

Requirements for the Youth Development Specialist Graduate Certificate

The program is available totally online. Each course is offered at least once every other year. The student must complete 13 credits of course work in collaboration with The Great Plains Interactive Distance Education Alliance (GPIDEA).

1. The following course (1 credit):
Foundations of Youth Development
2. Four of the following courses (12 credits):
Adolescents and Their Families
Community Youth Development
Contemporary Youth Issues
Youth Development
Youth in Cultural Contexts
Youth Policy

SCHOOL of HUMAN RESOURCES and LABOR RELATIONS

Peter Berg, Director

Through its research and educational programs, the School of Human Resources and Labor Relations advances knowledge and understanding of human resources and labor-relations within a global context. Offering a comprehensive understanding of the employment relationship, the program helps students develop critical thinking skills and learn essential problem-solving, social, emotional, and

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entrepreneurial skills for advancing the well-being and success of working people, organizations and communities worldwide.

The School has an interdisciplinary approach, incorporating scholarship from economics, human resource management, law, organizational behavior, psychology, public policy, and sociology, as well as labor and employment relations. It also has a vibrant outreach program, conducting training with managers, union leaders, and joint labor-management groups nationwide.

UNDERGRADUATE PROGRAMS

The School offers a Bachelor of Arts degree in Human Capital and Society, which prepares students for a wide range of professional careers focusing on employment and workplace strategies that shape the future of work in business, government, healthcare, education, labor organizations and other not-for-profit organizations. It also offers an undergraduate Minor in Leadership of Organizations, designed to help students develop leadership skills and apply them in a wide range of organizational settings: corporate, government, and non-profit.

HUMAN CAPITAL AND SOCIETY

Bachelor of Arts

The Bachelor of Arts degree in Human Capital and Society provides a general social science understanding of the complex nature of people and work. The program focuses on workforce education, training and development; laws governing employment and workplace rights; human decision-making and behavior in the labor market and workplace; and organizational strategies, policies and practices governing and influencing employee outcomes and performance.

Requirements for the Bachelor of Arts Degree in Human Capital and Society

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Human Capital and Society.

The completion of Statistics and Probability 200 or 201 referenced in item 3. below may also satisfy the University mathematics requirement or the SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) REQUIREMENT in the College, but not both.

The University's Tier II writing requirement for the Human Capital and Society major is met by completing Human Resources and Labor Relations 465. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following courses for the major (42 or 43 credits):

a. One of the following courses (3 or 4 credits):

	CREDITS
GEO 363 Introduction to Quantitative Methods for Geographers	3
PSY 295 Data Analysis in Psychological Research	3
STT 200 Statistical Methods	3
STT 201 Statistical Methods	4
STT 315 Introduction to Probability and Statistics for Business	3
STT 421 Statistics I	3

b. One of the following courses (3 credits):

EC 201 Introduction to Microeconomics	3
EC 202 Introduction to Macroeconomics	3

c. All of the following courses (18 credits):

HRLR 201 Human Capital and Society	3
HRLR 313 Employment Relations	3
HRLR 314 Legal Environment of Work	3
HRLR 315 Research Methods and Analysis	3
HRLR 410 Voice and Democracy at Work	3
HRLR 465 Capstone in Human Capital and Society	3

d. Complete a minimum of 12 credits with at least 3 credits from each of the three areas below (General, Human Capital Systems, and International):

General	
CEP 460 Communication Skill Training for the Helping Professional	3
HRLR 211 Introduction to Organizational Leadership	3
HRLR 212 Career Management	3
HRLR 311 Applied Organizational Leadership	3
HRLR 493 Internship in Human Capital and Society	3 to 12
HRLR 494 Undergraduate Research in Human Capital and Society	3 to 6
SSC 490 Special Topics in Social Science	3
SSC 493 Social Science Internship	3
SSC 493A Social Science International Internship	3
SSC 494 Undergraduate Research in Social Science	3
SSC 496 Field Study Abroad	3

Human Capital Systems

CEP 470 Disability in a Diverse Society	3
HRLR 316 Economics of Human Capital	3
HRLR 401 Income Inequality	3
MGT 411 Organizational Staffing	3

International

HRLR 414 Legal Standards in a Global Workplace	3
HRLR 420 Comparative Human Capital Systems	3

e. Complete at least 2 courses (6 credits) from the following courses:

Anthropology

ANP 201 Introduction to Cultural Anthropology	3
ANP 220 Gender Relations in Comparative Perspective	3
ANP 330 Race, Ethnicity, and Nation: Anthropological Approaches to Collective Identity	3

Economics

EC 301 Intermediate Microeconomics	3
EC 310 Economics of Developing Countries	3
EC 340 Survey of International Economics	3
EC 380 Labor Relations and Labor Market Policy	3
EC 480 Analysis of Labor Markets (W)	3

Geography

GEO 113 Introduction to Economic Geography	3
GEO 151 Introduction to Human Geography	3
GEO 204 World Regional Geography	3

History

HST 213 U.S. Business and Economic History	3
HST 225 Law, History and Society in the United States	3
HST 305 The Making of the Modern United States	3
HST 306 Modern United States	3
HST 313 Women in the United States to 1869	3
HST 314 Women in the United States since 1869	3

Human Development and Family Studies

HDFS 442 Ethnic Families in America	3
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Psychology

PSY 235 Social Psychology	3
PSY 236 Personality	3
PSY 255 Industrial and Organizational Psychology	3

Sociology

SOC 161 International Development and Change	3
SOC 214 Social Inequality	3
SOC 215 Race and Ethnicity	3
SOC 216 Sex, Gender, and Sexuality	3
SOC 241 Social Psychology	3
SOC 424 Organizations and Society	3
SOC 481 Social Movements and Collective Identities	3

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MINOR IN LEADERSHIP OF ORGANIZATIONS

The Minor in Leadership of Organizations provides interdisciplinary study of the leadership of organizations, preparing students to critically assess the effectiveness of leaders in a wide range of organizations including business, government, and non-profit. The minor also prepares students to be more effective leaders in their careers and as citizens.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an advisor in the School of Human Resources and Labor Relations.

Requirements for the Minor in Leadership of Organizations

Complete a minimum of 15 credits from the following:

	CREDITS
1. The following core course (3 credits):	
HRLR 211 Introduction to Organizational Leadership	3
2. One of the following courses (3 credits):	
ANP 321 Anthropology of Social Movements	3
HST 213 U.S. Business and Economic History	3
HST 312 African American Women	3
HST 313 Women in the United States to 1869	3
HST 314 Women in the United States since 1869	3
PLS 310 Public Administration and Policy	3
PLS 313 American Public Policy	3
PSY 235 Social Psychology	3
PSY 255 Industrial and Organizational Psychology	3
SOC 241 Social Psychology	3
SOC 481 Social Movements and Collective Identities	3
3. Two of the following courses (6 to 8 credits):	
ACM 271 Introduction to Arts and Cultural Management	3
ACM 461 Strategies of Arts and Cultural Management	3
CEP 260 Dynamics of Personal Adjustment	3
COM 240 Introduction to Organizational Communication	4
CSUS429 Program Evaluation for Community Sustainability	3
ESHP190 The Art of Starting	3
MGT 325 Management Skills and Processes	3
PHL 340 Ethics	3
PHL 345 Business Ethics	4
REL 185 Introduction to Religion and Nonprofits	3
REL 291 Special Topics in Religious Studies	3
REL 485 Religion and Nonprofit Leadership (W)	3
TE 250 Human Diversity, Power, and Opportunity in Social Institutions	3
WRA 202 Introduction to Professional and Public Writing	3
WRA 401 Rhetoric, Leadership and Innovation	3
WS 404 Women and the Law in the United States	3
Students who choose REL 291 must obtain prior approval from the academic advisor to ensure content is specific to Leadership of Organizations.	
4. The following course (3 credits):	
HRLR 311 Applied Organizational Leadership	3

Research and Program Services

RESEARCH PROGRAM. The general focus of faculty research and scholarship covers a wide breadth of human resource and labor and employment relations issues. Spanning local to global inquiries, analyses range from micro-level individual and organizational analyses to macro-level organizational and policy analyses. These inquiries and analyses take into

account the broader environmental contexts of organizations, multiple stakeholders and actors, and multi-level behaviors and decision-making. As a multidisciplinary field of study, faculty research draws on various theoretical foundations of other disciplines such as economics, psychology, sociology, political science, and law and employs the full range of scientific methodologies, statistical methods, and research designs.

HUMAN RESOURCES EXECUTIVE EDUCATION AND DEVELOPMENT. The school offers non-credit programs focusing on strategy, content expertise, and leadership – with the purpose of effectively aligning human resource policies and practices with business and operational plans to yield competitive advantage. Open enrollment programs provide training and leadership development in human resource management, contemporary collective bargaining and negotiation, and workers compensation. The school also offers customized curriculum tailored to meet the specific needs of organizations, as well as executive coaching designed to meet the personal development interests of individuals.

LABOR EDUCATION AND DEVELOPMENT. The school offers non-credit programming aimed at improving the employment opportunities and work lives of the citizens of Michigan. This programming includes union leader training and development, joint union-management training in high performance work systems, and economic development focusing on local business and community solutions. The school also provides consultation on union and organizational strategies, as well as facilitation for contract negotiations and joint union-management decision-making.

GRADUATE STUDY

The School's Master of Human Resources and Labor Relations program is recognized as one of the leading programs of its kind, with approximately 2,900 alumni who hold top executive positions in both the private and public sectors. The School also offers a doctoral program in Human Resources and Labor Relations, designed primarily for those seeking academic careers.

HUMAN RESOURCES and LABOR RELATIONS

The Master of Human Resources and Labor Relations is the school's signature graduate degree, offered on a full-time basis in East Lansing, Michigan. With a diverse and highly qualified student body, the master's program is universally regarded as one of the premier professional programs of its kind in the world. Preparing future leaders for professional careers, students receive a comprehensive, contemporary foundation in human resources and labor relations, gain a broad global perspective, and learn to apply best practices, lead organizational change, and act strategically as business leaders.

The curriculum offers a wide range of courses across required core knowledge areas including: human resource management, labor-management relations, organizational change, business acumen, international human resources and employment relations, workplace law, economics of human

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resources, and quantitative methods for human resource analyses.

In addition to classroom instruction, nearly all students participate in paid summer internships with companies between their first and second year in the program. Through these summer internships, students receive invaluable mentoring and on-the-job learning, working as members of specific project teams and undertaking individual assignments.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

To be considered for admission to the master's degree program, a student must have a bachelor's degree and a cumulative grade-point average of 3.00 or higher in the junior and senior years. Applicants must have satisfactory scores on the Graduate Record Examination (GRE) General Test or on the Graduate Management Admission Test (GMAT). Applicants with five or more years of relevant work experience with successful professional records may be able to substitute that work experience for GRE or GMAT test scores. Applicants must complete one course in microeconomic principles, one course in statistics, and one course in behavioral sciences with a minimum grade of 3.0 in each course. In addition, applicants will be judged on the quality of their statement of objectives and three letters of reference.

Requirements for the Master of Human Resources and Labor Relations Degree in Human Resources and Labor Relations

The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete 36 credits with a grade-point average of at least 3.00.

	CREDITS
1. All of the following courses (15 credits):	
HRLR 809 Economics of Human Resources	3
HRLR 813 Organizational Behavior for Human Resources and Labor Relations	3
HRLR 820 Human Resource Practices and Decisions	3
HRLR 832 Quantitative Methods for Human Resources Analyses	3
HRLR 858 Collective Bargaining	3
2. One course from each of the following core knowledge areas (12 credits):	
Human Resource Management	
HRLR 821 Talent Acquisition and Deployment	3
HRLR 822 Training and Development	3
HRLR 825 Compensation	3
International Human Resources and Labor Relations	
HRLR 854 Comparative Employment Relations	3
HRLR 855 International Human Resources	3
Workplace Law	
HRLR 863 Labor Law	3
HRLR 868 Employment Law	3
Strategy and Firm Performance	
HRLR 871 Human Resource and Firm Performance	3
HRLR 872 Human Resources Strategy	3
3. Nine additional credits in courses approved by the student's academic advisor or guidance committee. Students pursuing Plan A (with thesis) must complete 4 credits of HRLR 899 Master's Thesis Research as part of this elective requirement.	

HUMAN RESOURCES and LABOR RELATIONS—LAW

Human Resources and Labor Relations students who are admitted to the dual MHRL/JD program with the Michigan State University - College of Law may transfer a maximum of 9 credits from the Michigan State University/College of Law program to the MHRL program. These credits may be used only to satisfy elective credits. Only Plan B (without thesis) is available for election under the dual degree program.

Doctor of Philosophy

The School of Human Resources and Labor Relations offers a Doctor of Philosophy degree in Human Resources and Labor Relations to prepare students for a career as a scholar in human resources or labor and employment relations in a tenure-track position at a research-oriented university. Students study employment phenomena from the perspective of multiple actors including employees, employers, unions, the government, and society at-large. The program integrates tools from diverse disciplines including economics, management, and psychology.

Admission

Admission to this doctoral program is based on an evaluation of the student's academic record, the Graduate Record Examination (GRE) general test or the Graduate Management Admission Test (GMAT) scores, letters of recommendation, written statements, and an application form. For further details, visit our Web site at www.hrlr.msu.edu.

Requirements for the Doctor of Philosophy Degree in Human Resources and Labor Relations

Students will complete course work and seminars (60 credits) within the School of Human Resources and Labor Relations, and within other departments in the university. Students must:

	CREDITS
1. Complete the following courses (12 credits):	
HRLR 991A Theoretical Perspectives in Human Resource Management	3
HRLR 991B Theoretical Perspectives in Labor and Employment Relations	3
HRLR 992A Research Perspectives in Human Resource Management	3
HRLR 992B Research Perspectives in Labor and Employment Relations	3
2. Complete three doctoral level research methods courses within other departments approved by the student's doctoral committee (9 credits).	
3. Complete five doctoral level courses in other departments approved by the student's doctoral committee (15 credits).	
4. Pass comprehensive examinations based on their course work.	
5. Demonstrate research competence by writing an empirical research paper.	
6. Complete 24 credits of HRLR 999 Doctoral Dissertation Research.	
7. Successfully defend the dissertation.	

SCHOOL of PLANNING, DESIGN and CONSTRUCTION

Ming-Han Li, Director

The School of Planning, Design and Construction uniquely unites four built environment disciplines to foster synergistic learning and collaboration: construction management, interior design, landscape architecture and urban and regional planning. The academic programs are accredited and produce career-ready graduates. Students work on real-world, cross-discipline projects and activities. The faculty cross-collaborate on pressing built environment issues, delivering timely and crucial sustainable research and outreach. The School of Planning, Design and Construction is administered jointly by the College of Agriculture and Natural Resources and the College of Social Science.

UNDERGRADUATE PROGRAMS

The school offers a Bachelor of Science degree program in urban and regional planning through the College of Social Science.

The school also offers Bachelor of Science degree programs in construction management, and interior design and a Bachelor of Landscape Architecture degree program through the College of Agriculture and Natural Resources. The school also offers a dual degree in the Bachelor of Landscape Architecture and Master of Arts in Environmental Design. For information about those programs, refer to the statement on the *School of Planning, Design and Construction* in the *College of Agriculture and Natural Resources* section of this catalog.

URBAN AND REGIONAL PLANNING

The undergraduate program in urban and regional planning provides students with a basic understanding of environment, economy- and society-related planning issues using scientific, social scientific or humanistic approaches. Students will learn the history of urbanism, the theory and principles of urban design, and the relevant legal and administrative policies & procedures. Students study the techniques of survey and research used in the analysis of the structure and growth of urban areas. They are involved in written and graphic communication. They recognize the contributions made by other disciplines concerned with the study of urban development, including politics, law, economics, social aspects, pollution control, natural resources and the interactions of human beings and nature. By developing systematic programs for the orderly and unified arrangement of urban physical structures, students focus their accumulated knowledge and skills on specific urban problems. The undergraduate program, which has been accredited by the Planning Accreditation Board, is designed to prepare majors

to assume the responsibilities encountered in entry level professional planning practice.

Requirements for the Bachelor of Science Degree in Urban and Regional Planning

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Urban and Regional Planning.

The University's Tier II writing requirement for the Urban and Regional Planning major is met by completing Urban Planning 365. That course is referenced in item 3. a. below.

2. The College of Social Science requirements for the Bachelor of Science degree.

The Experiential Learning requirement for the College of Social Science is met by completion of UP 494 referenced in item 3. a. below.

The STEM requirement for the College of Social Science is met by completion of 6 credits from 3. c. and 6 credits from 3. d. below.

3. The following requirements for the major:

	CREDITS
a. All of the following courses with a minimum grade of 2.0 in each course (35 credits):	
UP 201 Introduction to Urban and Regional Planning	4
UP 314 Methods for Investigation of Urban Systems	4
UP 353 Land Use Planning	4
UP 365 Planning Law and Ethics (W)	4
UP 400 Special Topics in Urban Planning	3
UP 424 Geographic Information Systems and Design Tools for Planning	3
UP 433 Introduction to Environmental Planning	4
UP 454 Local Economic Planning	3
UP 494 Planning Practicum	6
b. Complete 12 credits of 300-level or above Urban and Regional Planning electives from a set of approved courses planned in consultation with the program advisor. These credits may not be used to fulfill requirement 3. d. below.	
c. Complete 6 credits from the following to satisfy the STEM requirement for the College of Social Science.	
ANP 206 Introduction to Physical Anthropology	3
CEM 141 General Chemistry	4
CMSE201 Computational Modeling and Data Analysis I	4
CMSE202 Computational Modeling and Data Analysis II	4
CSUS200 Introduction to Sustainability	3
CSE 102 Algorithmic Thinking and Programming	3
CSE 231 Introduction to Programming I	4
EGR 100 Introduction to Engineering Design	2
EGR 102 Introduction to Engineering Modeling	2
ENT 205 Pests, Society and Environment	3
EPI 390 Disease in Society: Introduction to Epidemiology and Public Health	4
GEO 203 Introduction to Meteorology	3
GEO 206 Physical Geography	3
GEO 302 Climates of the World	3
GLG 201 The Dynamic Earth	4
GLG 202 Geology of Michigan	3
HNF 150 Introduction to Human Nutrition	3
MTH 124 Survey of Calculus I	3
MTH 132 Calculus I	3
PHY 231 Introductory Physics I	3
PHY 251 Introductory Physics Laboratory I	1
STT 200 Statistical Methods	3
STT 201 Statistical Methods	4
d. Complete 6 credits from the following courses to satisfy the College of Social Science STEM requirement:	
PDC 403 Introduction to Domicology: Sustainable Built Environment	3
PDC 491 Special Topics in Planning, Design and Construction	1 to 4

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LINKED BACHELOR'S-MASTER'S DEGREE IN URBAN AND REGIONAL PLANNING

Bachelor of Science Degree in Urban and Regional Planning Master of Urban and Regional Planning Degree in Urban and Regional Planning

The department welcomes applications from Michigan State University undergraduate Urban and Regional Planning majors with at least 56 credits. Admission applications must be made prior to the final semester as an Urban and Regional Planning junior. Admission to the program requires a minimum undergraduate grade-point average of 3.50, a statement of goals for the master's degree, three letters of recommendation, and all academic transcripts. Admission to the Linked Bachelor's-Master's Program allows the application of up to 13 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 13, is applied toward the credit requirement of the master's degree. No 400-level courses with a grade lower than 3.0 will count toward the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

GRADUATE STUDY

The School of Planning, Design and Construction is administered jointly by the College of Agriculture and Natural Resources and the College of Social Science. The school offers a Master of Urban and Regional Planning degree program with a major in urban and regional planning, and a Master of International Planning Studies degree program with a major in international planning studies through the College of Social Science. Those programs are described below. The school also offers a Master of Arts degree program in Environmental Design; a Master of Science degree program in Construction Management, and a Doctor of Philosophy degree program in Planning, Design and Construction through the College of Agriculture and Natural Resources. For information about those programs, refer to the statement on the *School of Planning, Design and Construction* in the *College of Agriculture and Natural Resources* section of this catalog.

INTERNATIONAL PLANNING STUDIES

The Master of International Planning Studies (MIPS) is an online one-year (2 semesters and one summer) program that is designed for practitioners currently employed in urban and regional planning or related fields who desire additional knowledge in the field of community and regional development. Prospective students must have direct experience in the international aspects of planning or related fields that directly relate to their proposed area of concentration.

Admission

Applications for admission must hold an advanced degree or have significant experience in international planning, and seek knowledge about urban and regional conditions and related areas such as real estate, economic development, environmental protection and international planning. Applicants must demonstrate that the degree will strengthen their career credentials and make them more competitive in the applicant's chosen international planning profession. Prospective students are assumed to have a basic knowledge of planning concepts.

Requirements for the Master of International Planning Studies Degree

The program is available only online under Plan B (without thesis). The student must complete at least 30 credits as specified below.

	CREDITS
The student must:	
1. Complete the following core courses (11 credits):	
UP 801 Concepts and Issues in Planning and Development	4
UP 844 Planning Theory and Ethics	3
UP 894 Planning Practicum	4
2. Complete one of the following courses (4 credits):	
UP 890 Independent Study	4
UP 893 Internship in Urban Planning	4
3. Complete a minimum of 15 elective credits approved by the student's academic advisor.	
4. Complete a final evaluation.	

URBAN AND REGIONAL PLANNING

Master in Urban and Regional Planning

The graduate program leading to a degree of Master in Urban and Regional Planning (MURP) is committed to preparing students for professional planning careers in both the private and public sectors and seeks to develop both general planning knowledge and specific skills for practice. The program provides students with an advanced understanding of environment-, economy- and society-related planning issues using scientific, social scientific or humanistic approaches. Current faculty research and teaching expertise covers a wide range of planning subjects including urban design; land use planning; land use law; housing; community, economic and real estate development; natural resources; research methods; international development; transportation; technology; environmental planning; and public policy. The MURP degree is a nationally accredited degree and admits students with a variety of academic backgrounds. Ideal students are those with strong intellectual ability; good written and verbal communication skills; basic statistical methods and have demonstrated a proven potential for leadership in the field of urban and regional planning.

A student entering the graduate program in urban and regional planning is expected to concentrate, under faculty guidance, on studies that provide an optimum learning experience in applying the various scientific principles, theories, techniques, and design skills of planning to specific field problems. The graduate student is immersed in significant planning studies and research. The graduate program is designed to provide professional competence. After

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graduation, the student should be capable of assuming responsibilities on an intermediate level of a professional planning operation. The master's program in Urban and Regional Planning has been accredited by the Planning Accreditation Board.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

To be admitted to the master's degree program, the applicant must have a bachelor's degree from a recognized institution; a cumulative undergraduate grade-point average of 3.0; a grade-point average below 3.0 may be supplemented with a Graduate Record Examination (GRE) score of 1000 in verbal and quantitative, and an analytical writing score of 3.5. Students who are required to take the Test of English as a Foreign Language (TOEFL) must submit scores.

Requirements for the Master in Urban and Regional Planning Degree in Urban and Regional Planning

The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete at least 43 credits and meet the requirements specified below:

Requirements for Both Plan A and Plan B:

	CREDITS
1. Urban planning core courses (28 credits):	
UP 801 Concepts and Issues in Planning and Development	4
UP 814 Applied Research Methods for Planning and Development	4
UP 823 Urban Land Management and the Environment	3
UP 824 Geographic Information Systems and Design Tools for Planning	3
UP 844 Planning Theory and Ethics	3
UP 854 Economics of Planning and Development	4
UP 865 Planning and Development Law	3
UP 894 Planning Practicum	4
2. Complete 9 credits of approved elective courses chosen from a list of electives in consultation with the student's academic advisor.	

Additional Requirements for Plan A:

Students will complete the following two courses in a two-step process by enrolling in 2 credits of UP 889 Master's Research with their major faculty advisor who will chair their research before they can enroll in 4 credits of UP 899 Master's Thesis Research or additional elective course work usually in their second year. A maximum of 6 credits combined can be taken in UP 889 and UP 899.

Additional Requirements for Plan B:

1. Six additional credits in two courses approved by the student's academic advisor.
2. Pass a final evaluation.

Academic Standards

Academic standards for graduation require that each student maintain an average of 3.00, or better, in all course work, including study undertaken in collateral courses; however, the accumulation of grades below 3.0 in more than two courses of 3 or more credits each removes the student from the degree program.

Transfer Credits

A maximum of 11 transfer credits at the 400 or 800-level may be accepted toward the Master in Urban and Regional Planning degree.

Time Limit

The time limit for completing the degree is six years from the first semester of enrollment in the program.

DEPARTMENT of POLITICAL SCIENCE

Corwin Smidt, Chairperson

As a science, political science is concerned with theories, research methods, and facts as they relate to understanding political processes and phenomena. In particular, political science studies the distribution of power in groups, parties, institutions, governments, and international organizations. As a field of study, political science asks who has power, how did they get it, and why the exercise of power benefits some more than others. On both the American and international stages, political science prepares students to confront vital issues, raise critical perspectives, and explore new methodologies in the study of the fundamental concepts of power and change.

UNDERGRADUATE PROGRAMS

The undergraduate majors in political science are designed to provide students with a broad education in political and other social sciences with the analytical skills essential in many professions. The wide range of career opportunities open to political science graduates includes administrative positions in local, state, and federal government, or in public and private agencies; work with citizen's action groups and voluntary organizations; employment in the foreign service and various governmental and private international agencies; and careers as teachers and policy analysts. Because additional training beyond the bachelor's degree is necessary for some careers, many students in political science plan to attend law or graduate school. Qualified undergraduate political science majors who want to pursue professional careers in policy analysis, program management or policy advocacy, can complete both their bachelor's and master's degrees in a total of five years through the Linked Bachelor's-Master's Degree in Public Policy.

Students in the Department of Political Science may select one of the following majors:

1. Political Science (General)
2. Political Science—Prelaw
3. Public Policy
4. World Politics

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POLITICAL SCIENCE (GENERAL)

Requirements for the Bachelor of Arts Degree in Political Science (General)

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Political Science (General).

The University's Tier II writing requirement for the Political Science (General) major is met by completing Political Science 422. That course is referenced in item 3. a. (4) below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major:

	CREDITS
a. The following courses in the Department of Political Science: (34 credits)	
(1) Two of the following courses (6 credits):	
PLS 100 Introduction to American Politics	3
PLS 140 Introduction to Comparative Politics	3
PLS 160 Introduction to International Relations	3
PLS 170 Introduction to Political Philosophy	3
(2) All of the following courses (12 credits):	
PLS 200 Introduction to Political Science	4
PLS 201 Introduction to Methods of Political Analysis	4
PLS 392 Special Topics in Political Science	4
(3) At least four additional political science courses at the 300–400 level to total at least 12 credits. Only one of the following courses may be counted toward this requirement:	
PLS 494 Field Experience in Political Science	
or	
PLS 495 Independent Study	
(4) The following course (4 credits):	
PLS 422 Seminar in Political Science (W)	4

NOTE: Of the courses taken to satisfy the requirements for 3.a. (1) and 3. a. (3), at least two courses must be in American politics (PLS 100 and PLS 301-339), at least two courses must be in comparative/international politics (PLS 140, PLS 160, PLS 342-359, and PLS 361-369), and at least two courses must be in political philosophy (PLS 170 and PLS 370-379). Students should consult with their academic advisor with questions concerning this requirement.

POLITICAL SCIENCE—PRELAW

The prelaw major is designed to introduce students to the study of law and the judicial process and at the same time to provide an orientation to the law which is more general than that of most law schools. Students who elect this program may plan careers in (1) government and large businesses, (2) law firms, (3) individual or partnership practice of civil law, (4) trial practice, including criminal law, and (5) teaching. Since very few law schools provide information about the political, economic, societal and psychological environment in which the law exists, this background must generally be acquired prior to or after law school. The prelaw major is intended to give students the analytical skills and substantive background in those courses which will most likely contribute to their development.

Requirements for the Bachelor of Arts Degree in Political Science—Prelaw

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Political Science—Prelaw.

The University's Tier II writing requirement for the Political Science—Prelaw major is met by completing the following course: Political Science 422. That course is referenced in item 3.a.(5) below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major:

	CREDITS
a. The following courses in the Department of Political Science (34 credits):	
(1) All of the following courses (15 credits):	
PLS 100 Introduction to American Politics	3
PLS 200 Introduction to Political Science	4
PLS 201 Introduction to Methods of Political Analysis	4
PLS 392 Special Topics in Political Science	4
(2) One of the following courses (3 credits):	
PLS 140 Introduction to Comparative Politics	3
PLS 160 Introduction to International Relations	3
PLS 170 Introduction to Political Philosophy	3
(3) One of the following courses (3 credits):	
PLS 320 Judicial Politics	3
PLS 321 Constitutional Law	3
(4) At least three additional political science courses at the 300–400 level to total at least 9 credits. Only one of the following courses may be counted toward this requirement:	
PLS 494 Field Experience in Political Science	
or	
PLS 495 Independent Study	
(5) The following course (4 credits):	
PLS 422 Seminar in Political Science (W)	4

NOTE: Of the courses taken to satisfy the requirements for 3. a. (2) and 3. a. (4), at least two courses must be in comparative/international politics (PLS 140, PLS 160, PLS 342-359, and PLS 361-369), and at least two courses must be in political philosophy (PLS 170 and PLS 370-379). One of the comparative/international politics courses may be a course from an approved list of courses, offered outside the Department of Political Science. The approved list of comparative/international politics courses is available in the Department of Political Science. Students should consult with their academic advisor with questions concerning this requirement.

PUBLIC POLICY

The Public Policy major is designed to prepare students for careers in public service, advocacy, and analysis. It aims at a broad understanding of the goals and problems of public policy, the political process that leads to policy development, and the implementation and evaluation of public policy. The major is valuable preparation for those who intend to engage in research for public agencies, non-profits, or voluntary associations interested in the problems of government. A master's degree program concentrating in public policy is also available for advanced work in preparation for an executive career in these fields.

Requirements for the Bachelor of Arts Degree in Public Policy

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Public Policy.

The University's Tier II writing requirement for the Public Policy major is met by completing Political Science 422. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following requirements for the major:

	CREDITS
a. All of the following courses in the Department of Political Science (34 credits):	
(1) All of the following courses (18 credits):	
PLS 100 Introduction to American Politics	3
PLS 200 Introduction to Political Science	4
PLS 201 Introduction to Methods of Political Analysis	4

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	PLS 392 Special Topics in Political Science	4
	PLS 494 Field Experience in Political Science	3
(2)	One of the following courses (3 credits):	
	PLS 310 Public Administration and Policy Making	3
	PLS 313 American Public Policy	3
(3)	Three of the following courses (9 credits):	
	PLS 301 American State Government	3
	PLS 302 Urban Politics	3
	PLS 310 Public Administration and Policy Making	3
	PLS 313 American Public Policy	3
	PLS 324 Congress	3
	PLS 325 The Presidency	3
	PLS 331 Political Parties and Interest Groups	3
	PLS 342 Comparative Political Economy	3
	PLS 362 American Foreign Policy and National Security	3
	PLS 363 International and Domestic Political Conflict	3
	PLS 364 Politics of the United Nations and International Organizations	3
(4)	The following course (4 credits):	
	PLS 422 Seminar in Political Science (W)	4

WORLD POLITICS

The Bachelor of Arts degree in World Politics is designed to educate students about governments and political systems of many different nations and the interactions among them. It will prepare students for careers in international affairs in the public, private, and non-profit spheres. The major allows students to study the regions of the world that most interest them but also provides broad coverage of international relations and comparative politics.

Requirements for the Bachelor of Arts Degree in World Politics

- The University requirements for bachelor's degrees as described in the Undergraduate *Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in World Politics.
The University's Tier II writing requirement for the World Politics major is met by completing Political Science 422. That course is referenced in item 3. below.
- The requirements of the College of Social Science for the Bachelor of Arts degree.
- The following requirements for the major.

CREDITS

- All of the following courses in the Department of Political Science (34 credits):
 - All of the following courses (18 credits):

PLS 140 Introduction to Comparative Politics	3
PLS 160 Introduction to International Relations	3
PLS 200 Introduction to Political Science	4
PLS 201 Introduction to Methods of Political Analysis	4
PLS 392 Special Topics in Political Science	4
 - Four of the following courses (12 credits):

PLS 342 Comparative Political Economy	3
PLS 344 Politics of Developing Areas	3
PLS 345 Religion and World Politics	3
PLS 346 Middle East Politics	3
PLS 347 Democratic Regimes	3
PLS 351 African Politics	3
PLS 352 Latin American Politics	3
PLS 354 Politics of Asia	3
PLS 356 Politics of Europe and the European Union	3
PLS 357 Politics of English Speaking Democracies	3
PLS 358 Politics of the U.S.S.R. and Its Successor States	3
PLS 362 American Foreign Policy and National Security	3
PLS 363 International and Domestic Political Conflict	3
PLS 364 Politics of the United Nations and International Organizations	3
- The following course (4 credits):

PLS 422 Seminar in Political Science (W) 4

TEACHER CERTIFICATION OPTIONS

A political science disciplinary minor is available for teacher certification and is available only to students pursuing a major in Comparative Cultures and Politics, International Relations, Political Theory and Constitutional Democracy, Social Relations and Policy, Interdisciplinary Studies in Social Science, Interdisciplinary Studies in Social Science: Social Science Education, or History with a teacher certification option.

Students who elect the political science disciplinary minor must contact the Department of Political Science.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts or Bachelor of Science Degree in Economics Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Economics undergraduate students during the fall semester of their junior year in order to begin the program during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts Degree in Political Science (General) Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Political Science (General) undergraduate students during the fall semester of their junior year in order to begin the program during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution.

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The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts Degree in Political Science-Prelaw Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Political Science-Prelaw undergraduate students during the fall semester of their junior year in order to begin the program during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts Degree in Public Policy Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Public Policy undergraduate students during the fall semester of their junior year in order to begin the program during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

LINKED BACHELOR'S-MASTER'S DEGREE IN PUBLIC POLICY

Bachelor of Arts Degree in World Politics Master of Public Policy Degree in Public Policy

The department welcomes applications from Michigan State University Public Policy undergraduate students during the fall semester of their junior year in order to begin the program

during the fall semester of their senior year. Admission to the program requires a minimum undergraduate grade-point average of 3.50 and an approved program of study for the Master of Public Policy degree in Public Policy at the time of admission. Admission to the Linked Bachelor's-Master's Program allows the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

GRADUATE STUDY

The Department of Political Science offers a Master of Arts and a Doctor of Philosophy degree program in Political Science and a Master of Public Policy degree program in Public Policy.

The graduate degree programs in the Department of Political Science are designed to help students become thoroughly grounded in the knowledge base and research methods of political science. Training is given in the following major fields of political science: American politics, comparative politics, international politics, public policy, political thought, formal theory, and research methodology.

The Department of Political Science and the Department of Economics jointly offer a Master of Public Policy Degree, as well as Linked Bachelor's-Master's Degree in Public Policy. The Master of Public Policy Degree and the Linked Bachelor's-Master's Degree in Public Policy provide students with the requisite skills to address complex societal problems, reconcile conflicting political and ethical values in policymaking, make informed decisions about program activities, and provide effective leadership in policy development and implementation.

In addition to meeting the requirements of the university and of the College of Social Science, graduate students must meet the requirements specified below.

Admission

A bachelor's degree from an accredited educational institution is required for admission. Applicants should have the equivalent of an undergraduate major in political science, in a related social science, or in mathematics, statistics, or computer science. Some background in social science research methods, statistics, and/or basic mathematical operations is recommended. Normally, a minimum grade-point average of 3.20 in the last two years of undergraduate work is required for admission.

Applicants must take the Graduate Record Examination (GRE) General Test. Official results from this examination should be sent to the Department of Political Science.

Admission to the doctoral program is limited to fall semester only. For the Master of Public Policy program, most students are admitted for fall semester; applications for the spring semester will be considered on the basis of available openings. Applications for admission and financial aid should

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be submitted by March 1. Applications for admission alone will be accepted until approximately May 15.

Academic Standards

Graduate students must maintain a cumulative grade–point average of at least 3.00. Only those courses completed with a grade of 2.5 or higher may be counted toward the requirements for the master's or doctoral degree. A student who received two grades of 2.5 or below, or one grade of 2.0 or below, may be withdrawn from the program. A student who received three grades of 2.5 or below, or two grades of 2.0 or below, will be withdrawn from the program.

POLITICAL SCIENCE

Master of Arts

The Master of Arts program is designed to prepare students for doctoral studies. Those accepted are judged by the committee on admissions as qualified to enter the doctoral program, and it is anticipated they plan to complete this program at Michigan State University.

In addition to meeting the requirements of the university, of the College of Social Science, and of the Department of Political Science, students must meet the requirements specified below.

Requirements for the Master of Arts Degree in Political Science

The program is available only under Plan B (without thesis). The student must meet the requirements specified below:

CREDITS

1. Complete at least 30 credits distributed as follows:
 - a. At least 24 credits in Political Science courses at the 800–900 level including Political Science 800, 801, and 802
 - b. No more than 6 credits in courses at the 400–900 level in related disciplines.
2. Submit two substantial research papers acceptable to the department. These papers normally will be written in graduate seminars in Political Science and will be evaluated by the instructor(s) of the courses.

With the written approval of the department, a student may complete fewer than 24 credits in Political Science courses and more than 6 credits in courses in related disciplines.

Academic Standards

The student must maintain an overall grade–point average of 3.00 or higher.

Transfer Credits

For Law College students who have been admitted to the dual J.D.-M.A. program with Michigan State University - College of Law, a maximum of 12 credits from Michigan State University - College of Law may be transferred to the M.A. program with

a major in political science. A grade of 2.0 in a Law course will transfer to MSU as a passing grade. Students will be assessed at the Law College tuition rate with a graduate assistantship covering only the MSU cost of in-state tuition.

PUBLIC POLICY

The Master of Public Policy degree in Public Policy is designed to provide students with theoretical knowledge and specific skills essential for professional achievement in the public and non-profit sectors. The objective of this program is to develop an analytical approach to the public decision-making process through the systematic study of policy and policy analysis. Current professionals in the field of public policy or others who are interested in a career in public policy in the non-profit sector or in government will find this program appealing.

In addition to meeting the requirements of the university, the College of Social Science, and the Department of Political Science, students must meet the requirements specified below.

Requirements for the Master of Public Policy Degree in Public Policy

The program is available only under Plan B (without thesis). The student must complete 39 credits in courses approved by the director of the Master in Public Policy program and distributed as follows:

CREDITS

1. Complete all of the following courses:

PPL 801	Quantitative Methods in Public Policy	3
PPL 802	Quantitative Methods in Public Policy II	3
PPL 805	Microeconomic Theory	3
PPL 806	Policy Evaluation	3
PPL 807	Public Policy	3
PPL 808	Policy Development and Administration	3
PPL 813	Public Finance	3
PPL 890	Policy Workshop	3
PPL 891	Issues in Public Policy	6
2. Complete an additional 9 credits of course work at the 800-level or above as approved by the director of the program.
3. Students with no professional experience will be required to complete 3 credits of Public Policy 894 Field Experience Practicum.
4. Successful completion of a final examination or evaluation.

Doctor of Philosophy

The doctoral degree is generally undertaken by students wishing to teach political science and government at the college level and by those seeking professional careers in political and social research. Special attention is given at the doctoral level to intensive training in political research.

In addition to meeting the requirements of the university, of the College of Social Science, and of the Department of Political Science, students must meet the requirements specified below.

Requirements for the Doctor of Philosophy Degree in Political Science

The doctoral student must:

CREDITS

1. Earn at least 45 credits in political science courses including:
 - a. All of the following courses (9 credits):

PLS 800	Proseminar: Political Theory and Research Methods	3
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3

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- PLS 801 Quantitative Techniques in Public Policy and Political Science I 3
- PLS 802 Quantitative Techniques in Public Policy and Political Science II 3
- b. At least four courses in a major field, approved by the student's guidance committee, selected from one of the following political science fields: American politics, comparative politics, international relations, public policy, or political philosophy.
- c. At least three courses in a minor field, approved by the student's guidance committee, selected from one of the following political science fields: American politics, comparative politics, international relations, political philosophy, public policy, or research methodology.
2. Pass a comprehensive examination in both the major and minor field. Complete a paper, or course work as determined by the Graduate Studies Committee and the student's guidance committee.
3. Successfully write and defend a doctoral dissertation in a public oral examination.
- Additional requirements and evaluations are described in the Ph.D. Handbook on the department's Web site at www.pls.msu.edu.

Academic Standards

Academic standards for the Doctor of Philosophy degree program are described in the Ph.D. Handbook on the department's Web site at www.pls.msu.edu.

DEPARTMENT of PSYCHOLOGY

Brent Donnellan, Chairperson

Psychology is a science concerned with thoughts, feelings, and behaviors. Psychologists study many topics including: how people perceive the world with their five senses; how people learn (and forget); how people relate to each other; how people develop their personalities; how people interpret and respond to social conditions; how organizations function; how to classify and understand the origins of psychopathology; how to intervene and treat psychological problems; how communities support health and well-being; and how non-human animal models can be used to understand human behavior.

The undergraduate program emphasizes the scientific method and logical reasoning as well as theories and empirical findings in the different subareas of the discipline. Students are advised to obtain preparation in supporting fields such as mathematics, statistics, and philosophy of science. A strong foundation in other biological and social sciences as well as the arts and humanities is also recommended. Students who plan a career in psychology as a specialty will likely find graduate education a necessity. Beyond foundational training for a career in psychology, the undergraduate degree provides broad training for those interested in careers in business, education, law, medicine, and social services.

Graduate program descriptions are available from the departmental Web site at: www.psychology.msu.edu.

UNDERGRADUATE PROGRAMS

Requirements for the Bachelor of Arts Degree in Psychology

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Psychology.

The University's Tier II writing requirement for the Psychology major is met by completing one of the following courses: Psychology 401, 409, 410, 411, 413, 424, 440, 444, 455, or 493. Those courses are referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

CREDITS

3. The following required major courses with a minimum grade-point average of 2.00 (31 or 32 credits):
- All of the following courses:

PSY 101	Introductory Psychology	4
PSY 295	Data Analysis in Psychological Research	3
PSY 395	Research Design and Measurement in Psychological Research	3
 - One of the following courses:

PSY 200	Cognitive Psychology	3
PSY 209	Brain and Behavior	3
 - Two of the following courses:

PSY 235	Social Psychology	3
PSY 236	Personality	3
PSY 238	Developmental Psychology: Lifespan	3
PSY 244	Developmental Psychology: Infancy Through Childhood	3
PSY 255	Industrial and Organizational Psychology	3
PSY 270	Community Psychology	3
PSY 280	Abnormal Psychology	3
 - One of the following courses:

PSY 401	Expertise and Skill (W)	3
PSY 409	Psychobiology of Behavioral Development (W)	3
PSY 410	Neuroscience of Learning and Memory (W)	3
PSY 411	Hormones and Behavior (W)	3
PSY 413	Laboratory in Behavioral Neuroscience (W)	4
PSY 424	Child and Family Psychopathology (W)	3
PSY 444	Developmental Psychology: Adolescence through Youth (W)	3
PSY 455	Advanced Topics in Organizational Psychology (W)	3
PSY 493	Issues in Psychology (W)	3
 - Electives in Psychology 9
4. Complete the following mathematics requirement, which will satisfy the university mathematics requirement and departmental requirement:
- One of the following courses or placement waiver:

MTH 103	College Algebra	3
MTH 103B	College Algebra II	3
 - One of the following courses:

LB 118	Calculus I	4
MTH 101	Quantitative Literacy I	3
MTH 102	Quantitative Literacy II	3
MTH 114	Trigonometry	3
MTH 116	College Algebra and Trigonometry	5
MTH 124	Survey of Calculus I	3
MTH 132	Calculus I	3
MTH 152H	Honors Calculus I	3
STT 200	Statistical Methods	3
STT 201	Statistical Methods	4

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Requirements for the Bachelor of Science Degree in Psychology

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Psychology.

Students who are enrolled in the Psychology major leading to the Bachelor of Science degree in the Department of Psychology may complete an alternative track to Integrative Studies in Biological and Physical Sciences that totals 8 credits and consists of the following courses: (a) one course in Biological Science; (b) one course in Chemistry or one course in Physics (numbered 183 or higher); and (c) laboratory experience in biological or physical science totaling 2 credits.

The University's Tier II writing requirement for the Psychology major is met by completing one of the following courses: Psychology 401, 409, 410, 411, 413, 424, 440, 455, or 493. Those courses are referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

CREDITS

3. The following required major courses with a minimum grade-point average of 2.00 (31 or 32 credits):

a. All of the following courses:

PSY 101	Introductory Psychology	4
PSY 295	Data Analysis in Psychological Research	3
PSY 395	Research Design and Measurement in Psychological Research	3

b. One of the following courses:

PSY 200	Cognitive Psychology	3
PSY 209	Brain and Behavior	3

c. Two of the following courses:

PSY 235	Social Psychology	3
PSY 236	Personality	3
PSY 238	Developmental Psychology: Lifespan	3
PSY 244	Developmental Psychology: Infancy Through Childhood	3

PSY 255	Industrial and Organizational Psychology	3
PSY 270	Community Psychology	3
PSY 280	Abnormal Psychology	3

d. One of the following courses:

PSY 401	Expertise and Skill (W)	3
PSY 409	Psychobiology of Behavioral Development (W)	3
PSY 410	Neuroscience of Learning and Memory (W)	3
PSY 411	Hormones and Behavior (W)	3
PSY 413	Laboratory in Behavioral Neuroscience (W)	4
PSY 424	Child and Family Psychopathology (W)	3
PSY 444	Developmental Psychology, Adolescence through Youth (W)	3
PSY 455	Advanced Topics in Organizational Psychology (W)	3
PSY 493	Issues in Psychology (W)	3

e. Electives in Psychology

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4. Complete the following mathematics requirement, which will satisfy the university mathematics requirement or the departmental STEM requirement, but not both:

a. One of the following courses or placement waiver:

MTH 103	College Algebra	3
MTH 103B	College Algebra II	3
MTH 116	College Algebra and Trigonometry	5

b. One of the following courses:

LB 118	Calculus I	4
MTH 124	Survey of Calculus I	3
MTH 132	Calculus I	3
MTH 152H	Honors Calculus I	3

5. Complete the following NATURAL SCIENCE requirement. These courses may satisfy the university alternative track science requirement or the departmental STEM requirement, but not both.

a. One of the following courses:

BS 161	Cell and Molecular Biology	3
BS 181H	Honors Cell and Molecular Biology	3
LB 144	Biology I: Organismal Biology	3

b. One of the following courses:

CEM 141	General Chemistry	4
CEM 151	General and Descriptive Chemistry	4
CEM 181H	Honors Chemistry I	4
LB 171	Principles of Chemistry I	4

6. Other Required Courses (15 credits):

Complete 15 credits in Science, Technology, Engineering, and Mathematics (STEM) courses from the following list of courses: Fulfillment of this requirement also meets the College of Social Science STEM Graduation Requirement for Bachelor of Science Degree.

ANTR350	Human Gross Anatomy for Pre-Health Professionals	3
ANTR 355	Human Gross Anatomy Laboratory	1
BLD 204	Mechanisms of Disease	3
BMB 200	Introduction to Biochemistry	4
BS 161	Cell and Molecular Biology	3
BS 162	Organismal and Population Biology	3
BS 171	Cell and Molecular Biology Laboratory	2
BS 172	Organismal and Population Biology Laboratory	2
BS 181H	Honors Cell and Molecular Biology	3
BS 182H	Honors Organismal and Population Biology	3
BS 191H	Honors Cell and Molecular Biology Laboratory	2
BS 192H	Honors Organismal and Population Biology Laboratory	2
CEM 141	General Chemistry	4
CEM 142	General and Inorganic Chemistry	3
CEM 143	Survey of Organic Chemistry	3
CEM 151	General and Descriptive Chemistry	4
CEM 152	Principles of Chemistry	3
CEM 161	Chemistry Laboratory I	1
CEM 162	Chemistry Laboratory II	1
CEM 181H	Honors Chemistry I	4
CEM 182H	Honors Chemistry II	4
CEM 185H	Honors Chemistry Laboratory I	2
CEM 251	Organic Chemistry I	3
CEM 252	Organic Chemistry II	3
CEM 255	Organic Chemistry Laboratory	2
CMSE201	Computational Modeling and Data Analysis I	4
CMSE202	Computational Modeling and Data Analysis II	4
CSD 213	Anatomy and Physiology of the Speech and Hearing Mechanisms	3
CSE 102	Algorithmic Thinking and Programming	3
CSE 231	Introduction to Programming I	3
CSE 232	Introduction to Programming II	3
EPI 390	Disease in Society: Introduction to Epidemiology and Public Health	4
HNF 150	Introduction to Human Nutrition	3
HNF 310	Nutrition in Medicine for Pre-Health Professionals	3
HNF 385	Public Health Nutrition	3
IBIO 150	Integrating Biology: From DNA to Populations	3
IBIO 313	Animal Behavior	3
IBIO 320	Developmental Biology	4
IBIO 328	Comparative Anatomy and Biology of Vertebrates	4
IBIO 341	Fundamental Genetics	4
IBIO 365	Biology of Mammals	4
KIN 216	Applied Human Anatomy	3
KIN 217	Applied Human Anatomy Laboratory	1
KIN 330	Biomechanics of Physical Activity	3
LB 117	Functions and Trigonometry	4
LB 118	Calculus I	4
LB 119	Calculus II	4
LB 144	Biology 1: Organismal Biology	4
LB 145	Biology II: Cellular and Molecular Biology	5
LB 155	Introduction to Quantitative Science and Research	3
LB 171	Principles of Chemistry I	4
LB 171L	Introductory Chemistry Laboratory I	1
LB 172	Principles of Chemistry II	3
LB 172L	Principles of Chemistry II – Reactivity Laboratory	1
LB 270	Medical Terminology	2
MTH 114	Trigonometry	3
MTH 116	College Algebra and Trigonometry	5
MTH 124	Survey of Calculus I	3
MTH 126	Survey of Calculus II	3
MTH 132	Calculus I	3
MTH 133	Calculus II	4
MTH 152H	Honors Calculus I	3
MTH 153H	Honors Calculus II	4
MTH 234	Multivariable Calculus	4
MMG 141	Introductory Human Genetics	3
MMG 201	Fundamentals of Microbiology	3
MMG 301	Introductory Microbiology	3
MMG 302	Introductory Laboratory for General and Allied Health Microbiology	1
NEU 300	Neurobiology	3

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NEU 301	Introduction to Neuroscience I	3
NEU 302	Introduction to Neuroscience II	3
PHM 211	Pharmacology and Toxicology in Society	2
PHM 350	Introduction to Human Pharmacology	3
PSL 250	Introductory Physiology	4
PSL 310	Physiology for Pre-Health Professionals	4
STT 180	Introduction to Data Science	4
STT 200	Statistical Methods	3
STT 201	Statistical Methods	4
STT 231	Statistics for Scientists	3
STT 421	Statistics I	3
STT 422	Statistics II	3

TEACHER CERTIFICATION OPTIONS

A psychology disciplinary minor is available for teacher certification.

Students who elect the psychology disciplinary minor must contact the Department of Psychology.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

GRADUATE STUDY

The primary objective of doctoral programs in the Department of Psychology is to develop psychologists who are creative scholars. At the same time, students must develop the basic skills of their particular specialty and be well prepared for the job market through carefully supervised experience in research, teaching, and consulting. Relevant training experiences are available in agencies such as industries, clinics, hospitals, schools, and government offices as relevant to students in their specialized graduate training programs. Graduate programs include: behavioral neuroscience, cognition and cognitive neuroscience, clinical, ecological/community, organizational, and social/personality psychology. Students in these programs may participate in advanced graduate training through a concentration in Quantitative Methodology and Evaluation Science (QMES).

A fully online master's program and graduate certificate in Program Evaluation are available. Students learn to use research methods and other tools to determine if programs and policies are working to address important social issues and how they can be improved. The program emphasizes professional development in contemporary models and standards of evaluation practice; quantitative, qualitative, and mixed-method design and analysis for the evaluation context; leading-edge communication and reporting strategies; and evaluation contracting and project management. See <http://progeval.msu.edu>.

Students who are enrolled in master's or doctoral degree programs in the Department of Psychology may elect an Interdepartmental Specialization in Cognitive Science. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Cognitive Science*. For additional information, contact the Department of Psychology.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Psychology may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on

Interdepartmental Graduate Specializations in Infancy and Early Childhood.

PSYCHOLOGY

Master of Arts and Doctor of Philosophy

Students are accepted for graduate study in psychology only if judged by a departmental committee to be qualified to complete a doctoral degree, and programs of study are planned with this goal in mind; the master's sequence is generally developed as an integral part of the doctoral program with special attention given to the plans and needs of each student. Additional details are given under the doctoral program as outlined below. There is no terminal master's program.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission

Factors given major consideration for admission to the graduate program at the first-year level include (1) an approved bachelor's degree from a recognized college or university, (2) a junior-senior undergraduate grade-point average of 3.20 or better in academic studies, (3) undergraduate courses in experimental psychology and statistics, (4) satisfactory scores on the Graduate Record Examination General Test, (5) favorable evaluations of the applicant by three referees, preferably instructors in the applicants undergraduate major; and (6) approval by a departmental committee. That an applicant has achieved the above is not sufficient for admission. The number of applicants with superior qualifications exceeds the number of students that can be accommodated.

The department is especially interested in quality students and generally accepts them regardless of their undergraduate majors provided that they have adequate background for graduate study in psychology. Students meeting only the requirements for admission to provisional status are not generally accepted.

Completed applications must be received by December 1 for consideration for the subsequent fall semester.

Requirements for the Master of Arts Degree in Psychology

To meet individual needs, every student has a guidance committee with the student's advisor as chairperson. The committee develops a program of studies in consultation with the student. The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete a total of 30 credits as follows:

CREDITS

Requirements for Both Plan A and Plan B

1. Complete the following course (3 credits):
PSY 815 Quantitative Research Design and Analysis
in Psychology 3
2. Complete course work appropriate for the student's subdiscipline as determined and approved by the student's guidance committee.
3. Complete additional elective credits approved by the student's guidance committee.

COLLEGE OF SOCIAL SCIENCE

Additional Requirements for Plan A

1. Complete 4 credits of PSY 899 Master's Thesis Research.
2. Preparation of an approved thesis proposal.
3. Successful oral defense of the thesis.

Additional Requirements for Plan B

1. Complete 4 credits of PSY 890 Special Problems in Psychology.
2. Pass a final evaluation with a guidance committee of at least three faculty and the chairperson of the Department of Psychology. At least two of the three must be faculty members in the Department of Psychology.

There is no general language requirement. Where acquaintance with a foreign language is necessary for advancing the special interest of a particular student, the guidance committee may impose foreign language requirements.

Psychology graduate students may participate in advanced graduate training through a concentration in Quantitative Methodology and Evaluation Science (QMES). Students selecting this concentration must complete two prerequisite courses, three advanced training courses, and one student-developed project under the supervision of two members of the Quantitative Methodology and Evaluation Science faculty.

Requirements for Doctor of Philosophy Degree in Psychology

To meet individual needs, every student has a guidance committee with the student's advisor as chairperson. The committee develops a program of studies in consultation with the student. Students who are accepted into the doctoral program will fulfill the following program requirements for the degree:

CREDITS

1. Complete the following course (3 credits):
PSY 815 Quantitative Research Design and Analysis in Psychology 3
2. Complete additional course work required by the student's guidance committee.
3. Successful completion of the comprehensive examination.
4. Successful completion and defense of a dissertation.
5. Completion of 24 credits PSY 999 Doctoral Dissertation Research.

There is no general language requirement. Where acquaintance with a foreign language is necessary for advancing the special interest of a particular student, the guidance committee may impose foreign language requirements.

Psychology graduate students may participate in advanced graduate training through a concentration in Quantitative Methodology and Evaluation Science (QMES). Students selecting this concentration must complete two prerequisite courses, three advanced training courses, and one student-developed project under the supervision of two members of the Quantitative Methodology and Evaluation Science faculty.

Transfer Credits

For Law College students who have been admitted to the dual J.D. - M.A. program with Michigan State University - College of Law, a maximum of 9 credits from Michigan State University - College of Law may be transferred to the M.A. program with a major in psychology. A grade of 2.0 in a Law course will transfer to MSU as a passing grade. Students will be assessed at the Law College tuition rate with a graduate assistantship covering only the MSU cost of in-state tuition.

PROGRAM EVALUATION

Graduate Certificate

The Graduate Certificate in Program Evaluation prepares students for evaluation careers in diverse settings including government, education, social services, and evaluation consulting firms. It emphasizes professional development in history, theory, and standards of evaluation practice, evaluation methods, and evaluation practice skills.

Admission

To be admitted to the Graduate Certificate in Program Evaluation, applicants must have:

1. a bachelor's degree from a recognized educational institution.
2. an academic record equivalent to at least 3.00 (B) in undergraduate course work in their junior and senior year. This requirement is waived for students currently pursuing a master's or doctoral degree program at MSU.
3. submitted three letters of recommendation and a personal statement about their academic and professional goals and experience.
4. submitted Test of English as a Foreign Language (TOEFL) scores if they are an international applicant.

Admission to the program is selective and meeting the minimum standards does not guarantee admission. The applicant's overall record is considered, including the student's personal statement, recommendations, academic transcripts, and other documentation as required.

Students currently pursuing a graduate degree at MSU should submit a letter from their program advisor or chairperson indicating that the student is in good standing and they agree the certificate is an appropriate adjunct training opportunity. It is recommended that applicants have earned at least 12 undergraduate credits in a social science such as anthropology, sociology, or psychology.

Requirements for the Graduate Certificate in Program Evaluation

The Graduate Certificate in Program Evaluation is available only online. A total of 12 credits are required for the certificate.

CREDITS

1. The following course (3 credits):
PSY 880 Foundations of Evaluation Practice 3
2. One of the following courses (3 credits):
PSY 881 Evaluation Design 3
PSY 884 Qualitative and Mixed Method Evaluation Methods 3
3. Two of the following courses (6 credits):
PSY 881 Evaluation Design 3
PSY 882 Evaluation Data Collection Methods 3
PSY 883 Statistics for Evaluators I 3
PSY 884 Qualitative and Mixed Method Evaluation Methods 3
PSY 885 Communicating and Reporting 3
PSY 887 Statistics for Evaluators II 3
PSY 888 Evaluation Management 3
Courses used to fulfill requirement 1. above may not be used to fulfill this requirement.

Master of Arts

The Master of Arts degree in Program Evaluation prepares students for evaluation careers in diverse settings including government, education, social services, and evaluation consulting firms. It emphasizes professional development in history, theory, and standards of evaluation practice; evaluation methods; effective interpersonal and communication skills; and management of evaluation activities. Students will obtain direct practice experience under the supervision of program faculty.

COLLEGE OF SOCIAL SCIENCE

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Admission

To be admitted to the Master of Arts degree in Program Evaluation, applicants must have:

1. a bachelor's degree from a recognized educational institution.
2. an academic record equivalent to at least 3.00 (B) in undergraduate course work in their junior and senior year. This requirement is waived for applicants who have completed a graduate degree.
3. submitted three letters of recommendation and a personal statement about their academic and professional goals and experience.
4. submitted Test of English as a Foreign Language (TOEFL) scores if they are an international student.

It is recommended that applicants have earned at least 12 undergraduate credits in a social science such as anthropology, sociology, or psychology.

Admission to the program is selective and meeting the minimum standards does not guarantee admission. The applicant's overall record is considered, including the student's personal statement, recommendations, academic transcripts, and other documentation as required.

Requirements for the Master of Arts Degree in Program Evaluation

The Master of Arts degree in Program Evaluation is available only online and only under Plan B (non-thesis). A total of 37 credits are required for the degree.

- | | CREDITS |
|--|---------|
| 1. Students must complete 37 credits from the following courses: | |
| PSY 880 Foundations of Evaluation Practice | 3 |
| PSY 881 Evaluation Design | 3 |
| PSY 882 Evaluation Data Collection Methods | 3 |
| PSY 883 Statistics for Evaluators I | 3 |
| PSY 884 Qualitative and Mixed Method Evaluation Methods | 3 |
| PSY 885 Communicating and Reporting | 3 |
| PSY 886 Evaluation Practicum Preparation | 1 |
| PSY 887 Statistics for Evaluators II | 3 |
| PSY 888 Evaluation Management | 3 |
| PSY 889 Evaluation Practicum | 12 |
| 2. Completion of a final oral examination or evaluation. | |

SCHOOL of SOCIAL WORK

Anne Katrin Hughes, Director

Social work is a profession that focuses on helping vulnerable and oppressed people improve their lives. Social work uses a wide range of approaches toward this end, with the intent of improving both personal life circumstances as well as the broader institutions and social forces that affect these populations. Our field stresses the interaction between the person and the person's environment as we develop solutions. Social work is guided by a code of ethics that encompasses values fundamental to our practice, such as respect for

diversity, self-determination, empowerment, and focus on the most vulnerable members of society.

Our programs prepare students for social work practice in a wide range of settings, including at the individual, community, state, national, and international levels. Social workers engage populations experiencing diverse needs, such as in child welfare, aging, schools, health care, criminal justice, or poor communities. Experiential learning is critical to social work education; all students complete structured field placements in community-based and other service agencies that introduce students to real social work practice issues. These field placements comprise a significant portion of study at both the undergraduate and graduate levels.

UNDERGRADUATE PROGRAM

The Bachelor of Arts Degree in Social Work is accredited by the Council on Social Work Education. The primary educational goal of the program is to prepare students for beginning generalist social work practice. Students apply for admission to the social work major and primarily complete course work in their junior and senior years. Students also complete a field practicum in their senior year. For a detailed program description visit www.socialwork.msu.edu.

Admission as a Junior

The number of students who can be admitted as juniors to the bachelor's degree program in social work is limited. Applications are accepted and reviewed only during the spring semester of each year.

All persons who are interested in applying for admission as juniors to the bachelor's degree program in social work must request a special application form and detailed information regarding admission requirements and procedures from the School of Social Work Website at <http://www.socialwork.msu.edu/Programs/BASW>.

Students who are enrolled in colleges and universities other than Michigan State University should contact Michigan State University's Office of Admissions and the School of Social Work regarding admission to the bachelor's degree program in social work as transfer students.

To be considered for admission as a junior to the bachelor's degree program in social work, a student must have:

1. Submitted a completed application form by the deadline specified by the school.
2. Completed Social Work 200, which is a prerequisite for the 300–400 level courses required for the bachelor's degree.
3. Completed the courses in related areas referenced in items 3. b. (1), (2), (3), (4), and (5) under the heading Requirements for the Bachelor of Arts Degree in Social Work.

Admission to the bachelor's degree program in social work is competitive, and there is no guarantee that students with a major preference in social work will be admitted to the bachelor's degree program as juniors. In making admissions decisions, the faculty considers the relative qualifications of applicants, their suitability for the program, and the enrollment capacity of the program.

COLLEGE OF SOCIAL SCIENCE

A student who has been admitted to the bachelor's degree program in social work for a given semester, but then decides not to enroll for that semester, would need to reapply for admission to the program. There is no guarantee that the student would be admitted to the program again.

ANP 201	Introduction to Cultural Anthropology	3
HDFS 442	Ethnic Families in America	3
SOC 215	Race and Ethnicity	3
SOC 216	Sex and Gender	3

Honors Study

Students interested in honors study in social work should consult with academic advisors in the school.

Requirements for the Bachelor of Arts Degree in Social Work

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Social Work.

The University's Tier II writing requirement for the Social Work major is met by completing Social Work 440. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following required major courses:

a. The following courses in related areas (20 or 21 credits):

	CREDITS
(1) Both of the following courses (8 credits):	
PSY 101 Introductory Psychology	4
SOC 100 Introduction to Sociology	4
(2) One of the following courses (3 or 4 credits):	
HNF 150 Introduction to Human Nutrition	3
MMG 141 Introductory Human Genetics	3
PSL 250 Introductory Physiology	4
PSY 209 Brain and Behavior	3
(3) One of the following courses (3 credits):	
EC 201 Introduction to Microeconomics	3
EC 202 Introduction to Macroeconomics	3
(4) One of the following courses (3 credits):	
PSY 200 Cognitive Psychology	3
PSY 235 Social Psychology	3
PSY 236 Personality	3
PSY 244 Developmental Psychology: Infancy Through Childhood	3
PSY 270 Community Psychology	3
PSY 280 Abnormal Psychology	3
(5) One of the following courses (3 credits):	
PLS 100 Introduction to American Politics	3
PLS 140 Introduction to Comparative Politics	3

b. All of the following Social Work courses (38 credits):

A grade of 2.0 must be earned in each of the following courses: Social Work 310, 320, 420, 430, 431, 440, 441, 493A, 493B, 494A, and 494B. A minimum of 2.0 must be earned to progress to a course for which one of these courses is a prerequisite. Students must pass (P) SW 494A to progress to SW 494B.

SW 200	Introduction to Social Work	3
SW 310	Human Behavior and Social Environment	3
SW 320	Social Work and Social Policy I	3
SW 340	Foundations of Social Work Practice	3
SW 420	Social Work and Social Policy II	3
SW 430	Research Methods in Social Work I	4
SW 431	Research Methods in Social Work II	3
SW 440	Social Work Practice with Individuals, Families, and Groups (W)	3
SW 441	Social Work Practice with Task Groups, Organizations and Communities	3
SW 493A	Social Work Field Education: Integrative Field Seminar I	1
SW 493B	Social Work Field Education: Integrative Field Seminar II	1
SW 494A	Social Work Field Education: Undergraduate Generalist Practice I	4
SW 494B	Social Work Field Education: Undergraduate Generalist Practice II	4

c. One of the following courses (3 credits):

GRADUATE STUDY

The fully accredited Master of Social Work (MSW) degree program prepares students for advanced and more specialized social work practice. Students select either Clinical Social Work or Organization and Community Leadership as an advanced concentration. Clinical Social Work prepares students to engage in professional practice with individuals, families, and small groups, using many different intervention techniques. Organization and Community Leadership trains students for work in policy, advocacy, community development, and administrative positions.

The school emphasizes access to social work education, and has developed a wide range of options to meet the diverse needs of students. The school offers full MSW programs in Flint, Mid-Michigan, and Oakland County in addition to the East Lansing campus. A Weekend MSW program is available in Lansing, and a Statewide Blended program that utilizes a mix of online courses, videoconferencing, and small group face-to-face education to provide MSW access across Michigan. For all of these options, students can complete their field placements near where they live or work.

The school offers both regular and advanced standing MSW program options. The regular program requires 57 credits for degree completion. Students admitted after having completed the equivalent of the first year of this program at another university must complete a minimum of 31 credits in the MSW program at Michigan State University. A maximum of 26 credits of graduate level work in another Council on Social Work Education (CSWE) accredited program may be applied to the credit requirements under the MSW degree.

Students who have received a bachelor's degree in social work within the last six years from a program accredited by the CSWE may apply for admission to the Master of Social Work Advanced Standing program. The Advanced Standing program requires a minimum of 38 credits for the MSW degree, and may be completed with full-time study over one year or part-time study over two years.

Students enrolled in the MSW degree program may complete an optional certificate program in areas including school social work, advanced clinical practice with families, social work with older adults, substance abuse, social work and health, or trauma-focused social work practice.

Students who are enrolled in the Master of Social Work degree program in the School of Social Work may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Infancy and Early Childhood*.

The Doctor of Philosophy degree in Social Work, which is open to students who have earned an MSW degree, emphasizes the development, analysis, and application of social work knowledge, and is designed to prepare social workers for research and teaching positions in the academy and/or applied research settings.

COLLEGE OF SOCIAL SCIENCE

Master of Social Work

The Master of Social Work degree program includes extensive required courses and course sequences in social work. Only Plan B (without thesis) is available.

Clinical (micro) social work, also known as direct practice with individuals, couples, families, and small groups, builds upon the profession's values and ethics and strengths-based, person-in-environment perspective.

Organization and Community Leadership (macro) social work, also known as the practice area of specialization, focuses on social issues at a larger scope - programs, policies, communities, laws, or social and governmental institutions - through activities such as program and policy analysis and development, advocacy, fund raising, grant-writing, research, and program evaluation.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Admission to the Master of Social Work Degree Program

All students begin the Master of Social Work degree program in the fall semester to align their enrollment with the sequencing of required courses. Therefore, applicants should seek admission during the previous fall semester. Students wishing to be considered for admission must complete all application materials. Additional information can be found at <http://socialwork.msu.edu>. Although an undergraduate major or concentration in the social sciences or in social work may be helpful, it is not required.

To be considered for admission to the Master of Social Work degree program, a person must have:

1. A Bachelor of Arts or Bachelor of Science degree from a recognized institution. (Bachelor of Applied Science degrees are not accepted)
2. A grade-point average of at least 3.0 (on a 4.0 scale) during undergraduate study or in 14 or more credits of graduate study. The grade-point average in the last 60 credits or their equivalents of undergraduate course work is primarily considered.
3. Evidence of personal qualities considered important for the practice of social work, as demonstrated through the Applicant statement and letters of reference.
4. Prior work reflecting a liberal arts perspective with 19 credits in humanities and social and natural sciences, such as courses in sociology, psychology, anthropology, history, philosophy, literature, and languages.

In addition to these requirements, applicants to the Statewide Blended and Weekend program options must meet additional requirements. For Statewide Blended, applicants must:

1. Live more than 30 miles from both the East Lansing and Flint campuses.
2. Live in the state of Michigan, or if out-of-state, within 50 miles of the Michigan border.
3. Have regular access to high-speed internet service.
4. Complete an online assessment and orientation program on how to learn effectively in the online environment.

5. Applicants may also be asked to participate in a personal interview.

For Weekend, applicants must:

1. Live in the state of Michigan, or if out-of-state, within 50 miles of the Michigan border.
2. Have regular access to high-speed internet service.
3. Complete an online assessment and orientation program on how to learn effectively in the online environment.
4. Applicants may also be asked to participate in a personal interview.

Requirements for the Master of Social Work Degree Program

The student must complete 57 credits in specified instruction in social work. Required course work for both the Clinical Social Work major and the Organization and Community Leadership major are taken in the following areas: social work practice methods, human behavior and the social environment, social welfare policy, research methods, and field education. Additional information can be found at <http://socialwork.msu.edu>.

CREDITS

Clinical Social Work

1. All of the following courses (51 credits):

SW 810	Theories of Groups, Organizations, and Communities in Social Work	3
SW 811	Social Work Perspectives in Human Development	3
SW 820	Social Welfare Policy and Services	3
SW 822	Topics in Policy Practice and Advocacy	3
SW 829	Social Work Research Methods I	2
SW 830	Social Work Research Methods II	2
SW 832	Evaluating Social Work Programs and Practice	2
SW 840	Generalist Social Work Practice Methods I	3
SW 841	Generalist Social Work Practice Methods II	3
SW 843	Clinical Assessment and Diagnosis	2
SW 845	Administrative Skills in Social Work	3
SW 850	Clinical Social Work Practice I	3
SW 851	Clinical Social Work Practice II	3
SW 894A	Social Work Field Education: Graduate Generalist Practice I	4
SW 894B	Social Work Field Education: Graduate Generalist Practice II	4
SW 894D	Social Work Field Education: Clinical Practice I	4
SW 894E	Social Work Field Education: Clinical Practice II	4

2. Complete 6 credits of general electives at the 400-level or higher as approved by the student's academic advisor.

Organization and Community Leadership

1. All of the following courses (48 credits):

SW 810	Theories of Groups, Organizations, and Communities in Social Work	3
SW 811	Social Work Perspectives in Human Development	3
SW 820	Social Welfare Policy and Services	3
SW 822	Topics in Policy Practice and Advocacy	3
SW 829	Social Work Research Methods I	2
SW 830	Social Work Research Methods II	2
SW 832	Evaluating Social Work Programs and Practice	2
SW 840	Generalist Social Work Practice Methods I	3
SW 841	Generalist Social Work Practice Methods II	3
SW 844	Essential Theories in Organizations and Communities Social Work Practice	2
SW 865	Social Work Leadership in Organizations and Communities I	3
SW 866	Social Work Leadership in Organizations and Communities II	3
SW 894A	Social Work Field Education: Graduate Generalist Practice I	4
SW 894B	Social Work Field Education: Graduate Generalist Practice II	4
SW 894G	Social Work Field Education: Organization and Community Leadership I	4
SW 894I	Social Work Field Education: Organization and Community Leadership II	4

COLLEGE OF SOCIAL SCIENCE

2. Complete 6 credits of general electives at the 400-level or higher as approved by the student's academic advisor.	
3. Complete 3 credits of general electives from the following approved list of courses. Many courses require permission for enrollment.	
ADV 816 Fundraising and Philanthropy in Nonprofit Organizations	3
CSUS433 Grant Writing and Fund Development	3
CSUS858 Gender, Justice and Environmental Change: Issues and Concepts	3
GEO 816 The World System of Cities	3
HDFS860 Youth Policy and Positive Youth Development	3
HDFS861 Community Youth Development	3
HM 804 Public Health Policy and Administration	3
HM 841 Public Health Policy	3
HM 854 Health Equity Framework for Public Health Practice	3
HM 828 Community Engagement in Public Health Practice	3
HRLR813 Organizational Behavior for Human Resources and Labor Relations	3
HRLR816 Organizational Development and Change	3
HRLR818 Leadership 3	
HRLR822 Training and Development	3
PDC 403 Introduction to Domicology: Sustainable Built Environment	3
PPL 801 Quantitative Methods in Public Policy	3
PPL 802 Quantitative Methods in Public Policy II	3
PPL 806 Policy Evaluation	3
PPL 807 Public Policy	3
PPL 808 Policy Development and Administration	3
PPL 890 Policy Workshop	3
PPL 891 Issues in Public Policy	1 to 3
PSY 873 Methods and Practice of Community Engagement I	3
PSY 880 Foundations of Evaluation Practice	3
PSY 881 Evaluation Design	3
PSY 882 Evaluation Data Collection Methods	3
PSY 883 Statistics for Evaluators I	3
PSY 885 Communicating and Reporting	3
PSY 887 Statistics for Evaluators II	3
PSY 888 Evaluation Management	3
SOC 881 Analysis of Social Data I	3
SW 492 Seminar in Social Work	3
SW 890 Independent Study	1 to 4
SW 891 Special Topics in Graduate Social Work	1 to 4

Admission to the Advanced Standing Master of Social Work Degree Program

Persons who hold a recent bachelor's degree in social work from a program that is accredited by the Council on Social Work Education (CSWE) may apply for admission to the Advanced Standing Master of Social Work Program.

Students begin the program in summer session. Applicants should therefore seek admission during the previous fall semester. Students wishing to be considered for admission must complete all the application materials. Additional information can be found at <http://socialwork.msu.edu>.

To be considered for admission to the Advanced Standing Master of Social Work program, a person must have:

1. A bachelor's degree in social work granted within the last six years from a program that is accredited by the Council on Social Work Education (CSWE).
2. A grade-point average of at least 3.25 (on a 4.0 scale) during undergraduate study. The grade-point average in the last 60 credits or their equivalents of undergraduate course work is primarily considered.
3. Evidence of personal qualities considered important for the practice of social work as demonstrated through the applicant statement and letters of reference.
4. Prior academic work reflecting a liberal arts perspective with 19 credits in humanities and social and natural

sciences, such as courses in sociology, psychology, anthropology, history, philosophy, literature, and languages.

In addition, applicants to the Statewide Blended Advanced Standing program must also:

1. Live more than 30 miles from both the East Lansing, Oakland, and Mid-Michigan campuses.
2. Live in the state of Michigan, or if out-of-state, within 50 miles of the Michigan border.
3. Have regular access to high-speed internet service.
4. Complete an online assessment and orientation program on how to learn effectively in the online environment.
5. Applicants may also be asked to participate in a personal interview.

Requirements for the Advanced Standing Master of Social Work Program

The student must complete 38 credits in specified instruction in social work. Required course work for both the Clinical Social Work major and the Organization and Community Leadership major are taken in the following areas: social work practice methods, social welfare policy, research methods, and field education. Additional information can be found at <http://socialwork.msu.edu>.

CREDITS

Clinical Social Work-Advanced Standing

1. All of the following courses (32 credits):

SW 812B Integration of Theory, Policy, and Evaluation in Social Work	2
SW 822 Topics in Policy Practice and Advocacy	3
SW 830 Social Work Research Methods II	2
SW 832 Evaluating Social Work Programs and Practice	2
SW 842B Advanced Generalist Social Work Practice Methods	2
SW 843 Clinical Assessment and Diagnosis	2
SW 845 Administrative Skills in Social Work	3
SW 850 Clinical Social Work Practice I	3
SW 851 Clinical Social Work Practice II	3
SW 893B Social Work Field Education: Graduate Advanced Generalist Practice	2
SW 894D Social Work Field Education: Clinical Practice I	4
SW 894E Social Work Field Education: Clinical Practice II	4

2. Complete 6 credits of general electives at the 400-level or higher as approved by the student's academic advisor.

Organization and Community Leadership-Advanced Standing

1. All of the following courses (29 credits):

SW 812B Integration of Theory, Policy, and Evaluation in Social Work	2
SW 822 Topics in Policy Practice and Advocacy	3
SW 830 Social Work Research Methods II	2
SW 832 Evaluating Social Work Programs and Practice	2
SW 842B Advanced Generalist Social Work Practice Methods	2
SW 844 Essential Theories in Organizations and Communities Social Work Practice	2
SW 865 Social Work Leadership in Organizations and Communities I	3
SW 866 Social Work Leadership in Organizations and Communities II	3
SW 893B Social Work Field Education: Graduate Advanced Generalist Practice	2
SW 894G Social Work Field Education: Organization and Community Leadership I	4
SW 894I Social Work Field Education: Organization and Community Leadership II	4
2. Complete 6 credits of general electives at the 400-level or higher as approved by the student's academic advisor.
3. Complete 3 credits of general electives from the following approved list of courses. Many courses require permission for enrollment.

ADV 816 Fundraising and Philanthropy in Nonprofit Organizations	3
CSUS433 Grant Writing and Fund Development	3

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CSUS858	Gender, Justice and Environmental Change: Issues and Concepts	3
GEO 816	The World System of Cities	3
HDFS860	Youth Policy and Positive Youth Development	3
HDFS861	Community Youth Development	3
HM 804	Public Health Policy and Administration	3
HM 841	Public Health Policy	3
HM 854	Health Equity Framework for Public Health Practice	3
HM 828	Community Engagement in Public Health Practice	3
HRLR813	Organizational Behavior for Human Resources and Labor Relations	3
HRLR816	Organizational Development and Change	3
HRLR818	Leadership 3	3
HRLR822	Training and Development	3
PDC 403	Introduction to Domicology: Sustainable Built Environment	3
PPL 801	Quantitative Methods in Public Policy	3
PPL 802	Quantitative Methods in Public Policy II	3
PPL 806	Policy Evaluation	3
PPL 807	Public Policy	3
PPL 808	Policy Development and Administration	3
PPL 890	Policy Workshop	3
PPL 891	Issues in Public Policy	1 to 3
PSY 873	Methods and Practice of Community Engagement I	3
PSY 880	Foundations of Evaluation Practice	3
PSY 881	Evaluation Design	3
PSY 882	Evaluation Data Collection Methods	3
PSY 883	Statistics for Evaluators I	3
PSY 885	Communicating and Reporting	3
PSY 887	Statistics for Evaluators II	3
PSY 888	Evaluation Management	3
SOC 881	Analysis of Social Data I	3
SW 492	Seminar in Social Work	3
SW 890	Independent Study	1 to 4
SW 891	Special Topics in Graduate Social Work	1 to 4

Residence

One year of residence consisting of two consecutive semesters and involving at least 7 credits of graduate course work each semester is required.

Part-Time Students

Both the Master of Social Work program and the Advanced Standing Master of Social Work program are available on a part-time basis.

At the time of admission, students must apply for either part-time or full-time study. Students may transfer between part-time and full-time study with approval of the School.

Part-time students must progress through a plan of study as specified by the school. All students must meet their residence requirements during the year in which they are enrolled in the advanced practice and field education courses.

Doctor of Philosophy

The Doctor of Philosophy in Social Work is an interdisciplinary program rooted in the historical, epistemological, and philosophical bases of social work. It is designed to prepare social workers for leadership positions in the profession as educators, researchers, policy makers, and/or administrators. It places emphasis on the development, analysis, and application of social work knowledge related to professional practice, and is designed to contribute to the advancement of knowledge in the social work profession and field of social welfare.

In addition to meeting the requirements of the university and the College of Social Science, students must meet the requirements specified below.

Admission

The doctoral program in social work invites applications from experienced social workers who hold a Master of Social Work (MSW) degree from a Council on Social Work Education (CSWE) accredited graduate program. Applicants must provide evidence of academic performance via transcripts and standardized test scores, and a capacity to develop concepts and articulate issues related to the social work profession via two writing samples. Students are asked to provide a personal essay that articulates their interest in advanced social work research, education, and practice. Applicants with outstanding academic records may be admitted to the program provisionally and permitted to make up deficiencies on a collateral basis..

Requirements for the Doctor of Philosophy Degree in Social Work

	CREDITS
1. All of the following courses (18 credits):	
SW 900 Doctoral Proseminar in Social Work	2
SW 901 Knowledge Construction in Social Work	3
SW 905 Historical and Current Analysis of Social Work and Social Problems	3
SW 911 Research Sequence Practicum I	2
SW 912 Research Sequence Practicum II	2
SW 920 Evaluation of Social Work Services and Practice	3
SW 930 Social Work Research Using Quantitative and Qualitative Methods	3
2. Complete a minimum of 6 credits in statistics at the 800 or 900 level as approved by the student's guidance committee.	
3. Complete 15 additional graduate-level credits in a focused cognate or social science discipline, of which 3 credits can be in social work.	
4. Pass a comprehensive examination administered by the student's guidance committee.	
5. Complete 24 credits of SW 999 Doctoral Dissertation Research.	
6. Successfully defend the doctoral dissertation.	

DEPARTMENT of SOCIOLOGY

Aaron M. McCright, Chairperson

The world is rapidly changing. Global processes are transforming societies, changing cities and forms of economic production, creating new ways of communicating, facilitating new migration patterns, impacting human health and life chances, reshaping the biophysical environment, increasing social inequalities, and posing new risks and opportunities. New forms of labor, social movements, family life, health care delivery, military conflicts, and ways to distribute food and services are emerging. These global forces are even changing the character of sociology itself.

Members of the MSU Department of Sociology investigate these changing social, political, economic, and cultural dynamics through domestic and international scholarship (and—increasingly—with comparative, cross-national research). To accomplish this, MSU sociologists develop and

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apply leading theoretical frameworks, rigorously employ a diversity of methodological approaches, and use foundational and cutting-edge analytical techniques. In the process, MSU sociologists not only contribute significantly to the disciplinary core, but they also extend disciplinary influence by advancing its frontiers.

UNDERGRADUATE PROGRAM

Sociologists study how societies are created, maintained, and challenged. They think about the ways in which individuals and social structures interact. The department's undergraduate program is designed to give students an understanding of these processes throughout the world and of the major patterns of social behavior and organization in the United States. Courses deal with a range of topics including the basic institutions of society such as the economy and industry, education, family, health care and medicine, politics, sciences, mass media, the arts, and technology. Students examine how change occurs in rural and urban communities, in the environment, and in bureaucracies. They consider how knowledge may be used to bring about change. Courses on international development, sex and gender, racial and ethnic inequality, and changes in the lifecycle focus on the rich cultural and social diversity of individual and group behavior. Courses in social psychology and personality enable students to understand how individual behavior is affected by group life. Courses that focus on fundamental methods and techniques of research are important for understanding how to collect and interpret data on individual and group behavior. Opportunities are also available for participation in faculty research projects where the knowledge and skills learned in the classroom can be applied to real world situations. Some students have used their bachelor's degrees in sociology as a foundation for graduate and professional study in medicine, law, business, urban planning, social work, labor and industrial relations, and public health, or for advanced graduate study in preparation for careers as college teachers and researchers. Others may pursue positions in business, public service, sales research, teaching, public relations, and administration.

A Minor in Sociology is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts or Bachelor of Science degree in Sociology. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree. A total of 19 credits in the Department of Sociology are required for the minor. For further information about the minor in Sociology, visit <https://sociology.msu.edu>.

Requirements for the Bachelor of Science Degree in Sociology

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Sociology.

The University's Tier II writing requirement for the Sociology major is met by completing Sociology 488 or 499. Those courses are referenced in item 3. a. below.

The completion of Statistics and Probability 200, 201, 421 or 422, referenced in item 4. below may also satisfy the University mathematics requirement.

2. The requirements of the College of Social Science for the Bachelor of Science degree.

	CREDITS
3. The following required major courses (33 credits):	
a. All of the following courses:	
SOC 100 Introduction to Sociology	4
SOC 214 Social Inequality	3
SOC 281 Social Research Methods	4
SOC 282 Quantitative Analysis for Social Research	4
SOC 488 Sociological Theory (W)	3
SOC 499 Social Issues and Change in Contemporary Society (W)	3
b. One of the following courses that are related to diversity:	
SOC 215 Race and Ethnicity	3
SOC 216 Sex, Gender, and Sexuality	3
c. A minimum of three additional Sociology courses at the 300 level or higher, at least one of which must be at the 400 level	9
4. Complete 15 additional credits in the natural sciences selected as follows:	
a. One of the following courses in computer science:	
CSE 101 Computer Concepts and Competencies	3
CSE 131 Technical Computing and Problem Solving	3
CSE 231 Introduction to Programming I	4
b. One of the following courses:	
STT 200 Statistical Methods	3
STT 201 Statistical Methods	4
STT 421 Statistics I	3
STT 422 Statistics II	3
c. At least 11 or 12 additional credits in the following departments or programs: Biochemistry and Molecular Biology, Biological Science, Chemistry, Entomology, Earth and Environmental Sciences, Mathematics, Microbiology and Molecular Genetics, Physics and Astronomy, Plant Biology, Plant Pathology, Statistics and Probability, and Integrative Biology. The completion of courses taken in fulfillment of the University Mathematics requirement may not apply towards this requirement. Students should see their academic advisor to obtain a list of approved courses which will meet this requirement.	
5. Complete 1 credit of experiential learning which can be satisfied through one of the following courses that is connected to a 300-400 level sociology course:	
SOC 496 Individual Readings	1
SOC 497 Individual Research	1
SOC 498 Sociology Internship	1
Enrollment in SOC 496 must be connected to participation in either a study abroad program or study away program.	

Requirements for the Bachelor of Arts Degree in Sociology

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Sociology.

The University's Tier II writing requirement for the Sociology major is met by completing Sociology 488 or 499. Those courses are referenced in item 3. a. below.

2. The requirements of the College of Social Science Bachelor of Arts degree.

	CREDITS
3. The following required major courses (33 credits):	
a. All of the following courses:	
SOC 100 Introduction to Sociology	4
SOC 214 Social Inequality	3
SOC 281 Social Research Methods	4
SOC 282 Quantitative Analysis for Social Research	4
SOC 488 Sociological Theory (W)	3
SOC 499 Social Issues and Change in Contemporary Society (W)	3
b. One of the following courses that are related to diversity:	
SOC 215 Race and Ethnicity	3
SOC 216 Sex, Gender, and Sexuality	3
c. A minimum of three additional Sociology courses at the 300 level or higher, at least one of which must be at the 400 level	9
4. Complete an experiential learning experience through one of the following options, approved by the student's academic advisor:	
SOC 480 Advanced Research Methods in Sociology	3

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SOC 497 Individual Research 3
 SOC 498 Sociology Internship 3
 Completion of a 3-credit minimum Sociology-related study away or study abroad program with a grade of 2.0 or pass in at least one of the program's courses.

MINOR IN MIGRATION STUDIES

The Minor in Migration Studies, which is administered by the Department of Sociology, enhances the education of students who are interested in issues relating to human migration, including those who wish to prepare themselves for advanced degree programs in human migration or careers in related fields.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the College of Social Science.

Requirements for the Minor in Migration Studies

	CREDITS
Students must complete 15 credits from the following courses:	
1. The following course (3 credits):	
SOC 260 Introduction to Human Migration	3
2. One of the following courses (3 credits):	
ANP 310 Archaeology of Human Migrations	3
ANP 417 Introduction to Islam in Africa	3
ANP 419 Anthropology of the Middle East	3
ANP 437 Asian Emigrant Communities: A Global Perspective	3
ANP 461 Method and Theory in Historical Archaeology	3
GEO 413 Urban Geography	3
GEO 440 Critical Geopolitics	3
HST 260 Navigations and Encounters in an Age of Discovery	3
HST 301 Indigenous-European Encounters in North America	3
HST 363 East Africa in the Twentieth Century	3
HST 366 Modern Southeast Asia	3
HST 383 The Caribbean	3
HST 390 History of International Relations	3
3. Two of the following courses (6 credits):	
ENG 351 Readings in Chicano and Latino Literatures	3
ENG 360 Studies in Postcolonial and Diaspora Literature (W)	3
ENG 460 Seminar in Global and Postcolonial Literature	3
FLM 451 Studies in Postcolonial Cinema	3
GSAH 201 Introduction to Global Studies in the Arts and Humanities	3
GSAH 310 Questions of Justice in Global Contexts	3
GSAH 311 Global Perspectives on Borders and Migration	3
4. The following capstone course (3 credits):	
SOC 460 Advanced Seminar in Human Migration	3

MINOR IN SOCIOLOGY

The Minor in Sociology, which is administered by the Department of Sociology, provides a fundamental understanding of the linkages between agency and structure in society. Students obtain knowledge of the principles of sociology, sociological inquiry, diversity in society, and the ways in which global forces are transforming modern society. The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Arts or Bachelor of Science Degree in Sociology. With the approval of the department and college that administers the student's degree

program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult an undergraduate advisor in the Department of Sociology.

Requirements for the Minor in Sociology

Complete a minimum of 19 credits in the Department of Sociology from the following:

	CREDITS
1. Both of the following courses (7 credits):	
SOC 100 Introduction to Sociology	4
SOC 214 Social Inequality	3
2. One of the following courses (3 credits):	
SOC 215 Race and Ethnicity	3
SOC 216 Sex, Gender, and Sexuality	3
3. Complete three elective courses in Sociology at the 300-400 level. At least one course must be at the 400-level. Students may use SOC 281 Social Research Methods to fulfill this requirement. The courses must be approved by the student's academic advisor.	

TEACHER CERTIFICATION OPTIONS

A sociology disciplinary minor is available for teacher certification.

Students who elect the sociology disciplinary minor must contact the Department of Sociology.

For additional information, refer to the statement on *TEACHER CERTIFICATION* in the *Department of Teacher Education* section of this catalog.

GRADUATE STUDY

The MSU sociology graduate program seeks to develop professionals who will be creative and ethical researchers, teachers, and practitioners in knowledge production. The department has three signature areas of excellence:

1. **Health and Medicine.** Faculty and students examine the social context of health, illness, and health care, with a central focus on health disparities by race/ethnicity, social class, gender, and marital status; political, economic, and environmental circumstances that threaten health; and societal forces that impact the health care system. Faculty members often collaborate with scholars across MSU's College of Human Medicine, College of Osteopathic Medicine, College of Veterinary Medicine, and College of Communication Arts and Sciences. In recent years, faculty have secured research funding from the U.S. National Institutes of Health, U.S. Centers for Medicaid/Medicare, and U.S. Department of Agriculture.

2. **Environment.** The MSU Department of Sociology has the largest group of U.S. sociologists studying human-environment interactions, examining how humans (individually, in organizations, or in larger social groups) affect the biophysical environment and how the biophysical environment influences social phenomena. Faculty and students have considerable expertise in environmental decision-making; climate change; agriculture and food systems; water resources; and animal studies. In recent years, faculty have secured research funding from the U.S.

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National Institutes of Health, U.S. National Science Foundation, and U.S. Department of Agriculture.

3. **Migration.** The MSU Department of Sociology is a recognized center of expertise and excellence in research, teaching, and outreach on migration, transnationalism, and diaspora. Faculty and students examine the African diaspora; the demography of migration; migration, race, and refugees; development and migration; gender and migration; health and migration; migrant ethnic entrepreneurship, communities, and conflict; and migration integration. In recent years, faculty have secured research funding from the U.S. National Institutes of Health, U.S. Department of State, U.S. Social Science Research Council, and several private philanthropic foundations.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Sociology may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on *Interdepartmental Graduate Specializations in Infancy and Early Childhood*.

For further information about graduate study in sociology, consult the department's Graduate Manual or visit www.sociology.msu.edu.

SOCIOLOGY

Although the department views the Doctor of Philosophy degree as the terminal degree in sociology, a master's degree program with a major in sociology is available.

Master of Arts

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Requirements for the Master of Arts Degree in Sociology

CREDITS

The program is available only under Plan A (with thesis). The student must meet the requirements specified below:

1. Complete 30 credits including:
 - a. All of the following courses (9 credits):

SOC 815	Classical Sociological Theory	3
SOC 881	Analysis of Social Data I	3
SOC 885	Methods of Sociological Inquiry	3
 - b. One of the following courses (3 credits):

SOC 883	Multi-Equation Quantitative Models	3
SOC 884	Applied Longitudinal Data Analysis	3
SOC 985	Qualitative Field Research	3
SOC 986	Survey Research Principles	3
 - c. At least 12 credits in four courses as approved by the student's guidance committee.
 - d. Complete 6 credits of SOC 899 Master's Thesis Research.
2. Successful completion of the departmental Graduate Teaching Assistant workshop
3. Successful completion of the departmental Professional Development Workshop Series.
4. Successful completion of the departmental Responsible Conduct of Research Requirements.
5. Successful completion and presentation of a qualifying paper.
6. Successfully pass an oral examination in defense of the thesis.

Doctor of Philosophy

The doctoral degree program in sociology is designed to give the student a general background in sociological theory and methodology, as well as training in a major substantive area of the discipline.

While there is no language requirement, where acquaintance with a foreign language is necessary for advancing the special interest of the student, the student, in consultation with the guidance committee, may decide upon the study of a foreign language appropriate to their research and career development.

In addition to meeting the requirements of the university and of the College of Social Science, students must meet the requirements specified below.

Requirements for the Doctor of Philosophy Degree in Sociology

CREDITS

Students must complete 60 credits from the following:

1. All of the following courses (15 credits):

SOC 815	Classical Sociological Theory	3
SOC 816	Contemporary Sociological Theory	3
SOC 881	Analysis of Social Data I	3
SOC 882	Analysis of Social Data II	3
SOC 885	Methods of Sociological Inquiry	3
2. Two of the following courses (6 credits):

SOC 883	Multi-Equation Quantitative Models	3
SOC 884	Applied Longitudinal Data Analysis	3
SOC 985	Qualitative Field Research	3
SOC 986	Survey Research Principles	3
SOC 989	Topics in Sociological Methodology	3
3. Complete 15 credits from 5 additional courses approved by the student's guidance committee.
4. Complete 24 credits of Sociology 999 Doctoral Dissertation Research.
5. Successful completion of the departmental Graduate Teaching Assistant workshop.
6. Successful completion of the departmental Professional Development Workshop series.
7. Successful completion and presentation of a qualifying paper.
8. Successful completion of the comprehensive examination.
9. Successful defense of the dissertation proposal.
10. Successful defense of the dissertation.

GRADUATE SPECIALIZATION IN ANIMAL STUDIES: SOCIAL SCIENCE AND HUMANITIES PERSPECTIVE

The Graduate Specialization in Animal Studies: Social Science and Humanities Perspective, which is administered by the Department of Sociology, provides graduate students with basic knowledge in relationships between humans and animals and how they are linked together in a fragile biosphere.

The graduate specialization is available as an elective for students who are enrolled in master's or doctoral degree programs at Michigan State University. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the specialization may also be used to satisfy the requirements for the master's or doctoral degree.

Students who plan to complete the requirements for the graduate specialization should consult the graduate advisor for the specialization in the Department of Sociology.

Requirements for the Graduate Specialization in Animal Studies: Social Science and Humanities Perspective

	CREDITS
Complete a total of 12 credits from the following:	
1. Both of the following courses (6 credits):	
SOC 840 Animals and Social Transformations	3
SOC 989 Topics in Sociological Methodology	3
2. One of the following courses (3 credits):	
ACR 823 Contemporary Issues in Animal-Human Relationships	3
ANS 805 Animal Welfare Assessment	3
LAW 565A Animal Law	
3. Complete 3 credits of additional course work that focuses on any aspect of the human-animal relationship that meets the interests of the student. A list of available courses can be found on the specialization Web site. The course must be approved by the student's academic advisor for the specialization.	

PROGRAM in WOMEN, GENDER, and SOCIAL JUSTICE

The Women, Gender, and Social Justice program is a multi-disciplinary academic program that is administered by the College of Arts and Letters, with support from the College of Social Science and the College of Education. The College of Arts and Letters is the primary administrative unit and the Center for Gender in Global Context in International Studies and Programs oversees the program. The program offers a major in women's and gender studies leading to the Bachelor of Arts degree. In addition, the program offers an undergraduate minor in Women's and Gender Studies and a minor in Lesbian, gay, Bisexual, Transgender, Queer (LGBTQ) and Sexuality Studies. For additional information, refer to the Women, Gender, and Social Justice Program statement in the College of Arts and Letters section of this catalog.

CENTER FOR GLOBAL CHANGE AND EARTH OBSERVATIONS

Jiaguo Qi, Director

The Center for Global Change and Earth Observations (CGCEO) is an interdisciplinary research unit administered by the College of Social Science at Michigan State University (MSU). Faculty from across the university collaborate and conduct research on the issues of global environmental change and its impacts using geospatial information technologies, earth observation satellites, and process-based models to measure, analyze, and understand the social and physical processes of global environmental change. The Center strives to strengthen interdisciplinary approaches for addressing global challenges at all scales, from the local to the global and from daily to decadal, using the tools of the social and physical sciences.

The Center promotes basic and applied research on global environmental change in key areas including land-use and -

cover change dynamics, urbanization and sustainability, land degradation and social-ecological processes; climate variability, modeling and impact assessment; analyses and modeling of coupled human and natural systems, assessment and modeling of ecosystem services, carbon sequestration, biodiversity, water-energy-food nexus; natural resource monitoring, management and sustainable development. Research is supported through external funding from federal agencies, international organizations, the private sector, and foundations.

The Center also develops and applies technical tools of geographic information sciences, including open and distributed geographic information systems, efficient data processing, field-based sampling protocols, and spatially explicit decision support systems. It conducts research around the world, with special focus on developing countries in Latin America, East and West Africa, Eurasia and Asia (Southeast Asia, Central Asia, and East Asia), as well as in the Great Lakes and throughout the United States. The Center provides support to graduate research, education and training across the university and provides academic support for curricula in geographic information science, global change science, and environmental science.

MATRIX: THE CENTER for DIGITAL HUMANITIES and SOCIAL SCIENCES

Dean Rehberger, Director

Matrix: The Center for Digital Humanities and Social Sciences at Michigan State University seeks to advance critical understanding and promote access to knowledge through world-class research in digital humanities and cultural informatics. Digital humanities and cultural informatics bring together the humanist's quest for deeper understanding of human nature, thought, expression, and behavior with the tools, methods and applications of computer science, user experience design, and information and library sciences. Matrix researchers use information and communication technologies to advance, mediate, and inform the humanist disciplines, as well as disciplines within the arts, social sciences, and education. At MSU, Matrix partners in music, history, anthropology and archaeology, education, international studies, museum studies, archives and libraries to build new, global, networked resources, services, and platforms that give life to the metaphor of "Matrix" as the multiple intersections and applications of interdisciplinary research. Matrix therefore applies humanities technology to all the elements of MSU's mission: research, education, outreach, and service to multiple public and professional communities. Guided by basic scholarly and humanist values of excellence, education, access, and inclusiveness, and conducted according to proven, collaborative, scholarly

methods and principles, Matrix has become one of the most prestigious humanities technology centers in the world.

To this end, the mission of Matrix: The Center for Digital Humanities and Social Sciences serves as a catalyst for and incubator of the emerging fields of the digital humanities and cultural heritage informatics. In pursuing the Center's vision, Matrix is guided by five broad strategic goals that describe the national research agenda in digital humanities and cultural heritage informatics:

1. Broaden and advance the creation, preservation, access to and interpretation of the human record (both past and present), through collaborative research and development of major digital cultural heritage tools and resources.
2. Forge and strengthen interdisciplinary partnerships, pioneer research and development of pedagogical applications of new digital technologies for the arts, humanities, and social sciences in order to transform teaching and learning.
3. Research, develop, and implement tools and platforms to advance scholarly networking within and across disciplines, develop new forms of online publication within the academy and the broader public.
4. Research, develop and apply information and communication technologies to build domestic and international linkages, promote public involvement, ensure digital equity, and support civil society.
5. Foster a new generation of scholars to research, develop, and implement new technologies, platforms, and approaches for research and teaching, and to pioneer a new type of interdisciplinary humanities scholarship.

For additional information, visit www.matrix.msu.edu.

REMOTE SENSING and GEOGRAPHIC INFORMATION SCIENCE RESEARCH and OUTREACH SERVICES

Erin Bunting, Director

Remote Sensing and Geographic Information Science Research and Outreach Services (RS&GIS) is administered by the Department of Geography, Environment, and Spatial Sciences in the College of Social Science. The program was established to strengthen and support the utilization of geospatial technologies in research, instruction and extension activities.

RS&GIS promotes interdisciplinary research through collaborative efforts with faculty, research staff and students. Technical expertise includes geospatial database creation and analysis, web-mapping application development, mobile application development, website design, aerial and satellite image processing and interpretation, UAS data collection and analysis, geospatial modeling, terrain analysis and

cartographic design. Thematic expertise includes land/water use and change detection, economic development and planning, assessment/inventory of natural and human systems, UAS development and deployment, human-environment interactions, climatology, climate change ecology, and ecology of arid lands. RS&GIS also maintains the Michigan Aerial Imagery Archive, a repository of historical imagery dating back to the 1930s.

Professional staff are available for consultation and technical assistance to faculty, staff, and students. The program sponsors both technical and thematic seminars and short courses.

INSTITUTE FOR PUBLIC POLICY AND SOCIAL RESEARCH

Matthew Grossmann, Director

The Institute for Public Policy and Social Research is a university-wide research institute located within the College of Social Science. The institute provides research and technical assistance programs aimed at state, regional, and local levels of government, and research on national and international comparative issues. Institute personnel have economic, tax policy and analysis, public policy analysis and evaluation, computer programming, data management, statistical, survey analysis, and methodological expertise. The Institute includes the following units:

Michigan Political Leadership Program. This scholarship-funded certificate program is designed for those seeking greater involvement in the public policy process, particularly while serving in public office. Every year, 24 successful applicants participate in a curriculum that provides a solid foundation in practical politics, public policy analysis and process, personal leadership development, and effective governance. The 10-month program is co-directed by two people, one Republican and one Democrat experienced in public leadership and governance.

Legislative Leadership Program. Sponsored with Michigan State University Extension and MSU's Office of Governmental Affairs, this program links scholars, legislators, and practitioners in a discussion of public policy issues and the policy making process. The program kicks off every two years shortly after state elections. It invites newly elected state legislators for a multi-day session on current public policy issues.

Student Fellows. Competitively selected graduate and undergraduate students are engaged in work to enrich and expand leadership, policy and research. Their engagement focuses on compiling, analyzing and publishing research and writing for academic and public audiences.

Public Policy Forums. The institute organizes and carries out regular forums on topics of timely interest for legislators and other governmental decision-makers. They have focused on such issues as energy, education, tax policy, and the state of the nation's infrastructure and economic development.

Office for Survey Research. The institute specializes in telephone interviews, web-based surveys, and mailed questionnaires in support of both of applied and basic research. It also provides consultation in sampling design, question sequencing, statistical analysis, and other technical aspects of survey research. Projects span needs assessments, epidemiological studies, opinion surveys, client feedback surveys, cognitive interview testing, social or economic impact studies, various aspects of focus group design and operation, and political polls. The Office for Survey Research maintains and operates a state-of-the-art research lab.

State of the State Survey. This telephone survey of approximately 1,000 adult residents of Michigan is the only survey conducted to systematically monitor the public mood on important issues in major regions of the state. The quarterly survey runs about 20 minutes in length, and a portion of that time is devoted to questions monitoring the public's satisfaction with public leaders and existing economic conditions. Results are published online. MSU faculty, administrators, profit and nonprofit organizations are consistent sponsors of SOSS questions, research contributors and collaborators.

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INSTITUTE of PUBLIC UTILITIES

Janice A. Beecher, Director

The Institute of Public Utilities (IPU) supports informed, effective, and efficient regulation of the providers of essential utility infrastructure and services – electricity, natural gas, water, and communications. IPU was established in 1965 at Michigan State University, the nation's pioneer land-grant institution, and is located on MSU's beautiful East Lansing campus. IPU operates as a self-sustaining unit within the College of Social Science and collaborates with faculty and researchers from various academic colleges, departments, and centers. IPU delivers to the utility policy community independent, integrative, and interdisciplinary educational curricula and applied research on the institutions, theory, and practice of economic regulation and ratemaking. IPU specializes in building capacity for meeting the challenges of utility, network, and market governance, including modernization and transformation. IPU's neutral analytical and instructional practice is informed by a broad array of traditional and applied disciplines, including economics, political science, law, accounting, finance, and engineering. IPU's diverse program faculty includes nationally recognized university educators and expert practitioners known for their insight, experience, and teaching ability. IPU forums provide exceptional development and networking opportunities for everyone in the utility policy community, whether from the public, not-for-profit, or private sectors. Program participation is typically eligible for continuing education credits and can lead to a Certificate of Continuing Regulatory Education (CCRE).