



# GRADUATE EDUCATION

Michigan State University has thirteen colleges authorized to offer programs leading to master's and doctoral degrees:

- Agriculture and Natural Resources
- Arts and Letters
- The Eli Broad College of Business
- Communication Arts and Sciences
- Education
- Engineering
- Human Ecology
- Human Medicine
- Natural Science
- Nursing
- Osteopathic Medicine
- Social Science
- Veterinary Medicine

The Graduate School consists of graduate programs located in the colleges listed above. The Office of The Graduate School assists in the coordination, facilitation, and integration of programs of graduate education. Visit us at [www.grad.msu.edu](http://www.grad.msu.edu), or call (517) 355-0300.

The Dean of The Graduate School, in conjunction with the University Graduate Council, exercises overall review and supervision of graduate programs conducted in the colleges. Each college is responsible for developing graduate programs consistent with the highest professional standards of the respective fields. To provide access to certain fields of study, some colleges and departments offer master's degree programs at various locations and via the Web. All academic programs are in the hands of competent faculty enjoying national and international reputations.

The descriptions of graduate programs offered in the colleges attest to the variety of intellectual opportunities and the unique challenges of this University. Information on the requirements of any given major may be found in the pages which follow in this section and in the sections describing the individual colleges, departments, and schools.

The organizational structure of the colleges, divisions, schools, and departments for instructional programs is shown in *The Academic Program* section of this catalog.

Information on fees, general procedures and regulations, housing, and facilities is given in the *General Information* section of this catalog.

## Foreign Language Requirements

Individual departments, schools, or colleges may, with the approval of the University Graduate Council, require competency in foreign languages as part of the requirements for graduate degrees. Such requirements are specified in catalog descriptions of the programs.

Departments, schools, or colleges that require one or more foreign languages as part of their graduate degree requirements are responsible for certifying competency. This can be done either by utilizing their own faculty or by making arrangements with the appropriate language department(s). Each such unit shall develop a written policy establishing guidelines for determining language competency.

Students may meet the German requirement by satisfactorily completing German 400, and the Russian requirement by satisfactorily completing Russian 410.

### Policy on Research with Human Subjects

Refer to the statement on *Policy on Research with Human Subjects* in the *General Information* section of this catalog.

The Graduate School will not accept master's theses or doctoral dissertations containing research involving human subjects that has not had prior review and approval by the University Committee on Research Involving Human Subjects (UCRIHS).

### Student Rights and Responsibilities

Refer to the statement on *Student Rights and Responsibilities* in the *General Information* section of this catalog.

## ADMISSION

A senior in or a graduate of this University or of another institution having substantially the same requirements for a bachelor's degree may apply for admission to a program of graduate study.

Admission to the University is conditioned upon the applicant providing accurate and current admissions information and upon the applicant updating such data if circumstances arise that make the previously provided information inaccurate, misleading or incomplete in an important way. Submission of an application authorizes the University to investigate the accuracy of statements made and data provided by the applicant and those who submit materials or information on behalf of the applicant. Falsifications, misrepresentations or omissions in application answers or supporting data may constitute grounds to deny or revoke admission to the University. Admission to the University may be denied or revoked if the University learns that an individual has engaged in conduct that indicates to the University that the individual is not ready to be a responsible member of the University community.

Acceptance of an applicant for admission to a program leading to a master's degree, a doctoral degree, or an educational specialist degree is determined by the academic unit and the dean of the college in which the program is offered. For the following interdepartmental programs, the faculty who are associated with the program, in addition to the faculty of the academic unit, review applications for admission and recommend acceptance of applicants for admission. These programs are: Multidepartmental Doctoral Program in Environmental Toxicology, Interdepartmental Program in Ecology, Evolutionary Biology and Behavior, Interdepartmental Graduate Programs in Plant Breeding and Genetics, and Interdepartmental Graduate Programs in Urban Studies.

The acceptance decision is made after consideration of the applicant's academic record, experience, personal qualifications, and proposed program of study. The chief academic officer of the University has authority to grant waivers of usual entrance requirements upon recommendation of the Dean of The Graduate School.

### Application Procedure

Admission to Michigan State University is open to all candidates on the basis of academic preparation and ability, and the availability of space in the desired academic program, and without regard to race, color, gender, religion, national origin, political persuasion, sexual orientation, marital status, disability, height, weight, veteran status, age, or (in the case of U. S. citizens) financial need.

The applicant for admission at the graduate level must:

1. Complete the Application for Admission to Graduate Study, available through the Office of Admissions and Scholarships

or via the web, and return it, with a check or money order to cover the application fee, directly to the department, school or program to which admission is sought.

2. Request the registrar of each college or university attended to send one copy of each transcript directly to the department, school or program to which admission is sought. Transcripts of work taken at Michigan State University need not be requested.
3. Have three letters of recommendation sent to the chairperson or director of the department or school to which admission is sought.
4. Take any examinations required by the college and department or school and have the testing agency forward official results to the department or school to which admission is sought. For additional information, refer to the appropriate college and department or school section of this catalog.
5. Fulfill any additional requirements and procedures of the college and department or school to which admission is sought.

To insure full consideration, the application for admission, the application fee, official transcripts, letters of recommendation, test scores, and other required documents must be received by the appropriate offices at least nine months prior to the anticipated first semester of enrollment.

If the applicant is also applying for financial aid, the application materials must be received nine months prior to the first semester of enrollment. An application for an assistantship, fellowship, or scholarship for a fall semester is assured of full consideration if received before January 1, of that year, unless the application is for a special form of financial aid carrying an earlier deadline date. Some awards of financial aid are made earlier than January 1, and the applicant is therefore encouraged to file the application as early as possible.

Applications for loans for new students are made through the Office of Financial Aid and should be returned to that office before April 1, except for such loans as may carry a later deadline date.

See the *General Information* section of this catalog for further details.

### Admission to a Degree Program

An applicant for admission to a graduate program leading to a master's degree or an Educational Specialist degree must be a senior in or a graduate of an institution having substantially the same requirements for a bachelor's degree as Michigan State University. An applicant for admission to a doctoral degree program may be required to have completed a master's program or its equivalent. In certain departments and schools, however, a student may be allowed to begin a doctoral program directly after obtaining a bachelor's degree. Normally, a grade-point average of at least 3.00 (B) in the third and fourth years of undergraduate study is required by all departments and schools for regular admission to graduate programs.

Upon admission to a graduate program a student is classified in one of two categories, regular or provisional. Specific criteria for distinguishing between these categories are determined within each college for its own programs. In general, these criteria are:

1. **Regular:** Students who are considered to be fully qualified to undertake a program toward the graduate degree for which they are admitted.
2. **Provisional:** Students of promise who have some remediable inadequacy of qualification such as a minor deficiency in subject-matter preparation or for whom there is incomplete interpretation of available records. A student who is admitted to provisional status will be eligible for change to regular status when specific written conditions for transfer to regular status have been met.

## GRADUATE EDUCATION

### Admission

#### Change in Program

Graduate students currently enrolled in a degree program but wishing to enter a different degree program should apply to the academic unit administering the proposed new program at least six weeks in advance of the deadline set by the unit for ordinary applications.

#### Collateral Courses

A graduate student admitted with deficiencies in academic background may be required to take collateral courses in addition to the prescribed courses of a program. Credits earned in collateral courses do not count toward the minimum credit requirements for a degree.

#### Delayed Enrollment

If a person files an application for admission to a graduate program for a specific semester, and is accepted but does not enroll for that semester, that person may renew his or her application within a period of one year. If after one year that person still has not registered at Michigan State, that person must file a new application for admission.

#### Dual Enrollment by Undergraduates

A senior at Michigan State University who is within 15 credits of graduation and who is admitted to a graduate program may be dually enrolled for graduate study while completing the requirements for the bachelor's degree. An exception to this policy may be granted for all students who are enrolled in a specified undergraduate program that is tied to a specified graduate program, but *not* for an individual undergraduate student.

To be considered for dual enrollment, the student must complete a Request for Dual Enrollment Status form, available from the Office of Admissions and Scholarships. An Application for Admission to Graduate Study must also be filed as indicated under *Application Procedure* in this section of the catalog.

Admission to graduate study must be approved before work to apply toward a graduate program is undertaken. Credits completed prior to admission to graduate study *cannot* be applied toward a graduate program.

The maximum time limit for dual enrollment is two consecutive semesters. The student may earn no more than 12 credits of graduate level course work applicable to the student's graduate degree program and should carry no more than 16 credits per semester.

Students dually enrolled are not eligible for graduate assistantships, other forms of graduate student financial aid, or those services and prerogatives normally reserved for graduate students. Such students will be classified in an undergraduate status until the baccalaureate degree has been awarded.

#### Faculty Members of Michigan State University Admission to Graduate Study

A faculty member with the rank of assistant professor or higher may not earn a doctoral degree from Michigan State University. The same restriction applies to any faculty member with the rank of instructor who has an appointment in the tenure system. A faculty member may earn a master's degree at MSU.

#### Housing

New students may apply for housing after the notice of acceptance for admission is issued. Specific instructions are provided with the notice of acceptance. Former students may apply for

housing facilities after their applications for readmission have been accepted. Although additional students may be accommodated in University housing, housing reservations are guaranteed only for freshmen. See *Housing* and the *University Housing Policy* in the *General Information* section of this catalog for more information on University housing regulations and facilities.

#### Readmission to Original Program

Graduate students whose enrollment at Michigan State University is interrupted for any reason so that they are not enrolled for three consecutive semesters, including the Summer Sessions, must apply for readmission. The Application for Readmission form is available in the Office of the Registrar and at [www.reg.msu.edu](http://www.reg.msu.edu). Students must submit this form together with official transcripts of all work taken while not enrolled at Michigan State University, at least one month prior to the first day of registration for the semester in which the student expects to resume graduate studies. The application may also be submitted through the University's website, [www.msu.edu](http://www.msu.edu).

#### Readmission with Change of Program

A graduate student wishing to pursue a degree or program other than the one originally sought, and who has not enrolled for three consecutive semesters, including the Summer Sessions, or who has completed prior courses of study, should file the Application for Readmission form and transcripts as described above. Further, the student should apply to the academic unit administering the proposed new degree or program at least six weeks in advance of its deadline for ordinary applications to allow time to file with that unit any additional information it may need before the deadline.

## INTERNATIONAL STUDENT ADMISSION

Michigan State University is authorized under immigration regulations to enroll nonimmigrant students and welcomes applications from such persons. An international student is defined as a person holding a nonimmigrant visa.

A prospective student should write for instructions and application forms to the Office of Admissions and Scholarships, Administration Building, Michigan State University, East Lansing, Michigan 48824-0210 or visit the University's website at [www.msu.edu](http://www.msu.edu), at least one year before the anticipated semester of enrollment. Applications must be filed at least nine months prior to the enrollment date. Two official copies of all records of any previous schooling (mark sheets, transcripts, diplomas, certificates, etc.) must be submitted as official documents directly from each institution. These records must show courses taken and grades earned, and must be translated into English if the original records are in another language. If a translation is supplied, it should be certified as accurate and correct by an appropriate public or school official, or sponsoring agency or government. The original record should also be included. The chief academic officer of the University has authority to grant waivers of usual entrance requirements upon recommendation of the Dean of The Graduate School.

If the application for admission is approved, a certificate of acceptance to the University and a Form I-20 will be mailed. No prospective international student should plan to enter the United States before receiving both a certificate of acceptance and an I-20. It will be necessary to present the I-20 upon application for a student visa, and again upon arrival in the United States. Students applying for a J-1 Exchange Visitor visa will need to present a Form IAP-66 to obtain a visa. This form is available from the student's sponsor or the Division of International Students and

Scholars. The Office of Admissions and Scholarships remains in direct contact with each applicant.

Students who enter the United States with a Form I-20 from another institution should be aware that they must enroll at that school before they are eligible to transfer to Michigan State University. Such transfers require *both* formal admission to the University and approval of the U.S. Immigration and Naturalization Service.

International students must provide evidence of financial ability to meet their educational and maintenance expense for each year of proposed study at MSU before the certificate of acceptance to the University will be mailed. The University may require advance deposit of funds from students whose countries are experiencing severe economic problems or place tight restrictions on exchange of currency into U.S. dollars. Students should not expect financial aid from the University.

### English Language Proficiency

All international applicants for graduate programs whose first language is not English must be able to demonstrate their English language proficiency. Those applicants who do not demonstrate English language proficiency must fulfill the requirements stated below as part of the admissions procedure. Graduate students may be admitted on regular status or on provisional status.

### Minimum Requirement For Regular Admission

All international applicants are required to be proficient in English as a condition for *regular* admission to MSU. Applicants whose first language is not English will be required to demonstrate their proficiency by meeting certain minimum standards on any *one* of the following tests:

1. *Test of English as a Foreign Language (TOEFL)* (Educational Testing Service, Box 899, Princeton, New Jersey 08549, USA). A total score of 550 (paper version) or 213 (computer version) or above with no subscores below 52 (paper version) or 19 (computer version) is required. The official report must be received by the English Language Center directly from the Educational Testing Service.
2. *Michigan English Language Assessment Battery (MELAB)* (Testing and Certification Division, The English Language Institute, The University of Michigan, Ann Arbor, Michigan 48109, USA). An average score of 83 or higher with no subscores below 80 is required. The official report must be received by the English Language Center directly from the University of Michigan.
3. *English Language Center Test* (English Language Center [ELC], Michigan State University, East Lansing, Michigan, 48824-1035, USA). An average score of 80 to 85 with no subscores below 80, or an average score above 85 with no subscores below 78, is required.

### Minimum Scores For Provisional Admission

International applicants who have acceptable academic credentials may be admitted to MSU on a provisional basis with scores between 520 and 550 (paper version) or 190 and 213 (computer version) on the TOEFL or between 72 and 83 on the MELAB or between 72 and 80 on the English Language Center Test.

Provisionally admitted students must take classes at the English Language Center, and restrictions are placed on the number of academic courses that they may take. Any student admitted provisionally because of an English language deficiency must correct that deficiency within one calendar year.

### Required English Language Center Attendance

As the language requirement is a University policy, a decision by the English Language Center (ELC) for a student to enroll in its program is binding and is not negotiable by the student. Students who are required to attend ELC classes are obligated to show good class attendance and make an earnest effort to remove the language deficiency as soon as possible. The ELC program must be completed satisfactorily before regular admission status may be granted.

### Teaching Assignments

All international students who are admitted to graduate studies at MSU with teaching assistantships involving recitations, discussions, or laboratory sections will be given the SPEAK test by the English Language Center upon arrival on campus. Students may submit a current Test of Spoken English (TSE) in lieu of the SPEAK test. Students who do not pass the initial SPEAK test or TSE may not assume teaching responsibilities until they complete English 097, an oral skills course for international teaching assistants, and pass the International Teaching Assistant oral interview or pass a subsequent SPEAK or TSE test. The chairperson of the student's department may request an opportunity for a special review by the International Teaching Assistant Oral Review Board if the student does not pass the initial screening. The Board determines whether the student may be cleared for teaching duties. If the student fails to pass the *minimum all-University standard* of English proficiency for regular admission status, he or she may not be assigned to do any classroom teaching, including laboratory instruction and recitation or discussion sections, without approval of the English Language Center. Units may hold a higher-than-minimum performance criterion if they so choose if the content and/or the teaching models warrant.

See *Costs* in the *General Information* section and *English Language Center* in the *College of Arts and Letters* section of this catalog for additional information.

### International Student Accident and Health Insurance

International students are required to have health and accident insurance. Students are required to purchase the MSU Student Accident and Health Insurance Plan unless they have evidence of alternative insurance equal in benefits and provisions to the MSU plan. Fees for the student's insurance are included with the bill for tuition and fees during registration. Waivers to allow purchase of alternative plans must be approved by the Benefits Office, Human Resources, 130 Nisbet Building.

## ENROLLMENT and REGISTRATION

### Academic Advisement

Each student is assigned a member of the faculty who serves as the academic adviser. The name of the adviser is included with other information which is mailed to the student before registration. Each student's program is planned with, and must be approved by, the adviser, and changes may be made only with the adviser's approval.

The students should report first to the office of the assigned academic adviser in order to plan the schedule of courses for the semester.

**GRADUATE EDUCATION**  
**Enrollment and Registration**

**Enrollment, Fees, and General Information**

Information relating to enrollment, payment of fees, credits, changes in enrollment, the grading system, and other general information is given in the *General Information* section of this catalog.

**Period Covered by Registration**

Refer to the statement on *Period Covered by Registration* in *The Academic Program* section of this catalog.

**MAXIMUM AND MINIMUM CREDITS**

**All Students**

**MAXIMUM.** Graduate students may carry up to 16 credits each semester. The maximum number of credits, however, is determined by the department or school. A student load above 16 credits requires approval by the student's dean. Enrollment in doctoral dissertation research (course number 999) credits need not be counted in determining maximum credits.

**MINIMUM.** All students using University services (faculty consultation included) for graduate work must be registered each semester. Minimum registration consists of one course of 1 credit.

**Full Time Students**

In order to be considered full time for academic purposes, students must carry the minimum number of credits per semester as defined below:

Master's level . . . . .	9 credits
Doctoral level . . . . .	6 credits
Graduate–Professional level . . . . .	12 credits

**Graduate Assistants**

Graduate Assistant is a generic term referring to a graduate student who is supported on a graduate assistantship. Graduate assistants are in one of three categories as they relate to policy in this section: research assistants, teaching assistants represented by the Graduate Employees Union (GEU), and teaching assistants not represented by the GEU.

Graduate assistantships are available only to graduate students who are actively pursuing graduate degree programs and who are making satisfactory progress toward their degrees, including maintaining at least a 3.00 grade–point average. Colleges, departments, or schools may set higher or additional standards.

Graduate assistants are appointed on a **quarter–time, half–time, or three–quarter time basis**. The academic year encompasses two appointment periods: August 16–December 31 and January 1–May 15. During each appointment period a graduate assistant's duties to the University require an average of:

1. 10 hours per week for a quarter–time stipend.
2. 20 hours per week for a half–time stipend.
3. 30 hours per week for a three–quarter–time stipend.

Summer appointments cover the period from May 16–August 15. The appointing unit is responsible for informing the graduate assistant of the distribution of duties that are related to the summer appointment.

Graduate assistants must be registered each semester in which they hold assistantships. The minimum and maximum credit loads are as follows:

For a **quarter–time** graduate assistant, minimum enrollment is 6 credits for master's degree students and 3 credits for doctoral

students (*including* credits in courses numbered 899 or 999); maximum enrollment is 16 credits (*excluding* credits in courses numbered 899 or 999).

For a **half–time** assistant minimum enrollment is 6 credits for master's degree students and 3 credits for doctoral students (*including* credits in courses numbered 899 or 999); maximum enrollment is 12 credits (*excluding* credits in courses numbered 899 or 999).

For a **three–quarter–time** assistant, minimum enrollment is 3 credits (*including* credits in courses numbered 899 or 999); maximum enrollment is 8 credits (*excluding* credits in courses numbered 899 or 999).

Deviation from the minimum enrollment requirements listed above is permitted only during:

1. summer session, when a 3–credit minimum enrollment is allowed for all types of assistants
2. the semester in which the degree is granted, when all types of assistants must enroll for at least the number of credits required to complete the degree or meet the University minimum registration requirement.

Any deviation from the maximum enrollment requirements listed above must have the approval of the dean of the college *prior to enrollment*.

In meeting the credit requirements, graduate assistants should be enrolled in courses that are recognized as being of graduate level unless the student's department or school has granted written permission for course work constituting an exception to this rule. Visitor credits may count as part of a graduate assistant's credit load, if approved, in writing, by the student's department chair or unit director and the Dean of the Graduate School.

**Graduate Assistant (not covered by the Graduate Employees Union Contract) Illness, Injury, and Pregnancy Leave Policy**

A graduate assistant unable to fulfill the duties of his or her appointment because of illness or injury shall notify the administrator of his or her major unit as soon as circumstances permit. Similarly, a graduate assistant unable to fulfill the duties of her appointment because of pregnancy shall notify the administrator of her major unit as soon as circumstances permit.

During the illness, injury, or pregnancy the major unit shall adjust (reduce, waive, or reschedule) the graduate assistant's duties as those duties and the assistant's physical circumstances reasonably dictate. If total absence from duties becomes necessary, the major unit shall maintain the stipend of the appointment, provided the graduate assistant is still enrolled, for a period of two months, or to the end of the appointment period or of the semester, whichever should occur first.

The graduate assistant shall have the right to return to the assistantship, within the original terms of the appointment, at such time as he or she is able to reassume the duties of the position.

**Graduate Fellows**

Most fellowships require full–time pursuit of a graduate program. Unless the fellowship carries specific requirements for determining eligibility, the department or school is responsible for determining and certifying the full–time status of the student. All predoctoral graduate fellows paid through the University must be registered during the period for which payment is made.

# FINANCIAL AID for GRADUATE STUDENTS

Financial aid for graduate students is available in several forms. A number of scholarships and fellowships are awarded each year by The Graduate School to the colleges, and there are many opportunities for graduate assistant appointments for part-time teaching or research. The applicant should refer to the graduate application instruction sheet that accompanies the application for admission for details on applying for financial assistance.

Students already admitted to regular graduate status at Michigan State University and seeking an assistantship or other financial aid should consult the department, school, or college concerned. Since graduate assistantships and fellowships are usually awarded beginning in February for the following academic year, it is essential that applications and supporting documents be submitted in December or early in January to assure adequate consideration.

## GRADUATE ASSISTANTSHIPS

Graduate assistantship is a generic term referring to financial support of graduate students that results in a stipend and compensation and for which performance of defined duties is expected. Specific graduate assistant appointments are made in one of three categories: research assistants, teaching assistants represented by the Graduate Employees Union (GEU), and teaching assistants not represented by the GEU.

More than 3,000 assistantships in various fields are available to eligible graduate students. Graduate assistants must be actively pursuing degree programs and making satisfactory progress toward their degrees. The academic year encompasses two appointment periods: August 15–December 31 and January 1–May 15. During each appointment period a graduate assistant's responsibilities require an average of 10 hours per week for a quarter-time appointment, 20 hours per week for a half-time appointment, and 30 hours per week for a three-quarter-time appointment. Summer appointments cover the intervening period but the distribution of duties may vary. Anticipated distribution of duties over the weeks of a semester should be communicated to the graduate assistant by the appointing unit at the time of appointment.

To the extent that current policies and procedures contain provisions about wages, benefits, or other terms and conditions of employment, they are, for teaching assistants included in the collective bargaining unit, subject to negotiations with the Graduate Employees Union/American Federation of Teachers.

### Assistantship Levels

The following levels of assistantships are available:

**GRADUATE ASSISTANTS, LEVEL 1.** These graduate students have the bachelor's degree and have less than one year's experience as graduate assistants or as full-support fellows. They teach, do research, or are assigned such supervised assistant's duties as reading and grading papers.

**GRADUATE ASSISTANTS, LEVEL 2.** These graduate students have a relevant master's degree, or equivalent, and/or one year's experience as graduate assistants or as full-support fellows in the appointing department or school or in a unit considered relevant by the chairperson of the appointing department or school. They teach, do research, or perform administrative tasks with moderate supervision. Advancement from Level 1 to Level 2 is usually routine.

**GRADUATE ASSISTANTS, LEVEL 3.** These graduate students have a relevant master's degree, or equivalent, and have at least two year's experience as graduate assistants (or equivalent experience at the faculty level) in the appointing unit or in a unit considered relevant by the chairperson of the appointing unit. They teach, do research, or perform administrative tasks with minimum supervision. Advancement to the rank of Graduate Assistant, Level 3 is on a merit basis, with the above prerequisites being considered minimal. Within the range established for the University, the stipend depends on the qualifications of the individual and on the availability of funds in the appointing unit.

### Research Assistant and Teaching Assistant (not covered by the Graduate Employees Union Contract)

The information listed below is subject to yearly change. Please consult The Graduate School home page for the latest information at [www.msu.edu/user/gradschl](http://www.msu.edu/user/gradschl).

Stipend ranges for 2001-2002 for half-time, two-semester appointments are as follows: Level 1, \$9,594 to \$13,068, Level 2, \$10,566 to \$13,986, Level 3, \$11,052 to \$19,206.

Checks are distributed on the fifteenth of the month. Graduate assistants at any of the three levels may be appointed on a quarter-time, half-time, or three-quarter-time basis with an appropriate adjustment in the stipend. Changes in level, stipend, or percentage of time become effective only at the beginning of a semester. Additional benefits, even though the graduate student does not enroll for 10 credits or more, include the following:

1. Tuition waiver in the amount of 9 credits for Fall semester, 9 credits for Spring semester, and four credits for summer session. The tuition waiver will be provided during the period of the assistantship, to a maximum of 22 credits per year.
2. Exemption from out-of-state resident tuition. This exemption applies to a summer session that precedes or follows an appointment for an entire academic year, regardless of whether the student was previously enrolled at MSU. If the student does not have a signed graduate assistantship form before registering for summer session, he or she will pay out-of-state resident course fees and tuition. Upon receiving a copy of the appointment form for the entire academic year through the middle of the semester of the subsequent fall semester, the Office of the Registrar will refund the full amount of out-of-state tuition that the student paid for the summer session.
3. Matriculation and infrastructure/technology support fees are waived.
4. Health Insurance. Graduate assistants (domestic and international) are automatically enrolled in a health insurance plan, the premium of which is paid by the University. The plan provides the following coverage:
  - a. Fall appointment only: coverage from August 15 to February 14 of the following year.
  - b. Fall and Spring appointments—coverage from August 15 to August 14 of the following year.
  - c. Spring appointment only—coverage from January 1 to August 14.
  - d. Summer appointment only—coverage from May 15 to August 14.

Enrolled students may also insure their eligible spouse and/or dependent children (residing with the insured). For questions regarding coverage, enrollment or premium payment, contact *The Chickering Group* directly at 1-800-859-8452.

For questions concerning waiver processing or general information, contact the MSU Benefits office at (517) 353-4434 or (800) 353-4434, or email: [studentinsurance@hr.msu.edu](mailto:studentinsurance@hr.msu.edu). The Benefits Office is lo-

## GRADUATE EDUCATION

### Financial Aid for Graduate Students

cated at 1407 S. Harrison Road, Suite 140A (Nisbet Building), East Lansing, MI 48823 and on the web: MSU Benefits office: [www.hr.msu.edu/depts/benefits](http://www.hr.msu.edu/depts/benefits); The Chickering Group: [www.chickering.com](http://www.chickering.com).

5. Eligibility for treatment at Olin Health Center.

### Stipends and Additional Benefits, Other Information

Library privileges, intramural and recreative facilities privileges, and eligibility to join the Michigan State University Federal Credit Union.

Eligibility for student discounts on football, basketball, and/or hockey season tickets for themselves and their spouses.

Eligibility for free admission to other regularly scheduled MSU athletic events when presenting a valid student ID card.

Eligibility for student discounts on series tickets to professional performing arts events at the Wharton Center for Performing Arts, including one guest ticket at the student rate.

Exemption from payment of the Social Security tax on the stipend. Stipends are subject to income taxes with few exceptions. The taxability of stipends is subject to review by the Internal Revenue Service. Please call the Payroll Office for more information (355-5010). Please note that tax laws are subject to continuing revision and students should verify their tax liability each year.

### Registration and Credit Load Requirements

Graduate assistants must be registered each semester in which they hold an assistantship. Specific information on maximum and minimum credit loads is found under the *Graduate Assistants* heading in this section of this catalog.

## THE GRADUATE EDUCATION OPPORTUNITY PROGRAMS

This program, which is administered by The Graduate School, includes separate support programs:

1. **The Education Opportunity Fellowships.** This program consists of three components:
  - a. The EOF need-based award available to minorities and to welfare recipients, eligibility for which is determined by the Office of Financial Aid.
  - b. The Competitive Doctoral Enrichment Fellowships, a four-year program of support.
2. **Academic Achievement Graduate Assistantships.** These assistantships are an approach to the funding of graduate study in areas where racial minorities and/or women are underrepresented. To encourage recruitment and enrollment, the first year assistantship is paid from monies from the Graduate Education Opportunity Programs. The academic unit supports the remaining years of the graduate assistantship.

## GRADUATE-PROFESSIONAL STUDENT SCHOLARSHIPS

### College of Human Medicine Scholarship Fund

To aid students in the College of Human Medicine.

### Ingham County Medical Society

To assist students in the College of Human Medicine.

### College of Osteopathic Medicine Scholarship Fund

To aid students in the College of Osteopathic Medicine.

### Woman's Auxiliary Wayne County Medical Society

To provide scholarships for needy students in the College of Human Medicine.

## FELLOWSHIPS

A variety of graduate fellowships are available to Michigan State University students. Stipends and sources of support vary widely. In addition to applying for fellowships offered by the University and through the University by outside agencies, students are encouraged to apply for any outside sources of funds for which they may be eligible. Students are encouraged to consult such publications as the following, which are found in most libraries:

1. *Financial Aids for Graduate Students*, Bernard G. Max-well, Editor.
2. *The Foundation Directory*, Marianna O. Lewis, Editor.
3. *Scholarships, Fellowships, and Loans*, Norman Feingold.

Michigan State University annually awards a number of fellowships and tuition scholarships to encourage and assist high achieving students to pursue study leading to a graduate degree. A recipient of one of these awards must be enrolled in a degree program but is not required to give formal service to the University or to the department or school.

For a student not currently enrolled in a graduate program at Michigan State University, the application for admission also serves as an application for these awards. A student currently enrolled may apply through the respective department, school, or college.

### Registration and Credit Load Requirements

Specific information on registration requirements for fellowship recipients is given under *Maximum and Minimum Credits* heading in this section of this catalog.

### Affirmative Action Postdoctoral Fellowships

Unrestricted as to field but limited to those holding doctoral degrees from accredited institutions. Awardees must be citizens or permanent residents of the United States. The awards also pay tuition and course fees up to 12 credits per semester.

### CIC Minorities Fellowship Program

Michigan State University cooperates with the Committee on Institutional Cooperation (a consortium of the Big Ten universities plus the University of Chicago) to award these fellowships, which provide a stipend and tuition for four years of doctoral study to minority students in the humanities; the social sciences; and the natural sciences, mathematics, and engineering. Information on these fellowships may be obtained from The Graduate School.

### Graduate School Dissertation Completion Fellowships

These fellowships allow students to devote full time to writing the doctoral dissertation. Stipend is \$6,000 for the semester. This fellowships program is for students in the final months of their programs. About ten fellowships are awarded each semester. Application must be made directly to the department or school.

### Graduate School Incentive Fellowships

To encourage a greater number of Michigan State University graduate students to apply for national fellowships, the Graduate School has established a Graduate School Incentive Fellowship program for which students can compete if their initial applications for outside fellowships prove unsuccessful. One Incentive Fellowship will be awarded each semester. Contact The Graduate School for more details.

## Sponsored Fellowships

Fellowships sponsored by industries, foundations, and government agencies are available to high achieving students for graduate study in various departments or schools at Michigan State University. These fellowships are awarded through individual departments or schools. Information on available fellowships and the procedure for applying may be obtained by writing to the department or school concerned.

## University Distinguished Fellowship Program

These awards provide financial support for outstanding students who plan to enroll in a doctoral or master of fine arts program. Awards are based on demonstrated academic excellence and evidence of leadership potential. Doctoral students will receive four years of support. The first and fourth years are funded by the Graduate School, with no teaching or research service required of the student. During the second and third years of fellowship support, students receive a departmental assistantship that requires them to assist in research and teaching. Master of Fine Arts students are jointly supported by The Graduate School and their departments for three years. Distinguished Fellowship recipients beginning study in Fall 2002 will receive a 12-month stipend of \$20,000 plus health insurance. In addition, tuition and related fees will be waived up to a maximum of twelve credits during fall and spring semesters and six credits during summer semester. Applicants must be nominated by their department, school or program.

## University Graduate Recruiting Fellowships and University Graduate Fellowships

These awards are for recruiting new master's or doctoral students or for outstanding master's or doctoral students who are making good progress toward their degrees. Students must be U.S. citizens or permanent residents. Stipend levels are set by colleges.

# MASTER'S PROGRAMS

Graduate programs leading to a master's degree are offered by most colleges, departments and schools at Michigan State University. A student's program of study is administered by the officially designated unit and is subject to approval by the dean of the college. Some variations exist in the requirements of the several master's degree programs. It is important, therefore, for the student to become acquainted with all of the applicable University and unit requirements. The following description covers the all-University requirements, and most of the regulations, and will serve as a general guide.

## Master's Degrees Granted at Michigan State University and Minimum Credit Requirements

Following is a list of titles of master's degrees granted at Michigan State University.

Master of Arts	M.A.
Master of Arts for Teachers	M.A.T.
Master of Business Administration	M.B.A.
Master of Fine Arts	M.F.A.
Master of Labor Relations and Human Resources	M.L.R.H.R.
Master of Music	M.Mus.
Master of Science in Nursing	M.S.N.
Master of Public Administration	M.P.A.
Master of Science	M.S.
Master of Social Work	M.S.W. I
Master of Social Work	M.S.W. II
Master in Urban and Regional Planning	M.U.R.P.

## Credit Requirements

The minimum number of credits required for a master's degree program is 30 beyond the bachelor's degree. Some programs,

however, have higher minimum credit requirements. See the specific program sections in this publication.

## Residence

A minimum of 6 credits in the degree program must be earned in residence on campus, but many programs require more. Requests for waivers of this requirement must be submitted by the department or school responsible for the degree program to the appropriate college and then to the Dean of The Graduate School.

Certain off-campus and online master's programs do not require the minimum residence. Contact the department, school, or college offering a specific program for additional information.

## Planning a Master's Program and the Appointment of an Academic Adviser

An academic adviser for each student is assigned by the responsible unit in which the student takes the major work. The adviser alone, or in consultation with the student's advisory committee, will assist the student in planning a program satisfactory to the needs of the student and acceptable to the responsible unit. Changes in program plans may be made only with the approval of both the adviser and the responsible unit administrator, and, in some cases, the dean of the college.

## Programs of Study

Two types of programs are available:

- Plan A** consisting of prescribed course work, research, thesis, and a final oral examination.
- Plan B** consisting of prescribed course work, without a thesis, and with a final examination or evaluation.

Some colleges, departments, and schools offer programs only under Plan A or only under Plan B. Unless such limitation is explicitly stated in the catalog description of a program, both Plan A and Plan B are available.

## Course Work

Courses taken toward a master's degree should fit into a unified plan aimed at providing the student with both a comprehensive background and a depth of understanding in a major field. The number of course credits required in a major area is determined by each responsible unit. Some programs require a minor. Whether a minor area of study is required, optional, or not accepted toward a degree depends on the student's major program. In any case, the detailed course requirements are left to the judgment of the academic adviser and/or committee subject to the approval of the responsible unit administrator and the dean of the college. *More than half of the credits of the total required for a master's degree must be taken in courses at the 800 and 900 levels except as specifically exempted by the dean of the college.*

## Research and Thesis Plan A

A minimum of 4 credits in master's thesis research (course number 899) is required; some programs require more. The thesis, an abstract of the thesis, and an abstract title page must be prepared in accordance with the specifications in *The Formatting Guide-Master's Theses and Doctoral Dissertations*, a handbook that is available, along with a packet of required forms relating to

## GRADUATE EDUCATION

### Master's Programs

the thesis, from the Office of The Graduate School or from [www.msu.edu/user/gradschl](http://www.msu.edu/user/gradschl).

After the thesis adviser—and, if required by unit bylaws, members of the guidance or examination committee—indicate(s) that the thesis is acceptable for examination within the time frame determined by the department the semester in which graduation is anticipated, the student must submit copies of the thesis and abstract for distribution to the thesis adviser and other examiners. The thesis must be in completed form, with finished diagrams, etc. It must not, however, be bound. The oral examination in defense of the thesis must be scheduled within the time frame determined by the department the semester in which graduation is anticipated. After the examiners have reviewed and approved the thesis and voted to pass the student on the final oral examination in its defense, the student must incorporate into the thesis any recommended change(s) and corrections before presenting it to the thesis adviser for final review and signature of the bookplate. *Not later than the deadline date indicated by The Graduate School the semester in which graduation is expected*, the student must submit to the Office of The Graduate School a final unbound copy of the thesis, an additional copy of the abstract and the abstract title page, the signed bookplate, the microfilming and binding contract, and other forms required by and available from The Graduate School. Some departments, schools, or colleges require additional copies of the thesis, and it is the student's responsibility to provide such copies to them. In some colleges the master's thesis is first approved in the dean's office before the student submits it to The Graduate School for microfilming and binding.

All master's theses submitted to the Office of The Graduate School must be microfilmed. Michigan State University subscribes to the service offered by University Microfilms. One microfilm copy will be deposited in the University Library and will be available for interlibrary loan. The abstract will be published in *Master's Abstracts*, which will announce the availability of the thesis in film form. The microfilming and binding fee required of all master's students submitting theses, will cover the cost of the library microfilm copy, binding, and the publication and distribution of the abstract. The student may order additional bound copies for the department, the thesis director, or others through University Microfilms, or may make other arrangements for obtaining additional bound copies. The microfilming and binding contract, a list of local binderies, and further information may be obtained from the Office of The Graduate School.

An extra fee is charged if the thesis is to be copyrighted. Information about the amount of this fee and method of payment may be obtained from the Office of The Graduate School. Microfilming is considered by the University to be a form of publication. Publication by microfilm, however, does not preclude the printing of the thesis in whole or in part in a journal or monograph.

Refer to *Costs* in the *General Information* section of this catalog for more information.

### Examinations

Students in a **Plan A** master's degree program are required to pass an oral examination in defense of the thesis. However, students in certain programs are required to pass an oral examination that covers both a defense of the thesis and course work. *This examination must be scheduled within the time frame determined by the department the semester in which graduation is anticipated.* The examination for a Plan A master's degree is administered by an examining committee consisting of at least three Michigan State University regular faculty members (as defined in the *Faculty Handbook*).

"The 'regular faculty' of Michigan State University shall consist of all persons appointed under the rules of tenure and holding the

rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians. In addition, the principal administrative officer of each major educational and research unit of the University shall be a member of the 'regular faculty.' "

An exception may be granted by the Dean of The Graduate School to allow a non-tenure stream faculty member or an Academic Specialist to serve on a master's student's examination committee as one of the three required faculty members or as the chairperson of a master's student's examination committee or as the thesis adviser. With the approval of the chairperson or director of the department or school, an exception may be granted to allow an Emeritus faculty member to serve as one of the three required faculty members on a master's student's examination committee; in addition, an Emeritus faculty member may continue to serve as the chairperson of an examination committee. At the discretion of the examining committee, the presentation and defense of the thesis may be open to members of the academic community. The thesis and the student's performance on the oral examination must be approved by a majority vote of the examining committee.

A final examination or evaluation is required for students in a **Plan B** master's degree program with the following exceptions: the Plan B programs of study that lead to the Master of Business Administration degree, the Master of Labor Relations and Human Resources degree, the Master of Social Work degree, and the Professional Accounting degree. The examination or evaluation is administered in accordance with department or school and college rules by a committee consisting of at least two Michigan State University regular faculty members (as defined in the *Faculty Handbook*).

"The 'regular faculty' of Michigan State University shall consist of all persons appointed under the rules of tenure and holding the rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians. In addition, the principal administrative officer of each major educational and research unit of the University shall be a member of the 'regular faculty.' "

An exception may be granted by the Dean of The Graduate School to allow a non-tenure stream faculty member or an Academic Specialist to serve on a master's student's committee as one of the two required faculty members or as the chairperson of a master's student's committee. With the approval of the chairperson or director of the department or school, an exception may be granted to allow an Emeritus faculty member to serve as one of the two required faculty members on a master's student's committee; in addition, an Emeritus faculty member may continue to serve as a chairperson of a committee. In the event of significant discrepancy between the two assessments, the unit chair or coordinator would arrange for a third assessment to break the tie. The content and format of the examination or evaluation are specified by the department or school and college.

For both **Plan A** and **Plan B**, the student must be registered during the semester in which the examination or evaluation is administered (see *Maximum and Minimum Credits*). This requirement may be waived by the Dean of The Graduate School upon request of the chair or director of the academic unit, if the examination is administered during the summer session immediately following a spring semester during which the student was registered and/or prior to a fall semester in which the student will be registered.

### Academic Standards

Michigan State University is committed to high academic standards and expects all graduate students to excel in their particular majors.

A 3.00 cumulative grade–point average for all courses counting toward the master's degree is the minimum University standard; however, colleges, departments, or schools may establish a higher minimum standard.

Each college and department or school determines whether the minimum standards must be attained at the completion of a certain number of credits or by a specified interval after the student's first enrollment in the degree program. Some colleges, departments, and schools will not permit a student to remain in a program if there is an accumulation of more than a specified number of graduate credits with lower than a 3.0 grade even though the cumulative grade–point average is 3.00. A student who fails to meet the standards set by the University, college, and department or school will not be permitted to continue to enroll in the degree program, and appropriate action will be taken by the college, department, or school.

### Transfer Credits

As many as 9 semester credits of graduate course work (excluding research and thesis credits) may be transferred into a 30 credit master's degree program from other accredited institutions or international institutions of similar quality, if they are appropriate to a student's program and provided they were completed within the time limits approved for the earning of the degree desired at Michigan State University. The department or school chairperson or director and dean must grant approval. Only courses in which at least a 3.0 grade or its equivalent was received will be considered for transfer. Exceptions to this policy (at least a 2.0 grade) have been granted for the dual degree programs between MSU and the Michigan State University-Detroit College of Law (MSU-DCL). Those exceptions have been granted through academic year 2003-2004 at which time they will be reviewed.

Some colleges with programs that require more than 30 credits for the degree may accept more than 9 credits in transfer, but not more than one–fourth of the total number of credits required for the master's degree may be accepted in transfer.

See *Credits in the General Information* section of this catalog for additional information.

### Off–Campus Work

Credit for courses taken at Michigan State University off-campus instructional centers is of equal value to credit for on–campus courses. However, for the master's degree at least 6 credits must be earned in residence on campus, although some programs may require more. A student who plans to take off–campus courses should discuss the possibilities of acceptance of such work toward the degree with the academic adviser, department or school chairperson or director, or dean. Such approval should be obtained before enrolling in an off–campus course, just as is done for an on–campus course.

### Online Learning

The University offers selected degree programs (primarily, professional master's degree programs), certificate programs, and individual courses online. All University regulations, policies, and procedures described in this catalog that apply to on-campus programs also apply to online programs, unless specified otherwise.

MSU courses offered online are considered on-campus courses. Applicability of specific online MSU courses is determined by the requirements of specific programs.

For more information about online learning, visit <http://ntweb10.ais.msu.edu/onlinecontinuingeducation/>.

### Time Limit

Unless otherwise specified, the time limit for the completion of the requirements for the master's degree is five calendar years from the date of enrollment in the first course included for degree certification. The colleges of Arts and Letters, Human Medicine, Natural Science, Nursing, Osteopathic Medicine, Social Science, and Veterinary Medicine permit six years with the following exception: the time limit for the completion of the Master of Fine Arts degree in the College of Arts and Letters is nine years.

Michigan State University must reserve the right to modify or eliminate programs that are described in this publication. In the event such an action is taken, students affected will be advised by their units of the options available to them to complete their degrees. Every reasonable effort will be made to permit students to complete these programs or similar programs.

### REQUIREMENTS FOR A SECOND, JOINT, OR DUAL MASTER'S DEGREE

A candidate for a second master's degree, or for joint or dual master's degrees, from Michigan State University may request the application of up to 9 credits, appropriate to both programs, from the first master's degree program to the second or from one master's program to another. These 9 credits must have been earned within the time limitations of the college concerned. Credits used to satisfy the requirements of one master's degree may not be used to satisfy the residency requirements of another master's degree.

### REQUIREMENTS FOR A JOINT MASTER'S DEGREE AND MEDICAL DEGREE

A student who is enrolled in a graduate–professional program in MSU's College of Human, Osteopathic, or Veterinary Medicine, and who is also enrolled in a master's degree program at Michigan State University may request the application of up to 9 credits, appropriate to both programs, from the graduate–professional program to the master's degree program, as well. These credits must have been earned within the time limit for completing the master's degree program in which the student is enrolled.

### EDUCATIONAL SPECIALIST PROGRAM

For information about the Educational Specialist program, refer to the *Educational Specialist* statement in the College of Education section of this catalog.

## DOCTORAL PROGRAMS

Michigan State University offers programs leading to the degrees of Doctor of Philosophy (Ph.D.), Doctor of Musical Arts (D.M.A.), Doctor of Medicine (M.D.), Doctor of Osteopathic Medicine (D.O.), and Doctor of Veterinary Medicine (D.V.M.).

Programs of study for doctoral degrees are administered by guidance committees, departments, schools, divisions, and colleges subject to policies approved by the University Graduate Council.

## GRADUATE EDUCATION

### Doctoral Programs

Information about the programs leading to graduate–professional degrees may be obtained from the sections of this catalog describing the colleges of Human Medicine, Osteopathic Medicine, and Veterinary Medicine.

### Credit Requirements

Normally three or more academic years of study and research beyond the bachelor's degree are needed to complete a Ph.D. or D.M.A. program, although time is less important than scholarly achievement. The minimum number of courses or course credits required for a doctoral degree is determined by individual colleges and/or departments or schools.

### Residence

One year of residence on the campus after first enrollment for doctoral degree credit is required to permit the student to work with and under the direction of the faculty, and to engage in independent and cooperative research utilizing University facilities. A year of residence will be made up of two consecutive semesters, involving the completion of at least six credits of graduate work each semester.

### Planning a Doctoral Program and Appointment of a Guidance Committee

Each graduate student admitted to a doctoral program has the responsibility to form a guidance committee with the approval and the assistance of the department or school chairperson or director or designated representative. The guidance committee will consist of at least four Michigan State University regular faculty at least three of whom, including the committee chairperson, possess an earned doctoral degree, preferably of the same type that the student is seeking (for example, Ph.D.). For the DMA degree, the guidance committee will consist of at least four regular MSU faculty, at least two of whom, including the committee chairperson, possess the DMA degree. As defined in the *Faculty Handbook*: “The ‘regular faculty’ of Michigan State University shall consist of all persons appointed under the rules of tenure and holding the rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians. In addition, the principal administrative officer of each major educational and research unit of the University shall be a member of the ‘regular faculty.’”

An exception may be granted by the Dean of The Graduate School to allow a non–tenure stream faculty member or an Academic Specialist to serve on a doctoral student's guidance committee as one of the four required faculty members or as the chairperson of a doctoral student's guidance committee. With the approval of the chairperson or director of the department or school, an exception may be granted to allow an Emeritus faculty member to serve as one of the four required faculty members on a doctoral student's guidance committee; in addition, an Emeritus faculty member may continue to serve as the chairperson of a guidance committee. More than four persons may be members of the guidance committee. Persons who are not MSU regular faculty who can contribute to the student's program may serve as members of the guidance committee and assist in the work of the committee, providing that the number of such persons does not exceed the number of regular faculty on the committee. In consultation with the student, the guidance committee plans the entire program, including examinations, and thereafter supervises it, making modifications as needed until the degree is completed.

The guidance committee shall be formed within the first two semesters of doctoral study, or within two semesters beyond the master's degree or its equivalent. Within one semester after the

committee has met, the chairperson of the guidance committee shall file a guidance committee report with the dean of the college, listing all degree requirements. A copy of this guidance committee report shall also be given to the graduate student. This guidance committee report, as changed or amended in full consultation between the graduate student and the committee and approved by the appropriate department or school chairperson or director and the dean of the college, shall be regarded as the statement of program requirements. The program will not be considered binding unless signed by the student.

The guidance committee report includes a statement of the student's proposed program, with a timetable and tentative dissertation topic. In the report, the committee also recommends whether to accept any graduate credit beyond the master's degree level that was taken at other institutions; whether any study may be done *in absentia*, and under what conditions; what language examinations or alternative program, if any, the student must complete; and which member of the committee should later direct the research that is to form the basis of the student's dissertation.

Once designated, the guidance committee has the responsibility to meet periodically to oversee the graduate student's progress for as long as the graduate student continues in good standing. Any desired or required changes in the membership of the guidance committee may be made by the graduate student with the concurrence of the unit chairperson or director or designated representative, or by the unit with the concurrence of the graduate student in accordance with University, college, and unit policy. The membership of the guidance committee, with the concurrence of the graduate student, may be changed as appropriate to the dissertation topic. Guidance committee chairpersons on leave shall provide for the necessary guidance of their advisees during their absence.

The guidance committee is responsible for insuring the adequacy of the overall program, in keeping with the general policy that three or more academic years of study and research beyond the bachelor's degree are required.

### Program of Study

During the course of study leading to the completion of the doctorate, a student will meet University, college, and department or school requirements, including:

1. Taking certifying or qualifying examinations as required by the department, school, or college.
2. Completing courses in the major and related fields as prescribed by a guidance committee.
3. Fulfilling any college or departmental or school language requirements.
4. Meeting the academic standards, including maintaining a 3.00 cumulative grade–point average, required by University, college, and department or school policies.
5. Passing doctoral comprehensive examinations covering the major and related fields.
6. Preparing a dissertation that is acceptable to the guidance committee and that is based on original research which makes a significant contribution to knowledge.
7. Passing a final oral examination in defense of the dissertation.

### Examinations Other Than Comprehensives

Certain colleges, departments, or schools may require that a student early in the program take some form of certifying or qualifying examination. The results are used to determine if the student should be encouraged to proceed in a doctoral program, and, if so, to determine any weakness that exists in background knowl-

edge which may be strengthened by including appropriate courses in the doctoral program.

### Course Requirements

Courses (in addition to those numbered 999) will be prescribed by the guidance committee to insure that the student will have a comprehensive knowledge of a major field and related subjects. The courses that a student is required to complete will depend upon prior academic background in relation to the selected graduate program.

### Doctoral Comprehensive Examinations

When the prescribed course work is substantially complete as defined by the guidance committee, the doctoral student is eligible to take the comprehensive examinations covering the major and related fields. At least one component of the comprehensive examinations must be written and must be maintained in the department or school office for three years. Colleges, departments, or schools may also require an oral component. Students must be registered during the semester(s) in which they take comprehensive examinations (see *Maximum and Minimum Credits*). This requirement may be waived by the Dean of The Graduate School upon request of the chair or director of the academic unit, if the examination is administered during the summer session immediately following a spring semester during which the student was registered and/or prior to a fall semester in which the student will be registered.

Scheduling, composing, and evaluating the comprehensive examinations is done in accordance with college, department, and school policy. In the case of a comprehensive examination that consists of more than one part, the date that the student passes the examination is the date on which he or she passes the final component of the comprehensive examination. The department, school, or college shall make available to doctoral students upon matriculation a written explanation of comprehensive examination procedures. The comprehensive examinations must be completed before an oral defense of the dissertation can be scheduled.

For the Doctor of Philosophy and the Doctor of Musical Arts degrees, all of the comprehensive examinations must be passed within five years and all remaining requirements for the degree must be completed within eight years from the time when a student begins the first class at Michigan State University that appears on his or her doctoral program of study. Application for extensions of the eight-year period of time toward degree must be submitted by the department/school for approval by the dean of the college and the Dean of The Graduate School. Upon approval of the extension, doctoral comprehensive examinations must be passed again.

### Research

Each student working toward a Doctor of Philosophy degree must conduct original research upon which a dissertation which makes a significant contribution to knowledge is to be prepared and published. The research is to be under the direction of and acceptable to the guidance committee. All doctoral students must register for and successfully complete a minimum of 24 credits of doctoral dissertation research (course number 999). For additional information see *Costs* in the *General Information* section of this catalog.

It is a policy of Michigan State University to permit and facilitate dissertation research by students from developing nations in their home countries, whenever feasible.

### Dissertation and Abstract

The dissertation, an abstract of the dissertation, and an abstract title page must be prepared in accordance with the specifications in the *Formatting Guide-Master's Theses and Doctoral Dissertations*, a handbook that is available, along with a packet of required forms relating to the dissertation, from the Office of The Graduate School or from [www.msu.edu/user/gradschl](http://www.msu.edu/user/gradschl).

After the guidance committee chairperson—and, if required by unit bylaws, other members of the guidance committee—indicate(s) that the dissertation is acceptable for examination, and not later than the date determined by the department the semester in which graduation is anticipated, the student must submit copies of the dissertation and abstract for distribution to the guidance committee chairperson, other guidance committee members, and, if necessary, to any appointed examiner. The dissertation must be in completed form, with finished diagrams, etc. It must not, however, be bound. After the guidance committee and any appointed examiner have reviewed and approved the dissertation and after the student has passed the final oral examination in its defense, the student must incorporate into the dissertation any recommended change(s) and corrections before presenting it to the chairperson of the guidance committee for final review and signature of the bookplate. *Not later than the deadline date indicated by The Graduate School the semester in which graduation is expected*, the student must submit to the Office of The Graduate School a final unbound copy of the dissertation, an additional copy of the abstract and the abstract title page, the signed bookplate, the microfilming and binding contract, and other forms required by and available from The Graduate School. Some departments, schools, or colleges require additional copies of the dissertation, and it is the student's responsibility to provide such copies to them.

### Final Oral Examination

The final oral examination in defense of the dissertation is conducted and evaluated by the guidance committee and, at the discretion of the dean of the college, by one appointed faculty member whose voting status is determined by the college. Other interested faculty members may attend the examination without vote. The dissertation and the student's performance on the final oral examination must be approved by a positive vote by at least three-fourths of the voting examiners and with not more than one dissenting vote from among the Michigan State University regular faculty members of the guidance committee.

The final oral examination must be scheduled for a date not earlier than two weeks after the dissertation and abstract have been submitted to the chairperson of the guidance committee, other guidance committee members, and any appointed examiner. The student must be registered during the semester in which the final oral examination is taken. See *Maximum and Minimum Credits* in this section of the catalog.

### Microfilming and Publication of Dissertation

All doctoral dissertations submitted to the Office of The Graduate School must be microfilmed. Michigan State University subscribes to the service offered by University Microfilms International. One microfilm copy will be deposited in the University Library and will be available for interlibrary loan. The abstract will be published in *Dissertation Abstracts*, which will announce the availability of the dissertation in film form. The microfilming and binding fee, required of all doctoral students submitting dissertations, will cover the cost of the library microfilm copy, binding, and the publication and distribution of the abstract. The student may order additional bound copies for the department, the school, the director, or others through University Microfilms International, or

## GRADUATE EDUCATION

### Doctoral Programs

may make other arrangements for obtaining additional bound copies.

An extra fee is charged if the dissertation is to be copyrighted. Information about the amount of this fee and method of payment may be obtained from the Office of The Graduate School. Micro-filming is considered by the University to be a form of publication. Publication by microfilm, however, does not preclude the printing of the dissertation in whole or in part in a journal or monograph.

Refer to *Costs* in the *General Information* section of this catalog.

### Academic Standards

Michigan State University is committed to high academic standards and expects all doctoral students to excel in their programs of study.

A 3.00 cumulative grade–point average in the degree program is the minimum University standard, but colleges, departments, or schools may establish a higher minimum standard. However, attainment of the minimum grade–point average is in itself an insufficient indicator of potential for success in other aspects of the program and in the field. The guidance committee and academic unit are jointly responsible for evaluating the student's competency (as indicated by, e.g., grades in core and other courses, research performance, and development of professional skills) and rate of progress (as indicated by, e.g., the number of courses for which grades have been assigned or deferred). Written evaluations shall be communicated to the graduate student at least once a year, and a copy of such evaluations shall be placed in the graduate student's file. A student whose performance does not meet the standards of quality will not be permitted to continue to enroll in the degree program, and appropriate action will be taken by the college, department, or school.

### Transfer Credits

Graduate credits may be transferred from other accredited institutions or international institutions of similar quality if they are appropriate to a student's program and provided they were completed within the time limits approved for the earning of the degree desired at Michigan State University. The department or school chairperson or director and dean must grant approval. Only graduate–level courses in which at least a 3.0 (B) grade was received will be considered for transfer. Exceptions to this policy (at least a 2.0 grade) have been granted for the dual degree programs between MSU and the Michigan State University-Detroit College of Law (MSU-DCL). Those exceptions have been granted through academic year 2003-2004 at which time they will be reviewed.

See *Credits* in the *General Information* section of this catalog for additional information.

### Work in Absentia

Candidates for the doctoral degree may, with the approval of the guidance committee, carry on some of the work *in absentia*. Arrangements for registration may be made by applying at the office of the dean of the appropriate college.

### Time Limit

For the Doctor of Philosophy and the Doctor of Musical Arts degrees, all of the comprehensive examinations must be passed within five years and all remaining requirements for the degree must be completed within eight years from the time when a student begins the first class at Michigan State University that appears on his or her doctoral program of study. Application for extensions of the eight-year period of time toward degree must be

submitted by the department/school for approval by the dean of the college and the Dean of The Graduate School. Upon approval of the extension, doctoral comprehensive examinations must be passed again.

Michigan State University must reserve the right to modify or eliminate programs that are described in this publication. In the event such an action is taken, students affected will be advised by their units of the options available to them to complete their degrees. Every reasonable effort will be made to permit students to complete these programs or similar programs.

### Dual Major Doctoral Degrees

All dual major doctoral degrees must be approved by the Dean of The Graduate School. A request for the dual major degree must be submitted within one semester following its development and within the first two years of the student's enrollment at MSU. A copy of the guidance committee report must be attached. The following conditions must prevail:

1. The intent to receive the degree in two areas must be outlined in the guidance committee report.
2. The content of the guidance committee report must reflect the required standards for both departments.
3. The course work must be satisfactory to both departments.
4. The comprehensive examination must be passed to the satisfaction of both departments.
5. A guidance committee including members from both departments must be satisfied that the dissertation represents a contribution meeting the usual standards in both areas.

### Special Programs

The following regulations pertain to (1) students who hold a Doctor of Philosophy (Ph.D.) degree and wish to pursue a second Ph.D. program, or who wish to pursue two Ph.D. programs simultaneously, and (2) students who hold a professional doctoral degree (e.g., M.D., D.O., D.V.M.) and wish to pursue a Ph.D. program, or who wish to pursue a professional doctoral program and another doctoral degree program simultaneously:

1. Admission is determined by the respective college(s), department(s), or school(s), within current University guidelines.
2. A guidance committee composed of a chairperson and at least three additional members is appointed by the unit in which the student is enrolled, and the academic program developed in consultation with the student.
3. The request for the academic program must be submitted to the Office of The Graduate School, within one month following its development by the guidance committee, for review and approval. A copy of the guidance committee report must be attached.
4. The Office of The Graduate School review includes appropriateness of the guidance committee membership, the academic program, and courses or credits applied to the two programs.

### CIC TRAVELING SCHOLAR PROGRAM

Doctoral students at Michigan State University are eligible to apply for admission to the "Traveling Scholar Program," sponsored by the Big Ten Universities and University of Chicago through the Committee on Institutional Cooperation (CIC).

The CIC program enables selected doctoral students to take advantage of special facilities available on the campus of one of the participating universities but not available on the home campus. Such facilities include special course offerings, research opportunities, laboratories, and library collections. Students

participating in this program, known as "CIC Traveling Scholars," are limited to two semesters or three quarters on another campus.

A CIC Traveling Scholar from Michigan State University will be registered on the MSU campus, and fees will be collected and kept by this institution. No additional fees will be charged. Credit for work taken under this program will be accepted at this University.

A doctoral student interested in this program should contact The Graduate School for instructions and formal processing.

## MICHIGAN INTERCOLLEGIATE GRADUATE STUDIES (MIGS) PROGRAM

The Michigan Intercollegiate Graduate Studies (MIGS) Program enables graduate students of Michigan institutions offering graduate degree programs to take advantage of unique educational opportunities at other Michigan institutions offering graduate degrees.

Any graduate student in good standing in a master's, educational specialist, or doctoral degree program is eligible to participate. Students on a MIGS enrollment pay tuition and other fees at the host institution for the services rendered. All credits earned under a MIGS enrollment are accepted by a student's home institution as if offered by that institution. This type of enrollment is limited to one semester for master's or educational specialist degree students, and two semesters for doctoral degree students.

Students interested in this program should contact The Graduate School for further information and instructions.

## INTERDEPARTMENTAL PROGRAMS

### INTERDEPARTMENTAL GRADUATE PROGRAMS IN URBAN STUDIES

Interdepartmental graduate programs in urban studies at Michigan State University are coordinated by Urban Affairs Programs. They are administered by specific departments, schools and colleges. Each of these programs represents study in a disciplinary major (e.g., sociology) combined with study in urban studies. Only those interdepartmental graduate programs in urban studies that are identified below are available. The student does not have the option of completing a master's or doctoral degree with a major in urban studies alone. The departments and schools referenced below are represented on the urban studies faculty.

The interdepartmental graduate programs in urban studies focus on the investigation of the causes, conditions, and consequences of problems related to racial, social, economic, and political inequality. The goal of these programs is to prepare students for careers that will enable them to enhance the quality of urban living by facilitating urban residents' access to opportunities and by ameliorating the unfavorable conditions that lead to inequalities among urban residents. These programs are designed to prepare students to become university teachers, researchers, policy analysts, policy makers, and administrators who are knowledgeable about the problems facing urban areas and who are committed to seeking resolutions to those problems.

The urban studies graduate programs are interdisciplinary and interdepartmental programs of study, research, and public service. Each program consists of (1) a disciplinary component, which involves meeting the specific requirements for a master's

or doctoral degree within one of the participating departments or schools, and (2) an urban studies component, which involves meeting the specific master's or doctoral requirements listed below.

The interdepartmental graduate programs in urban studies are listed below by the units that administer them:

#### College of Agriculture and Natural Resources

- Department of Forestry  
Forestry–Urban Studies  
(Master of Science and Doctor of Philosophy)
- Department of Park, Recreation and Tourism Resources  
Park, Recreation and Tourism Resources–Urban Studies  
(Master of Science and Doctor of Philosophy)
- Department of Resource Development  
Resource Development–Urban Studies  
(Master of Science and Doctor of Philosophy)

#### College of Arts and Letters

- Department of History  
History–Urban Studies  
(Master of Arts and Doctor of Philosophy)

#### College of Communication Arts and Sciences

- Department of Audiology and Speech Sciences  
Audiology and Speech Sciences–Urban Studies  
(Doctor of Philosophy)
- Department of Communication  
Communication–Urban Studies (Master of Arts)
- Department of Telecommunication  
Telecommunication–Urban Studies (Master of Arts)

#### College of Social Science

- School of Criminal Justice  
Criminal Justice–Urban Studies (Master of Science)
- Department of Geography  
Geography–Urban Studies (Master of Arts)  
Urban and Regional Planning–Urban Studies  
(Master in Urban and Regional Planning)
- School of Labor and Industrial Relations  
Labor Relations and Human Resources–Urban Studies  
(Master of Labor Relations and Human Resources)
- Department of Political Science  
Political Science–Urban Studies (Doctor of Philosophy)  
Public Administration–Urban Studies  
(Master of Public Administration)
- Department of Psychology  
Psychology–Urban Studies  
(Master of Arts and Doctor of Philosophy)
- School of Social Work  
Organizational and Community Practice–Urban Studies  
(Master of Social Work)  
Clinical Social Work–Urban Studies  
(Master of Social Work)
- Department of Sociology  
Sociology–Urban Studies  
(Master of Arts and Doctor of Philosophy)

### Master's Degree

#### Admission

A student who plans to pursue an interdepartmental graduate program in urban studies must submit an application for admission to a master's degree program within a participating department or school. The student may be required to submit additional information to the urban studies faculty.

Applications for admission and for graduate assistantships for fall semester should be submitted by February 1. Applications for admission and for graduate assistantships for spring semester should be submitted by October 1.

**GRADUATE EDUCATION**  
**Interdepartmental Programs**

Admission to an interdepartmental master's degree program in urban studies requires approval by the faculty of a specific participating department or school and by the urban studies faculty. A student seeking admission must have a minimal grade–point average of 3.00, must have been admitted to a master's program in a specific department or school, and must have an academic background or demonstrable work experience in issues related to equality and justice in cities. In special cases, an applicant may be admitted on a provisional basis.

**Requirements for the Degree**

The interdepartmental master's programs in urban studies require a guidance committee, with at least one member from the urban studies faculty and at least one member from a unit other than the one that administers the student's major. Students must meet the degree requirements of their department or school of affiliation, of the college in which they are enrolled, and of the urban studies component of the program.

The requirements for the urban studies component of the interdepartmental master's programs in urban studies are listed below. Requirements 2 and 3 may be met as part of the disciplinary major requirements. The core courses in Requirement 1 may satisfy some disciplinary elective requirements.

	CREDITS	
1. Required Urban Studies Core Courses	9	
a. <b>Policy Course:</b> One of the following courses (3 credits):		
PLS 811 Proseminar in Policy Analysis	3	
SW 820 Social Welfare Policy and Services	3	
UP 848 Urban Policy Analysis	3	
b. <b>Theory Course:</b> One of the following courses (3 credits):		
RD 870 Community Resource Development	3	
SOC 838 Comparative Urban Theory	3	
c. <b>Race and Class Course:</b> One of the following courses (3 credits):		
FCE 892 Seminar in Family and Child Ecology	3	
HST 813 Race and Poverty in Cities: A Historical Perspective	3	
SOC 831 Intersections of Class, Race, and Gender	3	
SOC 834 Social Class and Social Change	3	
SOC 836 Race, Politics, and Social Structure	3	
For Family and Child Ecology 892 to be counted toward the requirements for an interdepartmental graduate program in urban studies, the content of this course must be specifically related to or focused on race and class.		
2. Quantitative Social Research Methods	3	
One 3–credit course that is relevant to the conduct of urban policy research approved by the urban studies faculty.		
3. One of the following options approved by the student's guidance committee:	6	
a. Thesis (6 credits). This option is for students who are pursuing a master's degree under Plan A (with thesis). The thesis must be an integration of the student's disciplinary major and urban studies theory or applications.		
b. Internship (6 credits). This option is for students who are pursuing a master's degree under Plan B (without thesis) and who, in the judgment of the guidance committee, have not had sufficient practical experience in the field of urban studies.		
c. Additional course work (6 credits). This option is for students who are pursuing a master's degree under Plan B (without thesis) and who, in the judgment of the guidance committee, have had sufficient practical experience in the field of urban studies. To satisfy this option, students must complete one of the following groups of courses:		
(1) Two additional courses from the list of courses in item 1.c. above.		
(2) Two 3–credit courses in one of the following four urban studies policy areas: Economic Development, Social Services, the Environment, or Developing Societies. The courses that are used to satisfy this option must be approved by the urban studies faculty.		
TOTAL	18	

Upon meeting the departmental or school, college, and urban studies component requirements, the student will be awarded a master's degree in a disciplinary major combined with an urban studies component (e.g., Sociology–Urban Studies) on the recommendation of the chairperson or director of the department or school, the urban studies faculty, and the Dean of the College in which the student is enrolled.

**Doctoral Degree**

**Admission**

A student who plans to pursue an interdepartmental graduate program in urban studies must submit an application for admission to a doctoral degree program within a participating department or school. The student may be required to submit additional information to the urban studies faculty.

Applications for admission and for graduate assistantships for fall semester should be submitted by February 1. Applications for admission and for graduate assistantships for spring semester should be submitted by October 1.

Admission to an interdepartmental doctoral degree program in urban studies requires approval by the faculty of a specific participating department or school and by the urban studies faculty. A student seeking admission must have a minimal grade–point average of 3.00, must have been admitted to a doctoral degree program in a specific department or school, and must have an academic background or demonstrable work experience in issues related to equality and justice in cities. In special cases, an applicant may be admitted on a provisional basis.

**Requirements for the Degree**

In the interdepartmental doctoral programs in urban studies, at least one member of a student's guidance committee must be from the urban studies faculty and at least one member must be from a unit other than the one that administers the student's major. Students must meet the degree requirements of their department or school of affiliation, of the college in which they are enrolled, and of the urban studies component of the program.

The requirements for the urban studies component of the interdepartmental doctoral programs in urban studies are listed below. Requirements 2, 3, 4, and 5 may be met as part of the disciplinary major requirements. The core courses in Requirement 1 may satisfy disciplinary elective requirements.

	CREDITS	
1. Required Urban Studies Core Courses	12	
a. <b>Policy Course:</b> One of the following courses (3 credits):		
PLS 811 Proseminar in Policy Analysis	3	
SW 820 Social Welfare Policy and Services	3	
UP 848 Urban Policy Analysis	3	
b. <b>Theory Course:</b> One of the following courses (3 credits):		
RD 870 Community Resource Development	3	
SOC 838 Comparative Urban Theory	3	
c. <b>Race and Class Courses:</b> Two of the following courses (6 credits):		
FCE 892 Seminar in Family and Child Ecology	3	
HST 813 Race and Poverty in Cities: A Historical Perspective	3	
SOC 831 Intersections of Class, Race, and Gender	3	
SOC 834 Social Class and Social Change	3	
SOC 836 Race, Politics, and Social Structure	3	
For Family and Child Ecology 892 to be counted toward the requirements for an interdepartmental graduate program in urban studies, the content of this course must be specifically related to or focused on race and class.		
2. Required Urban Policy Area of Specialization	6	
A minimum of two courses in one of the following four policy areas: Urban Economic Development Policy, Urban Environmental Policy, Urban Social Services Policy, or Urban Policy in Developing Societies.		
3. Quantitative Social Research Methods	6	
A minimum of two courses totaling at least 6 credits that are relevant to the conduct of urban policy research approved by the urban studies faculty.		
TOTAL	24	

4. Comprehensive Examinations: Comprehensive examinations consistent with college and departmental or school policies will be administered by the student's guidance committee. A majority decision of the members of the guidance committee is required for passing.
5. Dissertation: A dissertation proposal in the student's urban policy area of specialization must be approved by the student's guidance committee before the research is begun. A final oral defense of the dissertation will be administered in accordance with college and departmental or school policies after completion of the project.

Upon meeting the departmental or school, college, and urban studies component requirements, the student will be awarded a doctoral degree in a disciplinary major combined with an urban studies component (e.g., Sociology–Urban Studies) on the recommendation of the chairperson or director of the department or school, the urban studies faculty, and the Dean of the College in which the student is enrolled.

## MULTIDEPARTMENTAL DOCTORAL PROGRAMS in ENVIRONMENTAL TOXICOLOGY

Each of the multidepartmental doctoral programs in environmental toxicology represents study in a disciplinary major (e.g., zoology) combined with study in environmental toxicology. Only those multidepartmental doctoral programs in environmental toxicology that are identified below are available. The student does not have the option of completing a Doctor of Philosophy degree with a major in environmental toxicology alone. The departments referenced below are represented by members of the environmental toxicology faculty.

The multidepartmental doctoral programs in environmental toxicology allow students much flexibility in choosing areas for study. Each student's course of study is planned with that individual's particular interests, capabilities, and professional goals in mind.

For each multidepartmental doctoral program in environmental toxicology, the student must meet the requirements for the Doctor of Philosophy degree with the disciplinary major (e.g., zoology) and the requirements for the environmental toxicology component of the program that are specified below. In partial fulfillment of the environmental toxicology component, the student must complete one of two tracks: the environmental track or the toxicology track. Within the environmental track there are four major interest areas: environmental dynamics; economics, policy, and law; waste management; and analytical chemistry. When all of the requirements for the degree have been met, both the chairperson of the department that administers the student's disciplinary major and the director of the environmental toxicology program will recommend the student for the degree.

Where course requirements for a disciplinary major and for the environmental toxicology component of the program overlap, a given course may be counted toward both types of requirements.

In addition to meeting the requirements of the University and of the department and college in which the student is enrolled, the student must meet the requirements specified below.

### Admission

A student must be accepted for graduate study in one of the departments represented on the environmental toxicology faculty *before* applying for admission to the environmental toxicology program. Admission to the program is by environmental toxicology faculty approval. A student seeking admission must have earned at least a bachelor's degree; have completed with a minimum grade–point average of 3.00 sufficient credits in the biological, behavioral, and physical sciences to indicate probable success in the program; and have been accepted as an advisee by a member of the environmental toxicology faculty. In special cases an applicant with deficiencies in background courses may be admitted on a provisional basis. Students admitted on a provisional basis will not be considered for advanced degrees until they have fulfilled the provisional requirements.

### Guidance Committee

The major professor and at least one other faculty member of the guidance committee must be members of the environmental toxicology faculty. At least one member of the committee must be from a department other than the one that administers the student's disciplinary major.

### Requirements for the Environmental Toxicology Component of Multidepartmental Doctoral Programs in Environmental Toxicology

1. The topic of the Ph.D. dissertation research must be in the broad area of environmental toxicology and be acceptable to the environmental toxicology faculty.
2. The student must complete with a grade–point average of at least 3.00 the requirements for either the environmental track or the toxicology track.
3. The student must attend and participate in a seminar course in environmental toxicology.

The multidepartmental doctoral programs in environmental toxicology are listed below by the units that administer them:

#### College of Agriculture and Natural Resources

Department of Animal Science  
Animal Science–Environmental Toxicology  
Department of Crop and Soil Sciences  
Crop and Soil Sciences–Environmental Toxicology  
Department of Fisheries and Wildlife  
Fisheries and Wildlife–Environmental Toxicology  
Department of Food Science and Human Nutrition  
Food Science–Environmental Toxicology  
Department of Forestry  
Forestry–Environmental Toxicology  
Department of Resource Development  
Resource Development–Environmental Toxicology

#### College of Engineering

Department of Civil and Environmental Engineering  
Environmental Engineering–Environmental Toxicology

#### College of Human Ecology

Department of Food Science and Human Nutrition  
Human Nutrition–Environmental Toxicology

#### College of Natural Science

Department of Biochemistry and Molecular Biology  
Biochemistry and Molecular Biology–Environmental  
Toxicology  
Department of Botany and Plant Pathology  
Botany and Plant Pathology–Environmental Toxicology  
Department of Chemistry  
Chemistry–Environmental Toxicology  
Department of Entomology  
Entomology–Environmental Toxicology  
Department of Geological Sciences  
Environmental Geosciences–Environmental Toxicology  
Department of Zoology  
Zoology–Environmental Toxicology

#### College of Veterinary Medicine

Microbiology–Environmental Toxicology  
Pathology–Environmental Toxicology  
Pharmacology and Toxicology–Environmental Toxicology