The College of Education at Michigan State University, www.education.msu.edu, is a community of students, educators and researchers prepared to meet the challenges of education and kinesiology. We are committed to improving practice in schools and communities together through exemplary research, teaching and service. With an intensive five-year teacher preparation program, rigorous undergraduate study in kinesiology and athletic training, and several nationally ranked graduate programs, the College of Education prepares leaders ready to make an impact on learning and human development around the world.

Under the guidance of renowned administrators and faculty members in four departments, students have opportunities to pursue or advance careers in teaching (elementary, secondary and special education), educational administration, higher education, research, policymaking, student affairs, rehabilitation counseling, school psychology, fitness training, sport leadership, and health care fields e.g., preparation for physical therapy, work as a physician assistant or attending medical school. Degree programs are offered on-campus, online and in hybrid formats, which blend face-to-face and online learning. See program sections for details on programs available.

The College of Education has established a reputation for excellence and visionary thinking in its efforts to improve teaching and learning across our nation and world, particularly within the contexts of urban and global education. The faculty remains committed to addressing the educational and physical needs of all people across the life span, and to working closely with educators, leaders and policymakers in the field.

Innovative teacher education programs, outstanding faculty, relationships with practicing professionals and strong research opportunities make the MSU College of Education a dynamic place for learning to teach and contribute to the fields of education and kinesiology. The college is proud to claim more than 64,000 alumni, each touching lives in their own way around the world.

UNDERGRADUATE PROGRAMS

The College of Education offers four bachelor’s degree programs: the Bachelor of Science degree in Athletic Training, the Bachelor of Arts degree in Education, the Bachelor of Science degree in Kinesiology, and the Bachelor of Arts degree in Special Education. The College also offers a Minor in Educational Studies.

For additional information, refer to the Department of Teacher Education for the major in education, the Department of Kinesiology for majors in Athletic Training and Kinesiology, and the Department of Counseling, Educational Psychology and Special Education for the major in special education.

The college offers prospective teachers interested in teaching in urban schools opportunities for admission to the Urban Educators Cohort Program as freshmen. The college also offers prospective teachers with an interest in global education to be admitted to the Global Educators Cohort program as freshmen. Students interested in these programs submit a supplemental application to the College of Education after being admitted to Michigan State University. See the College of Education Web site at www.education.msu.edu for details.

Honors Study

The College of Education encourages honor students to develop rich and distinctive programs of study. Each Honors College member is assigned a special advisor who is responsible for helping the student plan a balanced and rigorous course of study.
Students are encouraged, when appropriate, to enroll in graduate seminars, to work on research projects with college faculty and to take full advantage of honors courses offered outside of the College of Education.

**MINOR IN EDUCATIONAL STUDIES**

The Minor in Educational Studies, which is administered by the College of Education, provides an opportunity for students interested in the intersection of learning, education, and society. The minor is a valuable addition for those pursuing careers in the social and behavioral sciences, law, social justice, or education. This minor does not offer professional training for teaching or lead to a teaching certificate or license.

The minor is available as an elective to students who are enrolled in bachelor’s degree programs at Michigan State University other than the Bachelor of Arts Degree in Education. With the approval of the department and college that administers the student’s degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor’s degree. At least 12 unique credits counted towards the requirements for a student’s minor must not be used to fulfill the requirements for that student’s major.

Students who plan to complete the requirements for the minor should consult an undergraduate academic advisor in the College of Education.

**Requirements for the Minor in Educational Studies**

**CREDITS**

1. Complete the following course (3 credits):
   - TE 201 Current Issues in Education ........................................... 3
2. Complete 15 credits of approved course work from the following:
   - CEP 260 Dynamics of Personal Adjustment ................................ 3
   - CEP 261 Substance Abuse ............................................................ 3
   - CEP 370 Educating Students with Special Needs ............................. 3
   - CEP 371 Fundamentals of Conflict and Conflict Resolution in Educational Settings .......................................................... 3
   - CEP 416 Teaching and Learning with Technology ............................ 3
   - CEP 460 Communication Skill Training for the Helping Professional .............. 3
   - CEP 470 Disability in a Diverse Society ........................................... 3
   - EAD 315 Student Leadership Training ............................................ 3
   - EAD 361 Educational Reform and Policy Analysis ........................... 3
   - EAD 362 Student Culture and Higher Education .............................. 3
   - EAD 363 Diversity and Higher Education ........................................ 3
   - TE 150 Reflections on Learning .................................................. 3
   - TE 250 Human Diversity, Power, and Opportunity in Social Institutions .......................................................... 3
   - TE 351 Urban Education ............................................................... 3
   - TE 352 Immigrant Language and Culture ........................................ 3
   - TE 353 International Education .................................................... 3

Additional courses may be used to fulfill this requirement with approval by the student’s academic advisor for the minor.

**TEACHER CERTIFICATION OPTIONS**

Disciplinary majors in education and special education leading to bachelor’s degrees in the College of Education are available for teacher certification.

Students who elect a disciplinary major must contact the Department of Teacher Education for the major in education, and the Department of Counseling, Educational Psychology and Special Education for the major in special education.

For additional information about the teacher certification options, including the many majors throughout the university that are available for those choosing to become secondary education teachers, refer to the statements on the disciplinary majors and to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of the catalog.

**GRADUATE STUDY**

Graduate programs in the College of Education provide opportunities for advanced study and research in education and kinesiology, which foster development of the insight and skill needed to deal with the many challenges that confront our graduates in today’s professions.

The college offers the following degrees in a variety of specialties: Master of Arts, Master of Science, Educational Specialist, Doctor of Education, and Doctor of Philosophy. Students study the profession in general as well as particular specialties. There is considerable latitude for students to plan their studies in collaboration with their faculty advisors and to work with faculty across the College and university.

Students who are enrolled in the Doctor of Philosophy degree program in Educational Psychology and Educational Technology in the Department of Counseling, Educational Psychology and Special Education and the Doctor of Philosophy degree program in Curriculum, Instruction, and Teacher Education in the Department of Teacher Education may elect a graduate specialization in language and literacy. For additional information refer to the statement on Graduate Specialization in Language and Literacy in the Teacher Education section of this catalog.

Students who are enrolled in Master of Arts, Educational Specialist and Doctor of Philosophy degree programs in the Department of Counseling, Educational Psychology and Special Education and in Master of Science and Doctor of Philosophy degree programs in the Department of Kinesiology may elect a specialization in infancy and early childhood. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infancy and Early Childhood in the College of Social Science section of this catalog.

The Master of Science and Doctor of Philosophy degrees in Mathematics Education are administered jointly by the College of Natural Science and the College of Education. The College of Natural Science is the primary administrative unit. For additional information, refer to the statements on Mathematics Education in the College of Natural Science section of this catalog.

**Master of Arts and Master of Science**

Each candidate for the Master of Arts or Master of Science degree selects one of the major fields in one of the academic units listed below:

- College of Education
  - education (M.A.)
  - health professions education (M.A.)
  - mathematics education (M.S.)
- Department of Counseling, Educational Psychology and Special Education
  - educational technology (M.A.)
  - rehabilitation counseling (M.A.)
  - school psychology (M.A.)
  - special education (M.A.)
- Department of Educational Administration
  - higher, adult, and lifelong education (M.A.)
  - K–12 educational administration (M.A.)
  - student affairs administration (M.A.)
- Department of Kinesiology
  - kinesiology (M.S.)
- Department of Teacher Education
  - teaching and curriculum (M.A.)

In addition to meeting the requirements of the university as described in the Graduate Education section of this catalog, students must meet the requirements specified below.
Admission

Students wishing to become candidates for the master's degree must possess a bachelor's degree from a recognized educational institution. A grade–point average of at least 3.00 during the final two years of undergraduate study is required for regular admission. A student who has taken comprehensive examinations for a doctor's degree may apply for transfer to the Educational Specialist program only if these examinations have been satisfactorily passed. Other students in good standing who are in the doctoral program but have not taken the comprehensive examinations and wish to apply for transfer to the Educational Specialist program may do so by application and upon the approval of the guidance committee and advisor.

Requirements for the Degree

A tentative program of study for the degree should be prepared prior to the completion of 10 semester credits. No student will be accepted as a candidate for the master's degree unless such a program has been approved by the advisor. Program changes require the approval of the advisor.

For most of the programs offered by the College of Education, the master's degree may be earned on either Plan A (with thesis) or Plan B (without thesis). For Plan A, not more than 8 credits of master's thesis research may count toward the degree.

Students in any master's program in the College of Education may apply a maximum of 12 credits earned through any combination of courses taken through lifelong education, graduate certification, or in transfer from another institution. Each program may determine if courses are appropriate for the master's program and may allow fewer than 12 credits to be applied to the specific master's program.

Academic Standards

If, upon completion of 18 or more graduate credits, the student has not attained a grade–point average of 3.00 or higher, he or she becomes ineligible to continue work toward the master's degree in the college.

Educational Specialist

The Educational Specialist program is designed for persons who wish to achieve, by a planned program of graduate studies, proficiency beyond the level of the master's degree or equivalent but who do not necessarily plan to complete the Doctor of Philosophy degree.

Each candidate for the Educational Specialist degree selects one of the major fields in one of the departments listed below:

- Department of Counseling, Educational Psychology
- and Special Education
- School Psychology

If the student is accepted for admission to doctoral study while pursuing the Educational Specialist degree or after completing this degree, credit for studies completed during the program may be applied to the doctoral degree upon recommendation of the student's doctoral guidance committee and approval of the Dean of the College of Education. However, the program leading to the Educational Specialist degree should not be thought of as a normal stage between the master's degree and the doctoral degree, but as a program for people who do not plan to complete work for a doctoral degree. There is no assurance that any of the work taken for the Educational Specialist degree will be counted toward the doctorate should the individual be admitted to a doctoral program.

Admission

Admission to the program normally occurs after the completion of the master's degree or equivalent. However, application may be made by those students who are pursuing bachelor's degrees from recognized educational institutions.

A student who has taken comprehensive examinations for a doctor's degree may apply for transfer to the Educational Specialist program only if these examinations have been satisfactorily passed. Other students in good standing who are in the doctoral program but have not taken the comprehensive examinations and wish to apply for transfer to the Educational Specialist program may do so by application and upon the approval of the guidance committee and advisor.

Admission to the program is subject to the general regulations of the university as set forth in the Graduate Education section of this catalog and the College of Education. Normally, the application will be processed in a manner similar to that for doctoral students. Scores for the Graduate Record Examination General Test are required at the time the application for admission to an educational specialist program is submitted. This examination must have been taken no longer than five years prior to the application for admission. At the discretion of the department, applicants may be admitted on a provisional basis pending the required Graduate Record Examination (GRE) General Test scores. Students thus admitted on a provisional basis must take the Graduate Record Examination General Test within a specified time period after enrollment in order to be considered for admission to regular status.

The Miller Analogies Test may be substituted for the Graduate Record Examination General Test by students in K–12 Educational Administration.

Requirements for the Degree

The Educational Specialist program consists of two full years (equivalent of 60 semester credits) of graduate study beyond the bachelor's degree. The second fall and spring semester of graduate study normally embraces 30 semester credits of graduate study. When the master's degree or equivalent is earned in an appropriate field and at an approved institution, a minimum equivalent of 30 additional semester credits of study is required for the Educational Specialist degree. At least 10 of the last 30 semester credits that are required for the degree must be completed on the East Lansing campus.

The sequence of studies for each student pursuing the Educational Specialist degree is planned by the designated advisor with the student's guidance committee, following the procedure described for the Doctor of Philosophy degree program in the college. Students must satisfactorily complete a terminal comprehensive examination that is administered in accordance with department policies. Demonstrated competence in statistics or a reading knowledge of a foreign language will be required whenever such competence is judged appropriate to the program by the guidance committee.

Included in the 60 semester credits that are required for the Educational Specialist degree is study in the major area, in other areas of professional education, and in related areas outside of the College of Education. Field work, internship, externship, and similar laboratory–type experiences constitute at least 6 credits of the program.
Academic Standards
Candidates for the Educational Specialist degree must achieve a grade–point average of not less than 3.20 during the last half of the program (the last 30 semester credits).

Transfer Credits
Up to 8 semester credits beyond the master's degree may be transferred from a recognized educational institution upon approval of the student's guidance committee and the Dean of the College of Education.

Time Limit
All requirements must be completed within five calendar years from the time of the student's first enrollment after completing the master's degree. A student who does not take a master's degree is allowed seven years to complete the requirements.

Doctor of Education
The program is designed for educators and other practitioners who have aspirations for improving their own leadership practice, for developing leadership capacity within their organizations and communities, and for making significant contributions to their local communities and to the future of Michigan. Most graduates with this degree will take up system level leadership in various education agencies, including local and regional school districts, state educational agencies, and professional educational associations. Graduates will also be prepared to teach in community colleges and regional universities, or to hold adjunct or clinical positions in research universities, as well as hold other types of educational leadership positions. Graduates of the program with appropriate prior credential and experience qualify for the Michigan Central Office Administrator endorsement.

Admission
Applicants to the Doctor of Education generally have leadership experience in a school and hold a master’s degree in education or its equivalent. Students who wish to qualify for the Michigan Central Office Administrator endorsement by completing the Doctor of Education should already hold the School Administrator credential before applying to the program.

Applicants must have a minimum grade-point average of 3.5 in previous graduate work, submit a goal statement, submit three letters of recommendation from persons who are acquainted with the applicant's academic and professional experience, performance, and potential, and submit scores earned on the Graduate Record Examination (GRE).

Faculty members review applications for program admission and look for indications of a high probability of success if admitted. Such indications include a high level of academic performance in prior degrees, levels of reference supporting academic and clinical proficiency, past leadership experiences and evidence of effectiveness, quality of written expression and a statement of professional goals that is consistent with the objectives of the program.

Applicants may be required to participate in an interview and to submit a sample of scholarly or professional writing.

Requirements for the Degree
The Doctor of Education program consists of a minimum of 45 credits of graduate study beyond the master’s degree. The program is a three-year, summer intensive program. The first year focuses on core knowledge required by educational leaders, policy makers, and researchers and follows a calendar that differs from the regular MSU academic calendar. The second year deepens students core knowledge of leadership and systems operations on the regular MSU semester course schedule. Year three is dedicated to completion of the capstone projects. At least 6 credits that are required for the degree must be earned on the East Lansing campus within a single semester.

Guidance Committee
Each student admitted to the Doctor of Education program will form a guidance committee with the approval and the assistance of the department. 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.

Academic Standards
Candidates for the Doctor of Education degree must achieve a grade–point average of 3.0. 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 student at least once a year, and a copy of such evaluations shall be placed in the 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 or department.

Comprehensive Examinations
When the prescribed course work is substantially complete as defined by the guidance committee, the Doctor of Education student will present a portfolio of leadership performance assessments completed during required course work as the comprehensive examination, to be evaluated by members of the guidance committee. The examination portfolio will be maintained in the department for three years. Students must be registered during the semester(s) in which they present the comprehensive examination portfolio. This requirement may be waived by the Dean of The Graduate School upon request of the chair 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 and department policy. The department or college shall make available to doctoral students upon matriculation a written explanation of comprehensive examination procedures. The comprehensive examination portfolio must be completed and approved before the student is permitted to participate in a group capstone project.
Admission

Applicants must have a record acceptable to the college and department. A master's degree in an appropriate subject matter field may be required, but completion of a master's degree is not a guarantee of admission.

Following receipt of the application, all transcripts, required test scores, letters of recommendation, and any other information required by the program, doctoral applicants may be invited to meet with a faculty committee before a final decision on doctoral admission is reached.

Scores for the Graduate Record Examination General Test are required at the time the application for admission to a doctoral program is submitted. This examination must have been taken no longer than five years prior to the application for admission. At the discretion of the department, applicants may be admitted on a provisional basis pending the required Graduate Record Examination scores. Students who are thus admitted on a provisional basis must take the Graduate Record Examination General Test within a specified time period after enrollment in order to be considered for admission to regular status.

Requirements for the Degree

A program encompassing approximately two full years of study beyond the master's degree is planned with and for each candidate. The concentration of study in the various programs will vary with the candidate's goals, background of study, current status of understanding, and experience.

All doctoral candidates in the college are required to have basic knowledge in at least four of the following areas of general professional education: (1) administration; (2) curriculum; (3) psychological foundations; (4) research and evaluation methods; (5) social, philosophical, and historical foundations; (6) motor development and motor learning; (7) biological foundations; (8) ethical considerations; (9) issues of diversity in education. The specific areas selected shall be determined by the student's guidance committee in consultation with the student.

All doctoral candidates in the college are required to successfully complete a minimum of 9 or more credits focused on research methods approved by their program and a research practicum course of CEP 995 or EAD 995 or KIN 995 or TE 995 for 1 to 3 credits.

The candidate is required to choose a research problem and to report the research in the form of a dissertation. The dissertation is equivalent to 24 semester credits.

The student must pass written comprehensive examinations that are administered in accordance with department and school policies. For some programs these examinations will be under the direction of the appropriate members of the candidate's guidance committee, supplemented by such other faculty members as may be appointed for the purpose by the Dean of the College. For other programs, a common examination is administered at regularly scheduled times.

The candidate will be orally examined upon presentation of the dissertation. The examination will center on the dissertation itself, but will also include examination on relevant basic concepts.

EDUCATION

Master of Arts

The Master of Arts degree in Education is designed for experienced educators who are interested in enhancing their professional practice through on-line study of advanced professional knowledge related to teaching, learning, and leadership in K-12 schools. Through elective sequences of learning opportunities, students will develop one or two concentrations that focus on selected areas such as special education, technology and learning, school leadership, literacy education, and science and mathematics education. The program provides optimum flexibility for students who wish to engage in inquiry and learning that will contribute to exemplary educational practice.

The College of Education has not determined whether the Master of Arts Degree in Education (MAED) online program satisfies licensure, endorsement, or certification requirements in all
states. Licensure and certification is regulated individually by states and no two are exactly alike. Some states have different levels of licensure and/or certification requirements. For example, in Michigan, the MAED online program alone does not lead to State of Michigan endorsement or initial teacher certification. Students who wish to use this program for renewal, endorsement, or certification in their home state should contact their bachelor’s certification institution or their home state department of education for applicable requirements, rules, and regulations of their home state. Students are responsible for determining whether the MAED online program will meet their home states’ requirements for certification, licensure, or otherwise advancing a student’s teaching credentials. Contact MSU’s Online MAED academic advisor with questions or, for state department of education contact information, please visit www2.ed.gov/about/contacts/state/index.html.

The requirements for the program must be completed within five years. In addition to meeting the requirements of the university and of the College of Education, students must meet all requirements specified below with advisor approval.

Admission

Applications for admission to the Master of Arts in Education are reviewed by College of Education faculty who look for evidence of appropriate preparation for advanced professional study at the master’s level and the likelihood of success in the distance learning format. Such evidence includes applicant’s prior educational record, work experience in educational settings, and a statement of professional goals that is consistent with the intellectual focus and online format of the program. In this statement, applicants must specify their interest in at least one area of concentration and address their personal and professional strengths that support their ability to engage in online learning.

Requirements for the Master of Arts Degree in Education

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

1. Completion of 9 credits of core requirements in educational autobiography and inquiry, issues in educational practice, and a capstone-synthesis course. A list of available courses can be obtained from the student’s academic advisor.
2. Completion of a minimum of 9 credits in an area of concentration selected from such fields of study as special education, technology and learning, school leadership, literacy education, and science and mathematics education.
3. Completion of a minimum of 9 additional credits in a second area of concentration or in areas approved by the student’s academic advisor.
4. A minimum of 3 credits in electives approved by the student’s academic advisor.
5. Successful completion and exhibition of an online portfolio.

HEALTH PROFESSIONS EDUCATION

Master of Arts

The Master of Arts degree in Health Professions Education is administered by the College of Education in cooperation with the College of Osteopathic Medicine.

The program is designed for experienced health practitioners who are interested in enhancing their knowledge through online study of advanced professional knowledge related to teaching, learning, leadership, and policy. In addition to meeting the requirements of the university and of the College of Education, students must meet all requirements specified below.

Admission

To be considered for admission into this program, an applicant must:

1. possess an unlimited (or unrestricted) license to practice as a healthcare professional or be an active participant in a postgraduate training program in a healthcare profession in the United States;
2. submit an official transcript related to item 1;
3. present to the committee three letters of recommendation, forwarded directly from their authors; preferably one from a superior, one from a direct report and one from a colleague;
4. submit a current curriculum vitae;
5. prepare and submit a personal statement describing personal interest in this degree program, professional career goals, and how the two are related.

The Admissions Committee will review these five elements of the application and make a final decision regarding matriculation into the program based on the following core issues:

1. academic: achieved course grades, trend in recent course performance, comments from letters of recommendation regarding cognitive skills;
2. professional motivation: experiences, competence, insight, comments from letters of recommendation regarding healthcare and leadership skills;
3. personal motivation: plans for future contributions to healthcare training;
4. societal awareness: community engagement, sensitivity to environment, and communication skills.

Applicants may be invited to a personal interview onsite or via teleconferencing as a part of the admission decision process.

Requirements for the Master of Arts Degree in Health Professions Education

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

1. Both of the following courses (6 credits):
   
   ED 820 Health Professions Education ........................................ 3
   
   OST 820 Capstone Course for the Health Professions ........................ 3

2. Eight of the following courses (24 credits):
   
   EAD 840 Inquiry in Postsecondary Education .................................. 3
   
   EAD 861 Adult Learning ......................................................... 3
   
   EAD 863 Training and Professional Development ............................ 3
   
   EAD 866 Teaching in Postsecondary Education ............................ 3
   
   EAD 877 Program Planning and Evaluation in Postsecondary Contexts ........ 3
   
   OST 801 Leadership and Organizational Dynamics/Human Resources Management in the Health Professions . . 3
   
   OST 802 Operations Analysis and Decision-Making in the Health Professions .................................................. 3
   
   OST 803 Financial Management and Budgetary Considerations in the Health Professions .................................................. 3
   
   OST 804 Public Health Policy and the Law in the Health Professions ........ 3
   
   OST 890 Independent Study ................................................... 3
   
   OST 894 Field Study ............................................................ 3

   A student may not select both EAD 863 and EAD 866.

3. Completion of a final examination or evaluation.

EDUCATIONAL POLICY

Doctor of Philosophy

The Doctor of Philosophy in Educational Policy is designed for persons who show promise of becoming scholars and leaders in state, national, and international policy communities. The program prepares scholars and leaders to understand, evaluate, and implement educational policy in higher education, government agencies, philanthropies and other institutions in the public and
private sectors. Students will have opportunities to develop analytical perspectives on current issues in educational policy and to investigate how these issues shape organizations, practice and learning. Students will acquire an understanding of different contexts for educational-policy formation. They will master the skills essential for policy research and analysis and participate in field-based policy development and evaluation practices.

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

Admission

Persons who hold bachelor’s or master’s degrees from a variety of disciplines may apply for admission to this doctoral program. Applicants with limited backgrounds in education or the underlying policy disciplines of political science, sociology, history, and economics, may be required to complete collateral work that will not count toward the degree.

The review of applications focuses on previous study and experience, compatibility between academic and professional goals and this doctoral program, and demonstration of potential for successful advanced degree work.

Requirements for the Doctor of Philosophy Degree in Educational Policy

Students must complete the requirements specified below:

1. Educational Policy Core. All of the following courses: 13
   - EAD 925 Policy and Practice in Education
   - EAD 942 Economic Analysis in Educational Policy Making
   - EAD 943 Politics of Education
   - ED 928 Proseminar in Educational Policy
   - TE 901 Proseminar in Curriculum, Instruction, and Teacher Education I

2. Educational Inquiry and Research.
   a. All of the following courses: 9
      - CEP 930 Educational Inquiry
      - CEP 932 Quantitative Methods in Educational Research I
      - CEP 933 Quantitative Methods in Educational Research II
   b. One of the following courses: 1 to 3
      - EAD 995 Research Practicum in Educational Administration
      - TE 995 Research Practicum in Curriculum, Teaching and Educational Policy I

3. Concentration in Educational Policy. 18
   Six courses in policy studies selected to provide the student with competence in an approved policy concentration in comparative studies, economics, evaluation, political science, sociology, or related fields. This concentration must be approved, in advance, by the student’s guidance committee.

4. The following course: 3
   - ED 976 Capstone in Educational Policy Analysis and Evaluation

5. Dissertation. 24
   - EAD 999 Doctoral Dissertation Research
   - TE 999 Doctoral Dissertation Research

   Students may not earn more than 30 credits in EAD 999 Doctoral Dissertation Research or TE 999 Doctoral Dissertation Research. All 999 credits must be earned in the same department.

GRADUATE SPECIALIZATION IN ECONOMICS OF EDUCATION

The Graduate Specialization in Economics of Education, which is administered by the College of Education, is designed to provide students with advanced statistical training and understanding of the application of these methods to key educational topics, with particular emphasis on use of economic methods and theories. The specialization is available as an elective to students who are enrolled in doctoral degree programs at Michigan State University. With the approval of the department and college that administers the student’s degree program, the courses that are used to satisfy the specialization may also be used to satisfy the requirements for the doctoral degree. The students program of study must be approved by the advisor for the specialization.

Requirements for the Graduate Specialization in Economics of Education

Students must complete the following (15 or 16 credits):

1. Two of the following courses (6 credits):
   - CEP 932 Quantitative Methods in Educational Research I
   - CEP 933 Quantitative Methods in Educational Research II
   - EC 820A Econometrics IA
   - EC 820B Econometrics IB
   - PPL 802 Quantitative Methods in Public Policy II
   - PPL 803 Quantitative Methods in Public Policy III
   - PSY 815 Quantitative Research in Design and Analysis in Psychology

2. One of the following courses (3 or 4 credits):
   - CEP 921 Psychometric Theory I
   - CEP 923 Item Response Theory
   - CEP 935 Advanced Topics in Multivariate Data Analysis II
   - CEP 991B Special Topics in Educational Statistics and Research Design
   - EC 821A Cross Section and Panel Data Econometrics I
   - EC 821B Cross Section and Panel Data Econometrics II

3. Both of the following courses (6 credits):
   - ED 944 Advanced Economic and Econometric Applications to Education Research I
   - ED 945 Advanced Economic and Econometric Applications to Education Research II

4. Complete a substantial research paper on a topic in the economics of education.

DEPARTMENT of COUNSELING, EDUCATIONAL PSYCHOLOGY and SPECIAL EDUCATION

Richard S. Prawat, Chairperson

UNDERGRADUATE PROGRAM

The department offers a Bachelor of Arts degree program with a major in special education. This program is designed for students who plan to be certified as both a K-12 special education teacher and an elementary teacher. The program combines preprofessional preparation in the learning disabilities area of special education and in elementary education. Upon satisfactory completion of the requirements for the Bachelor of Arts degree with a major in special education, the bachelor's degree is granted. However, in order for Michigan State University to recommend a person for an elementary teaching certificate with an endorsement in special education, that person must also complete the requirements for the Teacher Certification Internship Year Studies program described in the section on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.
Requirements for the Bachelor of Arts Degree in Special Education

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

   The completion of Integrative Studies in Social, Behavioral and Economic Science 220 referenced in item 2.b. (6) below may also satisfy a portion of the University Integrative Studies requirements in the Social, Behavioral, and Economic Sciences. The completion of Integrative Studies in Arts and Humanities 241A, IAH 241C, or IAH 241E referenced in item 2.b. (7) below may also satisfy a portion of the University Integrative Studies requirements in the Arts and Humanities.

   The completion of Mathematics 201 referenced in item 2.b. (1) below may also satisfy the University mathematics requirement.

   The University’s Tier II writing requirement for the Special Education major is met by completing one course as specified below:

   Learning disabilities area of emphasis: Counseling, Educational Psychology and Special Education 301. That course is referenced in item 2.d. (2) below.

2. The following requirements for the major:
   a. Professional Education Courses (21 credits):
      - CEP 240 Diverse Learners in Multicultural Perspective .......... 3
      - CEP 301 Learners and Learning in Context - Elementary (W) ........ 4
      - CEP 401 Teaching of Subject Matter to Diverse Learners - Elementary .... 5
      - TE 402 Crafting Teaching Practice - Elementary (W) ............. 6

   b. Planned Program for Elementary Education for Special Education Majors (15 credits):
      - For the requirements for the Language Arts Integrated Teaching major, refer to the section “MSU Subject Matter Teaching Majors for Teacher Preparation and Certification: MSU Integrated Teaching Majors” in the TEACHER CERTIFICATION section of this catalog.

      (1) Both of the following mathematics courses (8 credits):
          - MTH 201 Elementary Mathematics for Teachers I ............... 3
          - MTH 202 Elementary Mathematics for Teachers II ............. 3
      (2) The following course in children’s literature (3 credits):
          - TE 348 Reading and Responding to Children’s Literature .................. 3
      (3) The following course on language acquisition and development (3 credits):
          - CSD 333 Oral Language Development .................................. 3
      (4) The following course on science in the elementary schools (3 credits):
          - SME 301 Science for Elementary Schools ...................... 3
      (5) The following geography course (3 credits):
          - GEO 204 World Regional Geography ........................... 3
      (6) The following history course or approved social science alternative (4 credits):
          - ISS 220 Time, Space and Change in Human Society (D) ............ 4
          - IAH 241A Creative Arts and Humanities: Music and Society (D) .......... 4
          - IAH 241C Creative Arts and Humanities: Cultural and Artistic Traditions of Europe .............. 4
          - IAH 241E Creative Arts and Humanities: The Creative Process ............. 4
      (7) One of the following arts courses (4 credits):
          - CEP 301 Introduction to Students With Mild Impairments (W) ........ 3
          - CEP 449 Behavior Management in Special Education .................. 3
          - CEP 451 Models of Special Education Administration and Services .......... 3
          - CEP 452 Students with Disabilities in the Regular Classroom ........... 3
          - CSD 333 Oral Language Development .................................. 3
          - PSY 101 Introductory Psychology ..................................... 4

   c. Language Arts Integrated Teaching Major (16 to 41 credits)
      - The Language Arts Integrated Teaching major is designed to meet the Subject Matter Teaching Major/Major requirement for the Special Education Emphasis Area (Learning Disabilities). One of the other Integrated Teaching Majors (Social Studies, General Science), or one of the approved disciplinary majors, or one of the approved disciplinary teaching minor combinations is also available for elementary teacher certification (with the appropriate endorsement), with the approval of the Department of Counseling, Educational Psychology, and Special Education Department.

   d. The following Area of Emphasis (19 credits):
      - Learning Disabilities (19 credits):
      - All of the following courses:
        - CEP 301 Introduction to Students With Mild Impairments (W) ........ 3
        - CEP 449 Behavior Management in Special Education .................. 3
        - CEP 451 Models of Special Education Administration and Services .......... 3
        - CEP 452 Students with Disabilities in the Regular Classroom ........... 3
        - CSD 333 Oral Language Development .................................. 3
        - PSY 101 Introductory Psychology ..................................... 4

TEACHER CERTIFICATION OPTION

The special education disciplinary major leading to the Bachelor of Arts degree is available for teacher certification. Students with a special education disciplinary major must complete the following pedagogy courses:

Students who are seeking both elementary teacher certification and K-12 endorsement in Learning Disabilities satisfy all of the pedagogy course requirements by completing Counseling, Educational Psychology and Special Education 240, 502A, 801A, 802A, 803A, and 804A and Teacher Education 150, 301, 401, 402, and 501. [NOTE: Counseling, Educational Psychology and Special Education 502A, 801A, 802A, 803A, and 804A contain disciplinary content, as well as pedagogical content. Therefore, those courses are also counted toward the requirements for endorsement in the area of learning disabilities.] Students who completed Teacher Education 502, 801, 802, 803, and 804 and who are seeking endorsement in Learning Disabilities must complete Counseling, Educational Psychology and Special Education 502A, 801A, 802A, 803A, and 804A.

Students who elect the special education disciplinary major must contact the Department of Counseling, Educational Psychology and Special Education. For additional information, refer to the section on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

GRADUATE STUDY

The department offers the graduate programs that are listed below:

Graduate Certificates
applied behavior analysis in special education
educational technology
online teaching and learning

Master of Arts
educational technology
rehabilitation counseling
special education

Educational Specialist
school psychology

Doctor of Philosophy
educational psychology and educational technology
measurement and quantitative methods
rehabilitation counselor education
school psychology
special education

Descriptions of the graduate programs, organized by fields of study in alphabetical order, are presented below.

Students who are enrolled in the Doctor of Philosophy degree program in Educational Psychology and Educational Technology in the Department of Counseling, Educational Psychology and Special Education may elect a graduate specialization in language and literacy. For additional information, refer to the statement on Graduate Specialization in Language and Literacy in the Department of Teacher Education section of this catalog.

Students who are enrolled in Master of Arts, Educational Specialist, and Doctor of Philosophy degree programs in the Department of Counseling, Educational Psychology and Special Education may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on Inter-departmental Graduate Specializations in Infancy and Early Childhood in the College of Social Science section of this catalog.
APPLIED BEHAVIOR ANALYSIS IN SPECIAL EDUCATION

Graduate Certificate

The Graduate Certificate in Applied Behavior Analysis in Special Education prepares special educators for roles as behavior analysts in educational settings. Students will prepare to take and pass the national behavior analyst certification examination developed by the Behavior Analyst Certification Board in accordance with governing bodies in behavior analysis. The certificate is available only online.

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

Admission

An applicant for admission to the Graduate Certificate in Applied Behavior Analysis in Special Education must:

1. submit both departmental and university application forms.
2. have a master’s degree or be enrolled in a master’s degree program at Michigan State University.
3. submit three letters of recommendation from persons knowledgeable about the applicant’s academic potential to pursue graduate study and competence or potential to deliver applied behavior analysis or related services.
4. submit a statement of professional goals that clearly describe the applicant’s reasons for pursuing the certificate and the goals that the emphasis area will help them attain.
5. have access to high-speed internet and the appropriate technologies.

Applications are reviewed by faculty who look for indications of a high probability of success. The following factors are significant in determining admission to the emphasis area:

1. A grade-point average of 3.00 or higher in the last two years of undergraduate and all graduate courses.
2. Experience working with children and youth with disabilities in a school or camp or other experience with behavior analysis that is acceptable to the faculty.
3. Professional goals that are consistent with the objectives of the emphasis area.
4. A test of English language proficiency for students for whom English is not a first language.

Students who, in the judgment of the faculty, have not completed appropriate courses in exceptional children or behavior management may be required to complete such courses in addition to the requirements below.

Requirements for the Graduate Certificate in Applied Behavior Analysis in Special Education

Students must complete 19 credits from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP 844</td>
<td>Applied Behavior Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>CEP 845</td>
<td>Autism Spectrum Disorder: Assessment and Intervention</td>
<td>4</td>
</tr>
<tr>
<td>CEP 846</td>
<td>Autism Spectrum Disorders: Advanced Topics</td>
<td>3</td>
</tr>
<tr>
<td>CEP 854</td>
<td>Applied Behavior Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>CEP 855</td>
<td>Verbal Behavior in Education</td>
<td>3</td>
</tr>
<tr>
<td>CEP 942</td>
<td>Single-case Experimental Designs for Intervention Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Students currently enrolled in the Master of Arts Degree in Special Education pursuing an Autism Spectrum Disorder Emphasis will complete CEP 844, 845, and 846 as part of these requirements.

EDUCATIONAL PSYCHOLOGY AND EDUCATIONAL TECHNOLOGY

Doctor of Philosophy

The doctoral program in educational psychology and educational technology is designed for persons who show promise of becoming scholars and leaders in the study of human learning and development in varied educational settings and the study, creation, and use of diverse technologies supporting learning and teaching. The program places emphasis on rigorous scholarship and formulation of analytic perspectives on learning, development, and technology embedded in culture and society. Graduates of this program will be equipped to pursue careers in university research and teaching, research and development of online learning environments in diverse educational settings and to assume leadership roles in school systems and the private sector.

Doctoral students in educational psychology and educational technology focus their studies in one of the following emphasis areas:

Educational Psychology. Students study processes of human learning and development in naturally occurring settings such as homes, classrooms, peer groups, workplaces, and laboratories in order to understand and improve educational practice. Program participants often base their analyses in specific domains, including mathematics, literacy, and science.

Educational Technology. Students engage in research and development seeking to understand the pedagogy, policy, and design of media and technologies in support of learning, nationally and internationally, in formal environments such as traditional and online classes as well as in informal environments such as homes and after-school programs.

Students who are enrolled in the Doctor of Philosophy degree program in Educational Psychology and Educational Technology in the Department of Counseling, Educational Psychology and Special Education may elect a specialization in language and literacy. For additional information, refer to the statement on Graduate Specialization in Language and Literacy in the Department of Teacher Education section of this catalog.

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

Admission

Persons who hold degrees from a variety of disciplines may apply for admission. The review of applications focuses on previous study and experience, compatibility between academic and professional goals and this doctoral program, and demonstration of potential for successful advanced degree work.

All students admitted to the program begin their studies in fall semester. The deadline for submitting applications is December 1 prior to the year for which admission is sought in order to receive full consideration for financial support. Applications received after this date will be reviewed if space is available in the program.

Requirements for the Doctor of Philosophy Degree in Educational Psychology and Educational Technology

The student must meet the requirements specified below:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proseminar.</td>
<td>6</td>
</tr>
<tr>
<td>a. The following course:</td>
<td></td>
</tr>
<tr>
<td>CEP 900 Proseminar in Learning, Technology, and Culture</td>
<td>3</td>
</tr>
<tr>
<td>b. One of the following courses:</td>
<td></td>
</tr>
<tr>
<td>CEP 901A Proseminar in Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CEP 901B Proseminar in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>2. Educational Inquiry and Research.</td>
<td>12</td>
</tr>
</tbody>
</table>
EDUCATION  
Department of Counseling, Educational Psychology  
and Special Education

a. All of the following courses:
   - CEP 930 Educational Inquiry ..........................3
   - CEP 932 Quantitative Methods in Educational Research 1 ..........................3
   - CEP 933 Quantitative Methods in Educational Research II ..........................3
   - CEP 995 Practicum in Research Design and Data Analysis ..........................3

3. Emphasis Area Courses. Three courses from one of the following emphasis areas chosen to provide breadth of understanding in educational issues. ..........................9
   a. Educational Psychology
   - CEP 902 The Psychology of Learning School Subjects ..........................3
   - CEP 903 Cognitive Development across the Lifespan ..........................3
   - CEP 904 Social-Emotional Development across the Lifespan ..........................3
   - CEP 905 Cultural Perspectives on Learning and Development ..........................3
   - CEP 907 Psychological Study of Teaching ..........................3
   - CEP 910 Motivation and Learning ..........................3
   - CEP 911 Intellectual History of Educational Psychology ..........................3
   - CEP 912 Reading Comprehension: Research and Theory ..........................3
   - CEP 915 Literacy in Sociocultural Context ..........................3
   - CEP 957 Learning in Complex Domains ..........................3
   - CEP 980 Writing, Research, and Theory ..........................3
   b. Educational Technology
   - CEP 909 Cognition and Technology ..........................3
   - CEP 917 Design of Media for Learning ..........................3
   - CEP 951 Technology, Society, and Culture ..........................3
   - CEP 952 Technology for Teaching and Learning in Higher Education ..........................3
   - CEP 953 Teachers and Technology ..........................3
   - CEP 956 Mind, Media, and Learning ..........................3
   - CEP 981 Research on Literacy and Technology ..........................3

4. Area of Concentration. At least five additional courses in the student’s area of concentration. Students are encouraged to include some course work from outside the Department of Counseling, Educational Psychology, and Special Education. Emphasis area and concentration courses must provide a coherent program of study approved, in advance, by the student’s guidance committee.

5. Pass a departmental preliminary examination, focused on scholarly writing and the critique of research at the end of the first year of doctoral study.

6. Successful satisfactory completion of a research apprenticeship.

7. Successful completion and defense of the dissertation. Students may not earn more than 30 credits in CEP 999 Doctoral Dissertation Research.

EDUCATIONAL TECHNOLOGY

Graduate Certificate

The Graduate Certificate in Educational Technology is designed to assist current educators in becoming better teachers by utilizing new technologies to improve instructional practice. The introduction of new technology in the classroom will help participants re-think their own practice as teachers, evaluate their own beliefs about what helps students learn, and better ideas and perspectives that they might otherwise have overlooked or not encountered.

The scheduling of the certificate program allows flexibility to accommodate both full-time students and working professionals by offering accelerated summer study programs, as well as online and face-to-face courses.

This certificate program has been identified as the first three courses of the Educational Technology NP Endorsement concentration.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

Admission

To be considered for admission into the Graduate Certificate in Educational Technology, applicants must have completed a bachelor’s degree. For additional information, refer to the Admission section in the Graduate Education section of this catalog.

Requirements for the Graduate Certificate in Educational Technology

Students must complete all of the following courses (9 credits):

- CEP 810 Teaching for Understanding with Technology ..........................3
- CEP 811 Adapting Innovative Technologies to Education ..........................3
- CEP 812 Applying Educational Technology to Issues of Practice ..........................3

Master of Arts

The Master of Arts degree program in Educational Technology prepares students for the thoughtful use and design of technology in various educational settings. The program draws on current theories of learning and development to understand the role of technology in learning and instruction.

The program is offered in several different formats and allows flexibility to accommodate both full-time students and working professionals by offering accelerated summer study programs, online, and hybrid courses.

An Educational Technology (NP) endorsement can be added to either an elementary or secondary certificate by completing the requirements for MSU’s Master of Arts degree program in Educational Technology. For more information on the NP endorsement, visit www.edutech.msu.edu.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

Admission

Applications for admission to the program are reviewed by faculty who look for indications of a high probability of success. Such indications include a high level of academic performance, experience with educational technology, and consistency of professional goals with the objectives of the program.

The applicant is required to submit both departmental and university application forms and three letters of recommendation from professors or employers.

Requirements for the Master of Arts Degree in Educational Technology

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

1. Core Courses. All of the following courses: ..........................9
   - CEP 800 Psychology of Learning in School and Other Settings ..........................3
   - CEP 807 Proseminar in Educational Technology ..........................3
   - CEP 822 Approaches to Educational Research ..........................3

2. Completion of a minimum of 21 credits of course work at the 800-level or above as approved by the student’s academic advisor. A list of approved courses is available from the Educational Technology Program.

3. Completion of a final evaluation.

MEASUREMENT AND QUANTITATIVE METHODS

Doctor of Philosophy

The doctoral program in measurement and quantitative methods is designed for persons who hope to develop and investigate methods of assessment and quantitative analysis, as well as for individuals who wish to become experts in the application and use of such methods. Graduates may teach courses in educational measurement, statistics, and program evaluation in colleges and universities and are often involved in research on problems of measurement and quantitative methods. Graduates also occupy leadership positions in educational, governmental, and other
agencies concerned with educational measurement, statistics, and program evaluation. Students in the program learn to analyze research data and have opportunities to design and execute research studies and to consult on research design, data analysis, and evaluation. Students may develop and evaluate new statistical and psychometric models for use in educational research and behavioral science.

Admission

Applications for admission to the program are reviewed by faculty who look for indications of a high probability of success. Such indications include a high level of academic performance, a high score on the Graduate Record Examination General Test, and a statement of professional goals that is consistent with the objectives of the program. The applicant must submit three letters of recommendation, including at least one letter of recommendation from a professor or employer.

The applicant is required to submit supplemental documents and information as determined by the program, as well as the university application. Persons are admitted to the program for fall semester only. The deadline for submitting applications is December 1 of each year for admission the following fall semester. If space is available, late applications may be considered.

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

Requirements for the Doctor of Philosophy Degree in Measurement and Quantitative Methods

The student's program plan of course work must fulfill the requirements described below. In addition to completing the required course work, students should participate in measurement and quantitative methods seminars and satisfy the College of Education breadth requirements which require basic knowledge in at least four of the following areas of general professional education: administration; curriculum; psychological foundations; research and evaluation methods; social, philosophical, and historical foundations; motor development and motor learning; biological foundations; ethical considerations; and issues of diversity in education.

1. Core Courses. All of the following courses (30 to 32 credits):

   - CEP 900 Proseminar in Learning, Technology and Culture  3
   - CEP 920 Basic Concepts in Educational and Social Science Measurement  3
   - CEP 921 Psychometric Theory I  3
   - CEP 923 Item Response Theory  3
   - CEP 930 Educational Inquiry  3
   - CEP 932 Quantitative Methods in Educational Research I  3
   - CEP 933 Quantitative Methods in Educational Research II  3
   - CEP 934 Multivariate Data Analysis I  4
   - CEP 935 Advanced Topics in Multivariate Data Analysis II  4
   - CEP 995 Practicum in Research Design and Data Analysis  1 to 3

2. Concentration Courses.
   a. Measurement Majors:
      The following course:
      - CEP 922 Psychometric Theory II  3
   b. Quantitative Majors:
      Two of the following courses:
      - EC 820A Econometrics I A  3
      - EC 820B Econometrics II B  3
      - PPL 802 Quantitative Methods in Public Policy II  3
      - PPL 803 Quantitative Methods in Public Policy III  3
      - STT 441 Probability and Statistics I: Probability  3
      - STT 442 Probability and Statistics II: Statistics  3
      - STT 861 Theory of Probability and Statistics I  3
      - STT 862 Theory of Probability and Statistics II  3

3. Cognate Courses.
   a. Measurement Majors:
      Three of the following courses:
      - CEP 938 Latent Variable and Structural Equation Modeling  3
      - CEP 939 Seminar in Educational Measurement  3
      - CEP 982 Seminar in Counseling, Educational Psychology and Special Education  3
      - CEP 991B Special Topics in Educational Statistics and Research Design  4
      - STT 997 Advanced Topics in Statistics  3
   b. Quantitative Majors:
      Three of the following courses:

ONLINE TEACHING AND LEARNING

Graduate Certificate

The Graduate Certificate in Online Teaching and Learning prepares individuals to design and teach online courses. Students learn to apply the latest theories of learning and pedagogy while acquiring skills with new multimedia and networking tools to create exciting new online learning environments. The schedule of the certificate program allows flexibility to accommodate both full-time students and working professionals.

Requirements for the Graduate Certificate in Online Teaching and Learning

1. Complete all of the following courses (9 credits):

   - CEP 813 Electronic Portfolios for Teaching and Learning  3
   - CEP 817 Learning Technology through Design  3
   - CEP 820 Teaching K-12 Students Online  3

REHABILITATION COUNSELING

Master of Arts

Rehabilitation counseling is a profession devoted to enhancing the quality of life of individuals who have physical, mental, or emotional disabilities. Rehabilitation counselors provide counseling and other coordinated services to such individuals in the public, nonprofit, and private sectors of rehabilitation practice. The master's degree program in rehabilitation counseling emphasizes the philosophy, process, and professional discipline of rehabilitation. The program also emphasizes vocational assessment, vocational placement, and career development for persons with disabilities.

The Master of Arts degree program in rehabilitation counseling has been accredited by the Council on Rehabilitation Education.

Students who are interested in taking the examination to become a Certified Rehabilitation Counselor, or in obtaining State of Michigan licensure as counselors, should consult with an academic advisor to ensure that they complete the required courses.

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

Admission

Consideration is given to the applicant's previous academic and professional experience. There should be in each applicant's background a pattern of experience that supports his or her expressed desire to pursue advanced graduate studies in rehabilitation counseling. Appropriate evidence of such experience should be reflected in the applicant's letters of recommendation. The following are factors significant in determining admission to the program:
1. A bachelor’s degree in an appropriate field from a recognized educational institution, with a grade-point average of 3.0 (B) or better in the last two years of undergraduate study;
2. Scores from the Graduate Record Examination General Test if the applicant’s grade-point average is less than 3.0;
3. At least two letters of recommendation from professors or employers. The applicant is required to submit a departmental application form, as well as the university application form. Upon request for admission to the program, the departmental application form is mailed to the applicant with the university application form.

Requirements for the Master of Arts Degree in Rehabilitation Counseling

The program is available only under Plan B (without thesis). The student must complete a total of 48 credits distributed as follows:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling Core. All of the following courses:</td>
<td>9</td>
</tr>
<tr>
<td>CEP 861 Counseling Theory, Philosophy, and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CEP 862 Introduction to Individual and Group Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 864 Career Counseling</td>
<td>3</td>
</tr>
<tr>
<td>2. Rehabilitation Counseling Core. All of the following courses:</td>
<td>18</td>
</tr>
<tr>
<td>CEP 868 Medical Aspects of Disability.</td>
<td>3</td>
</tr>
<tr>
<td>CEP 870 Foundations of Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 871 Cognitive and Psychological Aspects of Disability</td>
<td>3</td>
</tr>
<tr>
<td>CEP 872 Social and Environmental Aspects of Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>CEP 873 Employment Strategies for Individuals with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>CEP 876 Professional Issues in Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>3. Research and Evaluation. All of the following courses:</td>
<td>6</td>
</tr>
<tr>
<td>CEP 822 Approaches to Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>CEP 877 Assessment in Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>4. Practicum and Internship. Both of the following courses:</td>
<td>15</td>
</tr>
<tr>
<td>CEP 874 Internship in Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 893A Rehabilitation Counseling Internship</td>
<td>3</td>
</tr>
<tr>
<td>CEP 894A Rehabilitation Counseling Practicum</td>
<td>6</td>
</tr>
<tr>
<td>Field placements must be approved by the department.</td>
<td></td>
</tr>
</tbody>
</table>

CEP 995 Practicum in Research Design and Data Analysis                      | 3       |

REHABILITATION COUNSELOR EDUCATION

Doctor of Philosophy

The Doctor of Philosophy degree program with a major in rehabilitation counselor education is designed to prepare individuals for careers as university-level educators and researchers and as consultants. The program is designed to provide the specialized knowledge and skills needed to help individuals with physical, mental, or emotional disabilities to become fully integrated and productive participants of society.

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

Admission

To be admitted to the doctoral program in rehabilitation counseling, a person must have:
1. A grade-point average of 3.3 or higher in master’s degree course work in rehabilitation counseling or in a related field.
2. Strong letters of personal and professional recommendation regarding the applicant’s academic capability and professional and personal qualifications, as judged by the faculty.
3. Relevant post-master’s work experience in rehabilitation counseling, as judged by the faculty.
4. Professional goals and interests that are compatible with the objectives and philosophy of the program, as judged by the faculty.
5. Satisfactory scores on the Graduate Record Examination General Test, as judged by the faculty.

The applicant is required to submit both departmental and university application forms. Persons are admitted to the program only for fall semester. The deadline for submitting applications for admission is December 1 of each year for admission the following fall semester.

Applicants to the Doctor of Philosophy degree program with a major in rehabilitation counselor education are expected to have completed a master’s degree program in rehabilitation counseling accredited by the Council on Rehabilitation Education. Applicants with a master’s degree in counseling, psychology, or another human service field would need to complete the core master’s level courses in rehabilitation counseling in addition to the requirements for the degree. Students will be encouraged to enroll in new course content areas that were not addressed in their master’s degree programs.

Requirements for the Doctor of Philosophy Degree in Rehabilitation Counselor Education

The student must meet the requirements specified below.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Educational Inquiry and Research. All of the following courses:</td>
<td>17</td>
</tr>
<tr>
<td>CEP 930 Educational Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>CEP 932 Quantitative Methods in Educational Research I</td>
<td>3</td>
</tr>
<tr>
<td>CEP 933 Quantitative Methods in Educational Research II</td>
<td>3</td>
</tr>
<tr>
<td>CEP 934 Multivariate Data Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>CEP 968 Research Methods in Counseling and School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CEP 995 Practicum in Research Design and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>2. Ethics and Professional Practice of Counseling. Both of the following courses:</td>
<td>6</td>
</tr>
<tr>
<td>CEP 963 Ethics in Counseling and School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CEP 969 Clinical Supervision in Counseling and School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>3. Rehabilitation Counseling Proseminars. All of the following courses:</td>
<td>9</td>
</tr>
<tr>
<td>CEP 960 Theoretical Foundations of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 964 Practice and Profession of Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 965 Psychosocial Bases of Disability and Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>4. Professional Preparation Core. All of the following course:</td>
<td>9</td>
</tr>
<tr>
<td>CEP 844A Rehabilitation Counselor Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>CEP 944B Teaching Practicum in Rehabilitation Counselor Education</td>
<td>3</td>
</tr>
<tr>
<td>CEP 944C Clinical Practice Practicum in Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 944D Clinical Practice Practicum in Rehabilitation Counseling</td>
<td>3</td>
</tr>
<tr>
<td>5. Learning and Development/Diversity. Two of the following courses:</td>
<td>6</td>
</tr>
<tr>
<td>CEP 860A Perspectives in Multicultural Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CEP 903 Cognitive Development Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>CEP 905 Cultural Perspectives on Learning and Development</td>
<td>3</td>
</tr>
</tbody>
</table>
| 6. Elective Study. Two courses selected with the approval of the student’s guidance committee. Students who wish to develop additional counseling experience, prior to enrollment in CEP 944C, may enroll in CEP 944D Clinical Supervision Practicum in Rehabilitation Counselor Education, as a 3 credit elective. Successful completion and defense of the dissertation. Students may not earn more than 30 credits in CEP 999 Doctoral Dissertation Research.

SCHOOL PSYCHOLOGY

Students interested in pursuing graduate study in school psychology must apply for admission to either the educational specialist or the doctoral program in school psychology. The initial phase of study in either of these programs is integrally related to the Master of Arts in School Psychology, which is available only to students in the Educational Specialist in School Psychology or the Doctor of Philosophy in School Psychology. The first 30 required credits of these respective degree programs fulfill the requirements of the Master of Arts in School Psychology, which students may elect to earn before continuing their course of study in either the educational specialist or the doctor of philosophy degree programs.

Master of Arts

The Master of Arts Degree in School Psychology explores the theoretical, philosophical, and professional discipline of school psychology. This program’s requirements are met as an integral part of the educational specialist or doctoral program, with a planned sequence of courses and practica experiences. There is no terminal master’s program.
Admission

Students interested in graduate study in school psychology should apply directly to the Educational Specialist or Doctor of Philosophy program in School Psychology. Master of Arts degree program requirements are incorporated into and are met as a part of those programs. Students do not apply separately for admission to the Master of Arts program.

Requirements for the Master of Arts Degree in School Psychology

The program is available only under Plan B (without thesis). The student must complete a total of 30 credits distributed as follows:
1. A minimum of 15 credits in school psychology courses at the 800-level or above.
2. A minimum of 3 credits in child development courses at the 800-level or above.
3. A minimum of 12 credits in courses in areas such as learning and development, or research and evaluation, as approved by the student’s guidance committee.
4. Completion of a final examination or evaluation.

Educational Specialist

The Educational Specialist degree program in school psychology is designed for persons who plan to devote their professional careers to school psychological services and who desire to achieve a level of proficiency that will enable them to assume leadership roles. The program consists of a planned sequence of courses, practica, and internship experiences that are complemented by graduate study in educational psychology and supporting disciplines.

In addition to meeting the requirements of the College of Education, students must meet the requirements specified below.

Admission

An individual should have a bachelor’s degree in psychology or education or substantial course work in psychology or education to be considered for admission. A person with a master’s degree in psychology or a related field may also apply for admission.

To be admitted to the program, a person with a bachelor’s, but not a master’s, degree must have a minimum grade-point average of 3.0 (B) for the last two years of undergraduate work. A person with a master’s degree must have a minimum grade-point average of 3.5 (B+) for prior graduate work. An admissions interview may be required.

Applicants should provide a written statement to the effect that they will be available to serve an internship of 1200 clock hours (30 weeks). For employment in other states, an internship of nine months may be required.

Persons are admitted to the program only for fall semester. The deadline for submitting applications for admission is January 15th for the following fall semester.

Requirements for the Educational Specialist Degree in School Psychology

Students must meet the requirements specified below. Students who hold a Master of Arts degree in School Psychology may already meet some of these requirements.

1. All of the following courses (36 credits):
   a. School Psychology (27 credits):
      CEP 860 Cognitive Assessment .............................................. 3
      CEP 881 Social and Emotional Assessment and Intervention 3
      CEP 883 Psychology of Classroom Discipline ................................. 3
      CEP 884 Roles and Functions of School Psychologists .......................... 3
      CEP 885 Behavior Disorders in Children ..................................... 3
      CEP 886 Psychoeducational Assessment and Intervention 13
      CEP 889 Consultation in School Psychology .................................. 3
      CEP 918 Theories of School-Based Psychological Interventions ........... 3
   b. Educational Psychology (9 credits):
      (1) Both of the following courses:

Doctor of Philosophy

The Doctor of Philosophy degree program with a major in School Psychology is designed to prepare school psychologists who will become scientist-practitioners in school and university settings. The school psychology program has been accredited by the American Psychological Association (APA) and approved by the National Association of School Psychologists (NASP). Students who are enrolled in the program are expected to abide by the ethical principles of the APA and NASP.

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

Admission

To be admitted to the doctoral program in school psychology, a person must have:
1. A bachelor’s degree in education or psychology, or in a related field. A master’s degree or a teaching certificate is not required, but evidence of experience with children, youth, and families is desirable.
2. A grade-point average of 3.0 or higher in the last two years of the bachelor’s degree program.
3. A grade-point average of 3.5 or higher in courses taken at the master’s degree level or beyond.
4. Professional goals and interests that are consistent with the objectives of the program, as judged by the faculty.
5. Strong personal recommendations, as judged by the faculty.
6. Satisfactory scores on the Graduate Record Examination General Test, as judged by the faculty.

The applicant must submit both departmental and university application forms. Persons are admitted to the program only for fall semester. The deadline for submitting applications for admission is December 1st for the following fall semester.

Requirements for the Doctor of Philosophy Degree in School Psychology

The student must meet the requirements specified below. Students who hold an Educational Specialist or a Master of Arts degree in School Psychology may already meet some of these requirements.

1. Educational Inquiry and Research. All of the following courses: 17 to 19
   CEP 930 Educational Inquiry .............................................. 3
   CEP 932 Quantitative Methods in Educational Research I ............... 3
   CEP 933 Quantitative Methods in Educational Research II ............ 3
   CEP 934 Multivariate Data Analysis I ................................... 4
   CEP 966 Research Methods in Counseling and School Psychology . . . . 3
   CEP 995 Practicum in Research Design and Data Analysis .......... 1 to 3

2. Psychological Foundations
   a. The following course (4 credits):
      PSY 805 History of Psychology ........................................... 4
   b. One of the following courses (3 credits):
      CEP 903 Cognitive Development across the Lifespan .................. 3
      CEP 904 Social-Emotional Development across the Lifespan .......... 3
   c. One of the following courses (3 or 4 credits):
      PSY 811 Advanced Behavioral Neuroscience ............................. 3
      PSY 851 Neuropsychology .................................................. 4
      PSY 852A Cognitive and Neuropsychological Assessment .......... 3

3. Theoretical Foundations. Both of the following courses: 6

CEP 903 Cognitive Development Across the Lifespan. 3
CEP 904 Social-Emotional Development across the Lifespan .......... 3
(2) One of the following:
CEP 932 Quantitative Methods in Educational Research I ............... 3
CEP 933 Quantitative Methods in Educational Research II ............ 3
2. The course (6 credits):
   CEP 893K Practicum in School Psychology ................................ 6
3. The following course (6 credits):
   CEP 894K Internship in School Psychology ................................ 6
4. Complete 12 credits of electives as approved in consultation with the student’s advisor.
Admission
An applicant for admission to the master’s degree program in special education is required to submit:
1. Both departmental and university application forms.
2. Three letters of recommendation from persons knowledgeable about the applicant’s academic potential to pursue graduate study and teaching competence or potential.

A statement of professional goals that clearly describes the applicant’s reasons for pursuing a master’s degree and the goals that the emphasis area will help the student attain.

Applications are reviewed by faculty who look for indications of a high probability of success. The following factors are significant in determining admission to the program:
1. A grade-point average of 3.0 or higher in the last 60 credit hours attempted of undergraduate and all graduate courses.
2. A valid teaching certificate in elementary or secondary education or eligibility for admission to the teacher certification program.
3. Experience working with children and youth with disabilities (e.g., in a school or camp emphasis area) that is acceptable to the faculty. The experience should be related to the applicant’s planned area of emphasis.
4. Professional goals that are consistent with the objectives of the program.
5. A test of English language proficiency for students for whom English is not a first language.

Students who are seeking certification or endorsement through these emphasis areas and who do not have a valid teaching certificate must complete the requirements for teacher certification in elementary or secondary education, in addition to meeting the requirements for the master’s degree in special education with an emphasis in autism spectrum disorder, or learning disabilities.

Students who enter the master’s degree program with a valid teaching certificate in elementary or secondary education and who desire an additional endorsement in an area of special education also must meet the endorsement requirements for autism spectrum disorder, or learning disabilities.

Requirements for the Master of Arts Degree in Special Education
In addition to a formal evaluation, the student must complete one of the following areas of emphasis: autism spectrum disorder, or learning disabilities. The total number of credits required for the Master of Arts in Special Education varies according to the area of emphasis a student selects. The program is available only online and only under Plan B (without thesis).

Autism Spectrum Disorder
Two programs in autism spectrum disorders (ASD) are available: autism spectrum disorder or autism spectrum disorder with an autism spectrum disorder endorsement. All graduate-level courses are offered via a combination of web-based, video conference, and phone/video-phone technologies. Students are required to have access to the appropriate technologies and the internet. A student who, in the judgment of the faculty, has not completed appropriate courses in exceptional children or behavior management may be required to complete such courses in addition to the courses listed below.

Autism Spectrum Disorder - Master of Arts with an Autism Spectrum Disorder Endorsement
Students must complete a minimum of 30 credits if they possess a teaching certificate and an initial endorsement in special education. A student who possesses a teaching certificate and is seeking an initial endorsement in special education will be required to complete an additional 6 credits (3 credits of CEP 840 and 3 credits of CEP 893J) for a total of 36 credits. A student who earned a teaching certificate and endorsement in learning disabilities from Michigan State University can transfer 12 credits of approved course work and complete this program upon the completion of 18 credits.

1. All of the following courses (30 credits)
   CEP 801A Collaboration and Consultation in Special Education 3
   CEP 803A Assessment of Students with Mild Disabilities 3
   CEP 841 Classroom and Behavior Management in the Inclusive Classroom 3
   CEP 842 Content-Area Instruction for Students with Mild Disabilities 3
   CEP 843 Autism Spectrum Disorders: Characteristics and Educational Implications 3
   CEP 844 Applied Behavior Analysis 3
   CEP 845 Autism Spectrum Disorders: Assessment and Intervention 3
   CEP 846 Autism Spectrum Disorders: Advanced Topics 3
   CEP 850 Technology and Literacy for Students with Mild Disabilities 3
   CEP 894J Special Education Practicum: Children and Youth with Autism Spectrum Disorders 3

Autism Spectrum Disorder - Endorsement only
Students must complete a total of 21 credits. The autism spectrum disorder endorsement only is available to students who already possess a special education endorsement in another disability area. Students who are seeking their initial endorsement in special education in the area of autism spectrum disorder must follow the requirements above under the heading Autism Spectrum Disorder – Master of Arts with an Autism Spectrum Disorder Endorsement.
Learning Disabilities
Two programs in learning disabilities are available: Master of Arts without a learning disabilities endorsement or a Master of Arts with a learning disabilities endorsement. All graduate-level courses are offered via a combination of web-based, video conference, and phone/video- phone technologies, with the exception of the Special Education Internship, which is required for students who are seeking an endorsement. Students are required to have access to the appropriate technologies and the internet.

Learning Disabilities - Master of Arts
This program is designed for students who already have an endorsement to teach students with learning disabilities or who are seeking a master’s degree that will permit them to improve their knowledge of learning difficulties and disabilities. Students who complete these requirements will not receive an endorsement in learning disabilities.

Students must complete 30 credits and may be able to transfer 6 to 12 credits of course work from their post-baccalaureate program into the master’s area of emphasis with advisor approval. The course work must meet the area of emphasis, department, college, and university requirements. The student’s area of emphasis must be approved by the advisor.

1. All of the following courses (30 credits):
   - CEP 801A Collaboration and Consultation in Special Education 3
   - CEP 803A Assessment of Students with Mild Disabilities 3
   - CEP 804A Literacy Instruction for Students with Mild Disabilities 3
   - CEP 840 Policies, Practices, and Perspectives in Special Education 3
   - CEP 841 Classroom and Behavior Management in the Inclusive Classroom 3
   - CEP 842 Content-Area Instruction for Students with Mild Disabilities 3
   - CEP 844 Applied Behavioral Analysis 3
   - CEP 850 Technology and Literacy for Students with Mild Disabilities 3
   - TE 846 Accommodating Differences in Literacy Learners 3
   - Elective in TE or CEPSE 3

Learning Disabilities - Master of Arts with a Learning Disabilities Endorsement
This program is designed for students who are seeking an endorsement in learning disabilities. This may be the first endorsement for a teacher who is certified in elementary or secondary education prior to entering the area of emphasis or it may be a second endorsement for a student who has an endorsement in another special education area.

Students must complete 36 credits. Students who enter the area of emphasis with a teaching certificate in elementary or secondary special education may be able to transfer up to 6 credits of course work from their post-baccalaureate program into the master’s area of emphasis with advisor approval. The course work must meet the area of emphasis, department, college, and university requirements. The student’s area of emphasis must be approved by the advisor.

Students who enter the area of emphasis with a valid teaching certificate will be recommended for a State of Michigan teaching endorsement in learning disabilities upon completion of these requirements. The student must contact the Department of Education in other states in which they may desire to teach to determine if the endorsement is recognized.

1. All of the following courses (36 credits):
   - CEP 801A Collaboration and Consultation in Special Education 3
   - CEP 803A Assessment of Students with Mild Disabilities 3
   - CEP 804A Literacy Instruction for Students with Mild Disabilities 3
   - CEP 840 Policies, Practices, and Perspectives in Special Education 3
   - CEP 841 Classroom and Behavior Management in the Inclusive Classroom 3
   - CEP 842 Content-Area Instruction for Students with Mild Disabilities 3
   - CEP 844 Applied Behavioral Analysis 3
   - CEP 850 Technology and Literacy for Students with Mild Disabilities 3
   - CEP 883F Special Education Internship: Teaching Children with Learning Disabilities 3
   - CEP 894G Special Education Practicum: Children and Youth with Autism Spectrum Disorders 6
   - TE 846 Accommodating Differences in Literacy Learners 3

Doctor of Philosophy
The doctoral program with a major in special education is available to students who show promise of becoming outstanding leaders in the administration of special education programs or in college instruction. Students’ programs of study are planned to develop mastery of a comprehensive field, to foster creative approaches to the educational problems of exceptional children, and to encourage a breadth of understanding of related disciplines.

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

Admission
Applications for admission to the program are reviewed by faculty who look for indications of a high probability of success. Such indications include a high level of academic performance, a high score on the Graduate Record Examination General Test, and a statement of professional goals that is consistent with the objectives of the program. The applicant must submit three letters of recommendation including at least one from a professor or employer.

The applicant is required to submit a department supplemental application, as well as the university application. Persons are admitted to the program for fall semester only.

The deadline for submitting applications is December 1 of each year for admission the following fall semester. If space is available in the program, late applications will be considered.

Requirements for the Doctor of Philosophy Degree in Special Education
Students must meet the requirements specified below:

1. Research Methodology (21 credits):
   a. All of the following courses:
      - CEP 930 Educational Inquiry 3
      - CEP 932 Quantitative Methods in Educational Research 1 3
      - CEP 933 Quantitative Methods in Educational Research II 3
      - CEP 942 Single-Case Experimental Designs for Intervention Research 3
   b. One of the following courses:
      - CEP 906 Practicum in Research Design and Data Analysis 3
      - CEP 910A Proseminar in Learning, Technology, and Culture 3
      - CEP 941C Critical Issues in Special Education 3
      - CEP 982 Seminar in Counseling, Educational Psychology and Special Education 3

2. Special Education Core. All of the following courses (15 credits):
   - CEP 960 Proseminar in Learning, Technology, and Culture 3
   - CEP 943 MULTICULTURAL ISSUES IN SPECIAL EDUCATION 3
   - CEP 982 Seminar in Counseling, Educational Psychology and Special Education 3

3. At least 3 courses, totaling 9 credits in an approved cognate area.

4. Successful completion and defense of the dissertation. Students may not earn more than 30 credits in CEP 999 Doctoral Dissertation Research.
The program consists of a minimum of 45 credits of graduate study beyond the master’s degree. In addition to meeting the requirements of the College of Education, students must meet the requirements specified below.

**Admission**

Applicants to the Doctor of Education degree in Educational Leadership should have leadership experience in a school and hold a master’s degree in education or its equivalent. Students who wish to qualify for the Michigan Central Office Administrator endorsement by completing the Doctor of Education degree in Educational Leadership should already hold the School Administrator credential before applying to the program.

- 1. submit a goal statement.
- 2. submit three letters of recommendation from persons who are acquainted with the applicant’s academic and professional experience, performance, and potential.
- 3. submit scores earned on the Graduate Record Examination (GRE).

Applicants may be required to participate in an interview and to submit a sample of scholarly or professional writing.

**Requirements for the Doctor of Education Degree in Educational Leadership**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All of the following core courses (18 credits):</td>
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<tr>
<td>EAD 920 Political Economy of Schooling</td>
<td>3</td>
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<tr>
<td>EAD 921 Educational Leadership and Transformation</td>
<td>3</td>
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<tr>
<td>EAD 922 Analyzing Education Systems</td>
<td>3</td>
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<tr>
<td>EAD 923 Organizing for Learning</td>
<td>3</td>
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<tr>
<td>EAD 926 School Finance and Operations</td>
<td>3</td>
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<tr>
<td>EAD 927 Enacting Systemic Improvement</td>
<td>3</td>
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<tr>
<td>2. All of the following inquiry and research courses (18 credits):</td>
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<tr>
<td>EAD 924 Data and Decisions</td>
<td>3</td>
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<tr>
<td>EAD 929 Collaborative Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>EAD 981A Capstone I</td>
<td>4</td>
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<tr>
<td>EAD 981B Capstone II</td>
<td>4</td>
</tr>
<tr>
<td>EAD 982A Capstone Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>EAD 982B Capstone Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>3. Both of the following courses (9 credits):</td>
<td></td>
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<tr>
<td>EAD 980 Engaged Educational Leadership</td>
<td>6</td>
</tr>
<tr>
<td>EAD 990 Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>4. Completion of the comprehensive examination portfolio.</td>
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</tbody>
</table>

**HIGHER, ADULT and LIFELONG EDUCATION**

**Master of Arts**

The master’s degree program in higher, adult and lifelong education is designed for persons who are preparing for careers in post-secondary education, public and nonprofit agencies, or business and industry. The program focuses on the broad study of issues, institutions, and practices in the field with emphasis on instruction, program development, and program management.

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

The applicant must submit three letters of recommendation from persons who are acquainted with the applicant’s academic and employment experiences and potential.

Requirements for the Master of Arts Degree in Higher, Adult and Lifelong Education

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

1. Both of the following courses: ........................................ 6
   EAD 840 Inquiry in Postsecondary Education .......................... 3
   EAD 868 Proseminar in Higher and Adult Education ................. 3

2. Three of the following courses: ....................................... 9
   EAD 801 Leadership and Organizational Development .............. 3
   EAD 803 Budgeting and Finance in Higher Education ............... 3
   EAD 806 Concept of a Learning Society .............................. 3
   EAD 860 Adult Learning ............................................... 3
   EAD 861 Concept of a Learning Society ......................... 3
   EAD 866 Teaching in Postsecondary Education .................... 3
   EAD 870 Foundations of Postsecondary Education ................. 3
   EAD 876 Budgeting and Finance in Higher Education ............... 3
   EAD 877 Program Planning and Evaluation in Postsecondary Contexts. ................. 3

3. Fifteen additional credits of which 9 credits must be in Educational Administration courses within the Higher, Adult and Lifelong Education program.

4. Pass a final certifying examination.

Doctor of Philosophy

The doctoral program in higher, adult, and lifelong education is designed for individuals pursuing careers as administrators, researchers, professors, or policymakers in the field. The program emphasizes the complex and multifaceted nature of post-secondary education in the United States and other nations. By studying the diversity of contexts, structures, practices, and participants, students in the program should gain a broad, comparative perspective on the interrelated systems that influence the provision of post-secondary education in modern societies. The program is designed to assist students to distill from these perspectives a meaningful professional agenda and to acquire the skills and knowledge needed to carry this agenda forward.

The program is based on the belief that practitioners in the field of higher, adult, and lifelong education must (1) be knowledgeable about current practices, trends, and issues and (2) be able to advance the current boundaries of professional knowledge.

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

Admission

The applicant must submit three letters of recommendation from persons who are acquainted with the applicant’s academic and professional experience, performance, and potential. Applicants may be required to participate in an interview and to submit a sample of scholarly writing.

Requirements for the Doctor of Philosophy Degree in Higher, Adult, and Lifelong Education

1. Educational Inquiry and Research. CREDITS
   a. The following courses:
      CEP 930 Educational Inquiry ........................................ 3
      CEP 932 Quantitative Methods in Educational Research I ........ 3
   b. A 800-level course in advanced qualitative methods approved by the student’s guidance committee.
   c. A research practicum to be taken after the student has completed the courses referenced in items 1.a. and 1.b. above:
      EAD 995 Research Practicum in Educational Administration ................. 3

2. Core Courses. All of the following courses:

   EAD 960 Proseminar in Postsecondary Education .......................... 3
   EAD 966 Students in Postsecondary Education .......................... 3
   EAD 987 Policy Development and Analysis in Postsecondary Education .......................... 3
   EAD 968 Teaching, Learning and Curriculum in Postsecondary Education ................. 3
   EAD 970 Organization and Administration in Postsecondary Education .......................... 3

3. Additional Educational Administration Courses
   Nine additional credits in 800-level Educational Administration courses or above which deal with issues of postsecondary education.

4. Cognate outside the major or electives (9 credits).

5. Successful completion and defense of the dissertation. Students may not earn more than 30 credits in EAD 999 Doctoral Dissertation Research.

K–12 EDUCATIONAL ADMINISTRATION

The graduate degree programs in K–12 educational administration are designed to prepare persons for leadership positions in elementary and secondary education in the United States and other nations.

Master of Arts

The master’s degree program in K–12 educational administration is designed to prepare individuals for administrative positions in schools and school districts. The program is open to classroom teachers and noneducators who are interested in the practice or teaching of educational administration.

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

Requirements for the Master of Arts Degree in K–12 Educational Administration

The program is available only under Plan B (without thesis). The student must complete 30 credits and meet the requirements specified below, which must be approved by the student’s academic advisor.

CREDITS

1. A core of selective experiences that builds on four critical leadership capacities: (1) vision building, interpersonal and political skills; (2) organizational analysis and operation; (3) research and inquiry and (4) engagement with families and communities. In addition, the core experience will include field-based leadership internships ........................................ 24

2. A minimum of 6 credits in an area of emphasis focused on professional interest ........................................ 6

3. Pass a final certifying examination.

Doctor of Philosophy

The doctoral degree program in K–12 educational administration is designed to prepare individuals who will become administrators in K–12 school systems; administrators, educators, or researchers in institutions of higher education; or policy analysts or policymakers in a variety of agencies concerned with K–12 education.

Perspectives on K–12 educational administration, study of topics of enduring concern to educational administrators, clinical experiences, and applied research are integral aspects of this doctoral program.

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

Admission

Applications for admission to the program are reviewed by faculty who look for indications of a high probability of success within the program. Such indications include a high level of academic performance at the bachelor’s and master’s levels, evidence of leadership in education, and a statement of professional goals that is
consistent with the objectives and resources of the program. Applicants must submit a writing sample.

Requirements for the Doctor of Philosophy Degree in K--12 Educational Administration

Students must meet the requirements specified below.

1. Educational Inquiry and Research:
   
   a. The following courses:
      - CEP 930 Educational Inquiry ........................................ 3
      - CEP 932 Quantitative Methods in Educational Research I ... 3
   
   b. One of the following courses:
      - CEP 933 Quantitative Methods in Educational Research II ... 3
      - A 900-level course in advanced qualitative methods approved by the student's guidance committee.
   
   c. A research practicum to be taken after the student has completed the courses referenced in items 1.a. and 1.b. above:
      - EAD 995 Research Practicum in Educational Administration .................................................. 1 to 3

2. K--12 Educational Administration:
   
   a. One of the following courses:
      - EAD 990 Independent Study ........................................ 3
      - EAD 994 Laboratory and Field Experience in Educational Administration .................................. 3
   
   b. At least 12 credits in other K--12 educational administration courses approved by the student's guidance committee.

3. Concentration Course work. Students must complete a minimum of 9 credits of course work that builds expertise in an area related to their doctoral research. These courses should be organized around a specific theme, must be selected with an advisor's guidance, and must be approved by the student's guidance committee. These courses may be taken inside or outside the Department of Educational Administration.

STUDENT AFFAIRS ADMINISTRATION

Master of Arts

The master's degree program in student affairs administration is designed for persons who plan to be employed in this field within institutions of higher education. The program is designed to enable students to achieve an understanding of educational administration, higher education, and student affairs administration. Course work in the major integrates theory and practice. Courses can be chosen to reflect a student's interest in administration and leadership, teaching and learning, or adult development, and to build skills in academic advisement, training and development, communications, or counseling.

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

Admission

Applicants must submit a written statement of their volunteer experiences and interests that are related to the field of student affairs administration. The three required letters of recommendation must be from persons who are acquainted with the applicant's (1) academic and employment performance and (2) potential for graduate work and professional administration in higher education. Applicants must be available for an interview.

Requirements for the Master of Arts Degree in Student Affairs Administration

The program is available only under Plan B (without thesis). The student must complete 40 credits distributed as follows:

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<thead>
<tr>
<th>CREDITS</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>4</td>
<td>EAD 891</td>
<td>Administration in Higher Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 870</td>
<td>Foundations of Postsecondary Education</td>
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<td>3</td>
<td>EAD 871</td>
<td>Collegiate Contexts for Teaching and Learning</td>
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<td>3</td>
<td>EAD 873</td>
<td>The College Student Experience</td>
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<tr>
<td>3</td>
<td>EAD 874</td>
<td>Student Affairs in Collegiate Settings I</td>
</tr>
</tbody>
</table>

GRADUATE CERTIFICATE IN TEACHING AND LEARNING IN POSTSECONDARY EDUCATION

The Graduate Certificate in Teaching and Learning in Postsecondary Education is designed to assist current educators and practitioners from a variety of professional settings and disciplines who seek to enhance their understanding of teaching and learning issues for adult learners. The flexible schedule of the graduate certificate program accommodates both full-time students and working professionals by offering summer study programs as well as online and face-to-face instruction.

Requirements for the Graduate Certificate in Teaching and Learning in Postsecondary Education

<table>
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<tr>
<th>CREDITS</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>9</td>
<td>EAD 890</td>
<td>Concept of Learning Society in Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 860</td>
<td>Issues in Urban Education: Racial Achievement Gap.</td>
</tr>
<tr>
<td>3</td>
<td>EAD 822</td>
<td>Engaging Diverse Students and Families</td>
</tr>
<tr>
<td>3</td>
<td>EAD 830</td>
<td>Issues in Urban Education: Racial Achievement Gap.</td>
</tr>
<tr>
<td>3</td>
<td>EAD 861</td>
<td>Adult Learning</td>
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<tr>
<td>3</td>
<td>EAD 863</td>
<td>Training and Professional Development</td>
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<td>3</td>
<td>EAD 865</td>
<td>Teaching in Postsecondary Education</td>
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<tr>
<td>3</td>
<td>EAD 866</td>
<td>Teaching in Postsecondary Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 871</td>
<td>Collegiate Contexts for Teaching and Learning</td>
</tr>
<tr>
<td>3</td>
<td>EAD 877</td>
<td>Program Planning and Evaluation in Postsecondary Education</td>
</tr>
</tbody>
</table>

GRADUATE CERTIFICATE IN URBAN EDUCATION

The Graduate Certificate in Urban Education, which is administered by the Department of Educational Administration in the College of Education, is designed for students who aspire to understand and focus on issues involving urban education including the racial academic achievement gap; allocation of resources for urban schools; contexts of social, cultural, and economic differences; and the possibilities of transforming the ways in which urban school children learn to be active and engaged participants in their communities.

The certificate is available as an elective to students who are enrolled in master's or doctoral degree programs with approval from the urban education faculty. Students must meet the requirements of the certificate specified below, in addition to the requirements for the student's primary degree program.

Requirements for the Graduate Certificate in Urban Education

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>EAD 901</td>
<td>Urban Education: An Historical Overview</td>
</tr>
<tr>
<td>3</td>
<td>CEP 943</td>
<td>Multicultural Issues in Special Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 822</td>
<td>Engaging Diverse Students and Families</td>
</tr>
<tr>
<td>3</td>
<td>EAD 830</td>
<td>Issues in Urban Education: Racial Achievement Gap.</td>
</tr>
<tr>
<td>3</td>
<td>EAD 865</td>
<td>Teaching in Postsecondary Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 866</td>
<td>Teaching in Postsecondary Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 940</td>
<td>Organizational Analysis of Education</td>
</tr>
<tr>
<td>3</td>
<td>TE 961</td>
<td>Urban Politics, Education, and School Reform</td>
</tr>
<tr>
<td>3</td>
<td>TE 962</td>
<td>Teachers and Teaching in Urban Contexts</td>
</tr>
<tr>
<td>3</td>
<td>TE 963</td>
<td>Critical Race Theory in Education</td>
</tr>
</tbody>
</table>

Requirements for the Graduate Certificate in Urban Education

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>TE 964</td>
<td>Issueocused Learning</td>
</tr>
<tr>
<td>3</td>
<td>EAD 870</td>
<td>Foundations of Postsecondary Education</td>
</tr>
<tr>
<td>3</td>
<td>EAD 871</td>
<td>Collegiate Contexts for Teaching and Learning</td>
</tr>
<tr>
<td>3</td>
<td>EAD 873</td>
<td>The College Student Experience</td>
</tr>
<tr>
<td>3</td>
<td>EAD 874</td>
<td>Student Affairs in Collegiate Settings I</td>
</tr>
</tbody>
</table>

Students must complete the following (12 credits):

1. The following course (3 credits):
   - EAD 901 Urban Education: An Historical Overview

2. Three of the following courses (9 credits):
   - CEP 943 Multicultural Issues in Special Education
   - EAD 822 Engaging Diverse Students and Families
   - EAD 830 Issues in Urban Education: Racial Achievement Gap
   - EAD 865 Teaching in Postsecondary Education
   - EAD 866 Teaching in Postsecondary Education
   - EAD 940 Organizational Analysis of Education
   - TE 961 Urban Politics, Education, and School Reform
   - TE 962 Teachers and Teaching in Urban Contexts
   - TE 963 Critical Race Theory in Education

3. Students must complete a research paper on a topic in urban education which may focus on issues related to policy, curriculum, leadership or counseling as they pertain to understanding problems and strengths in urban schools. The research paper topic must be pre-approved by the urban education faculty and completed while enrolled in one of the courses listed above.
DEPARTMENT of KINESIOLOGY

Alan L. Smith, Chairperson

UNDERGRADUATE PROGRAM

The department offers Bachelor of Science degree majors in Kinesiology and in Athletic Training with an emphasis on relationships between physical activity in human beings and various sciences. Students will gain an understanding of the development, interpretation, application, and dissemination of knowledge that relates physical activity to human well-being.

ATHLETIC TRAINING

The major in athletic training prepares students to work with athletes, physicians, and coaches to ensure the health care and well-being of the competitive and recreational athlete. The Michigan State University athletic training major blends clinical and academic learning experiences. Students will gain knowledge and skills in evaluation and the treatment and rehabilitation of athletic injuries and will be prepared to organize and manage athletic training programs. The Michigan State University student majoring in athletic training is exposed to state-of-the-art philosophies, equipment, and research.

A student in this major will complete a two-year athletic training curriculum while working in a variety of clinical settings. These settings include on-campus rotations within the athletic department, high schools, and various clinics. Through clinical education, the student will encounter experiences requiring immediate decision-making, physician consultation, injury evaluations, and communications with coaches, student-athletes, and approved clinical instructors. Students who complete this major will be eligible to take the Board of Certification (BOC) examination.

The Bachelor of Science degree in Athletic Training is designed to prepare students for job opportunities in collegiate, professional, clinical, high school, and industrial settings. Students who graduate from this program may enter professional physical therapy programs, medical programs, or graduate studies in kinesiology. The degree is accredited by the Commission on Accreditation of Athletic Training (CAAATE).

Admission as a Junior

Admission to the athletic training major is competitive. A limited number of students are admitted. The deadline for application to the major is February 1. The decision regarding admission to the major is based on the following criteria:

1. Submission of the following; (a) an application to the major in athletic training; (b) an essay expressing reasons for selecting the field of athletic training; and (c) three letters of personal reference.
2. Completion of the following prerequisite courses with a grade-point average of 2.5 in these courses:
   - KIN 125 First Aid and Personal Safety
   - KIN 126 Introduction to Athletic Training
   - KIN 127 Taping and Bracing in Athletic Training
   - KIN 227 Observations and Introduction to Clinical Skills in Athletic Training
   - KIN 320 Pathology of Sports Injury
3. A minimum grade of 2.00 in each of the following courses: Chemistry 141, Kinesiology 216, Mathematics 103, Physics 231, and Physiology 250.
4. University grade-point average of 2.5 or above.
5. Interview with the Michigan State University Athletic Training Admissions Board.
6. Space availability in the formal clinical curriculum sites.

Requirements for the Bachelor of Science Degree in Athletic Training

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

Students enrolled in the Athletic Training major leading to the Bachelor of Science degree in the Department of Kinesiology may complete an alternative track to Integrative Studies in Biological and Physical Sciences that consists of the following courses: Chemistry 141 and 161, Physics 231 and 251, and Physiology 250. The completion of Chemistry 141, and Physics 251 satisfies the laboratory requirement. Chemistry 141 and 161, Physics 231 and 251, and Physiology 250 may be completed along both the alternative track and the requirements for the major referenced in item 2. a. below.

The University’s Tier II writing requirement for the Athletic Training major is met by completing Kinesiology 345. That course is referenced in item 2. b. below.

CREDITS

2. The following requirements for the major:
   a. All of the following with a minimum grade of 2.0 in each course: 17
      - CEM 141 General Chemistry
      - KIN 216 Applied Human Anatomy
      - MTH 103 College Algebra
      - PHY 231 Introductory Physics I
      - PSL 250 Introductory Physiology
   b. All of the following courses with a minimum grade-point average of 2.0: 39
      - KIN 121 The Healthy Lifestyle
      - KIN 125 First Aid and Personal Safety
      - KIN 128 Introduction to Athletic Training
      - KIN 127 Taping and Bracing in Athletic Training
      - KIN 173 Foundations of Kinesiology
      - KIN 217 Applied Human Anatomy Laboratory
      - KIN 227 Observations and Introduction to Clinical Skills in Athletic Training
      - KIN 250 Measurement in Kinesiology
      - KIN 310 Physiological Bases of Physical Activity
      - KIN 320 Pathology of Sports Injury
      - KIN 330 Biomechanics of Physical Activity
      - KIN 345 Sport and Exercise Psychology (W)
      - KIN 360 Physical Growth and Motor Behavior
      - KIN 411 Laboratory Experiences in Exercise Physiology
      - KIN 465 Adapted Physical Activity
      - CEM 161 Chemistry Laboratory
      - PHY 251 Introductory Physics Laboratory I
   c. All of the following courses: 2
      - KIN 421 Lower Body Injury Evaluation
      - KIN 422 Rehabilitation of Athletic Injuries
      - KIN 423 Therapeutic Modalities
      - KIN 425 Organization and Administration of Athletic Training
      - KIN 426 Upper Body Injury Evaluation
      - PSY 101 Introduction to Psychology
   d. All of the following courses with a minimum grade-point average of 2.0: 22
      - HNF 150 Introduction to Human Nutrition
      - KIN 421 Lower Body Injury Evaluation
      - KIN 422 Rehabilitation of Athletic Injuries
      - KIN 423 Therapeutic Modalities
      - KIN 425 Organization and Administration of Athletic Training
      - KIN 426 Upper Body Injury Evaluation
      - PSY 101 Introduction to Psychology
   e. Successful completion of the final clinical rotation, with a minimum grade of 2.0 in the following: 4
      - KIN 427 Clinical Rotations in Athletic Training
   f. A candidate must meet a minimum clinical evaluation score as required by the program director based on performance in clinical rotation experiences and competency.
   g. Meet professional standards as designated by the department.

KINESIOLOGY

The major in kinesiology places emphasis on the attainment of disciplinary knowledge in the anatomical, biomechanical, developmental, physiological, and neurological aspects of physical activity, explores how physical activity relates to human well-being, and offers an area of emphasis in exercise science.

The bachelor’s degree program in kinesiology is designed to prepare students to enter a variety of fields associated with sport, exercise science, and allied health services. Students who gradu-
Admission as a Junior

Admission to the major requires completion of at least 56 credits acceptable to the College with a cumulative university grade-point average of 2.0 or above and a minimum grade of 2.0 in each of the following courses: Chemistry 141, Kinesiology 216, Mathematics 103, Physics 231, and Physiology 250.

Requirements for the Bachelor of Science Degree in Kinesiology

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

2. The following requirements for the major:

   a. All of the following with a minimum grade of 2.0 in each course: 17
      
      CEM 141 General Chemistry ........................ 4
      KIN 216 Applied Human Anatomy .................... 3
      MTH 103 College Algebra ................................ 3
      PHY 231 Introductory Physics I ....................... 3
      PSL 250 Introductory Physiology ..................... 4

   b. All of the following courses with a minimum grade of 2.0: 15
      
      KIN 121 The Healthy Lifestyle ........................ 3
      KIN 140 Foundations of Kinesiology ................. 3
      KIN 250 Measurement in Kinesiology ................ 3
      KIN 310 Physiological Bases of Physical Activity ... 3
      KIN 330 Biomechanics Physical Activity .......... 3

   c. Both of the following courses: 2
      
      CEM 161 Chemistry Laboratory I .................... 1
      PHY 251 Introductory Physics Laboratory I ........ 1

   d. One of the following courses: 3
      
      KIN 345 Sport and Exercise Psychology (W) ........ 3
      KIN 445 Sociocultural Analysis of Physical Activity (W) ........ 3

   e. One of the following courses: 3
      
      KIN 360 Physical Growth and Motor Behavior ....... 3
      KIN 365 Sensorimotor Control ....................... 3

   f. Completion of an approved cognate in kinesiology (a minimum of 12 credits) 12
      
      g. An internship experience approved by the Kinesiology Internship Coordinator from one of the following courses: 3 to 6
      
      KIN 492 Internship: Non-Physiologically Based .... 3 to 6
      KIN 493 Internship: Physiologically Based ........ 3 to 6

   h. Kinesiology 495 is designed for seniors who have completed one of the following cognates: Adapted Physical Activity, Administration, Biomechanics, Communication, Growth and Motor Development, Orthotics and Prosthetics, or Psychological Aspects.

   i. Kinesiology 493 is designed for seniors who have completed one of the following cognates: Cardiac Rehabilitation, Exercise Physiology, Fitness Leadership, Nutrition, or Pre-professional.

Requirements for the Specialization in Coaching

The student must complete:

1. All of the following courses (17 credits):
   
   KIN 173 Foundations of Kinesiology .................. 3
   KIN 345 Sport and Exercise Psychology (W) ........ 3
   KIN 360 Physical Growth and Motor Behavior ....... 3
   KIN 400 Principles of Coaching I .................... 4
   KIN 401 Principles of Coaching II ................... 4

2. One of the following courses (3 credits):
   
   ANTR 350 Human Gross Anatomy for Pre-Health Professionals 3
   KIN 216 Applied Human Anatomy ...................... 3

3. One of the following courses (2 or 3 credits):
   
   KIN 300C Coaching Soccer ................................ 2
   KIN 300D Coaching Basketball ......................... 2
   KIN 300E Coaching Football ............................ 2
   KIN 300L Coaching for Strength, Conditioning and Fitness 3
   KIN 490 Independent Study ................................ 2
   KIN 494 Fieldwork ........................................ 2

To be counted toward the requirements for the Specialization in Coaching, the content of Kinesiology 490 must focus on coaching.

4. Cardiopulmonary Resuscitation (CPR) and First Aid Certification: Students must obtain these two certifications through a reputable source for CPR and first aid. Reputable sources include but are not limited to the American Red Cross, American Heart Association, and the National Safety Council. The certification must be current at the time of the student’s date of graduation. These certifications involve additional costs to the student.

MINOR IN HEALTH PROMOTION

The Minor in Health Promotion is designed to assist students in understanding health issues that will serve as a basis for personal and professional growth and positive lifestyle changes. The minor, which is multidisciplinary, is administered by the Department of Kinesiology.

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

Requirements for the Minor in Health Promotion

The student must complete:

1. Both of the following courses (6 credits):
   
   KIN 121 The Healthy Lifestyle ........................ 3
   PSY 320 Health Psychology ............................. 3

2. One of the following courses (3 credits):
   
   HNF 150 Introduction to Human Nutrition ............ 3
   HNF 260 Principles of Human Nutrition ............... 3

3. At least 9 credits from the following courses:
   
   ANP 270 Women and Health: Anthropological and International Perspectives ......................... 3
   ANP 370 Culture, Health, and Illness .................. 3
   BS 162 Organismal and Population Biology .......... 3
   CEP 260 Dynamics of Personal Adjustment ............ 3
   CEP 281 Substance Abuse ................................ 3
   EEP 260 World Food, Population and Poverty ......... 3
   FSC 211 Principles of Food Science .................... 3
   FSC 421 Food Laws and Regulations .................... 3
   HDFS 145 The Individual, Marriage and the Family .. 3
   HDFS 225 Lifespan Human Development in the Family 3
   HDFS 414 Parenting ...................................... 3
   HDFS 444 Interpersonal Relationships in the Family 3
   HDFS 445 Human Sexuality .............................. 3
   HM 101 Introduction to Public Health .................. 3
   HNF 375 Community Nutrition .......................... 3
   HNF 377 Applied Community Nutrition ................ 3
   HNF 406 Global Foods and Culture .................... 3
   LB 144 Biology I: Organismal Biology ................. 3
   MMG 301 Introductory Microbiology ................... 3
   MMG 302 Introductory Laboratory for General and Allied Health Microbiology ....................... 3
   NUR 300 Pathophysiology ................................ 4
   PHIL 344 Ethical Issues in Health Care ................. 4
   PSY 339 Psychology of Women ........................... 3
   SOC 241 Social Psychology .............................. 3
   SOC 475 Health and Society ............................. 3
GRADUATE STUDY

The department offers programs in kinesiology leading to the Master of Science and Doctor of Philosophy degrees. Students who are enrolled in Master of Science and Doctor of Philosophy degree programs in the Department of Kinesiology may elect specializations in Infancy and Early Childhood. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infancy and Early Childhood in the College of Social Science section of this catalog.

KINESIOLOGY

Graduate study in kinesiology provides opportunities for students to specialize in areas leading to the Master of Science and Doctor of Philosophy degrees. The programs are designed to prepare individuals for professional positions as educators, researchers, and consultants in a variety of sports, health, and educational contexts. Collaborative course work, laboratory and field experiences, clinical placements, and research are available with other departments and schools both at Michigan State University and at other universities, as well as with various community agencies.

Master of Science

The primary objective of the master's degree program in kinesiology is to help students to acquire a breadth of knowledge grounded in theory, to gain expertise in one or more areas of specialization, and to develop competence in methods of inquiry. The program follows the guidelines that were adopted by the National Association for Sport and Physical Education (NASPE).

A range of relevant courses and experiences can be incorporated into the student's program to satisfy individual needs and interests.

Ten major areas of study within the discipline of kinesiology are available to master's students:

- Adapted Physical Activity
- Athletic Training
- Biomechanics
- Coaching
- Exercise Physiology
- Growth and Motor Development
- Psychosocial Aspects of Sport and Physical Activity
- Sport Administration
- Strength and Conditioning
- Student Athlete Development

For each student, one of these nine areas of study is designated as the concentration.

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

Requirements for the Master of Science Degree in Kinesiology

Breadth requirement. Students who have not completed an undergraduate degree in kinesiology (or similarly named program such as physical education or exercise science) must complete a minimum of 6 credits of Kinesiology courses representing at least two of nine different disciplinary areas (adapted physical activity, athletic training, biomechanics, coaching, exercise physiology, growth and motor development, psychosocial aspects of sport and physical activity, sport administration, student athlete development) outside of the student's major area/concentration, as approved by the student's guidance committee. Credits earned in 200 or 300 level courses may be used to fulfill the breadth requirement, but will not count toward the master's degree.

The program is available under both Plan A (with thesis) and Plan B (without thesis). Students must complete 30 credits and meet the requirements specified below:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Required core course (3 credits):</td>
<td>3</td>
</tr>
<tr>
<td>2. A minimum of 9 credits of kinesiology graduate level courses in the student's concentration as approved by the student's guidance committee.</td>
<td>9</td>
</tr>
<tr>
<td>Additional Requirements for Plan A:</td>
<td>12</td>
</tr>
<tr>
<td>1. Both of the following courses (9 credits):</td>
<td>9</td>
</tr>
<tr>
<td>a. One additional research methods course at the 400–900 level approved by the student's guidance committee (3 credits).</td>
<td>3</td>
</tr>
<tr>
<td>b. Additional credits in courses approved by the student's guidance committee (3 credits).</td>
<td>3</td>
</tr>
<tr>
<td>Additional Requirements for Plan B:</td>
<td>12</td>
</tr>
<tr>
<td>1. Additional credits in courses approved by the student's guidance committee (12 credits). One of the following courses is recommended:</td>
<td>12</td>
</tr>
<tr>
<td>a. KIN 893 Internship in Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td>b. KIN 897 Project in Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td>2. Final certifying examination.</td>
<td></td>
</tr>
</tbody>
</table>

Students who do not complete Kinesiology 893 or 897 are required to pass an oral certifying examination. Students who do not complete Kinesiology 893 or 897 are required to pass a written certifying examination.

Doctor of Philosophy

The primary objective of the doctoral degree program in kinesiology is to develop scholars who are competent in teaching, conducting research, and serving in leadership roles in various educational, governmental, public, or private agencies. In addition to developing expertise in an area of specialization, students must be able to interpret and integrate information from related academic disciplines. Individualized programs of study may be developed, taking into consideration students' academic needs and professional goals.

Six major areas of study within the discipline of kinesiology are available to doctoral students:

- Adapted Physical Activity
- Athletic Training
- Biomechanics
- Exercise Physiology
- Growth and Motor Development
- Psychosocial Aspects of Sport and Physical Activity

For each student, one of these six areas of study is designated as the concentration.

While enrolled in the doctoral degree program in kinesiology, students are expected to present at least one paper at a professional meeting.

In addition to meeting the requirements of the university and of the College of Education, students must meet the requirements specified below.
Admission
Ordinarily, to be considered for admission into the doctoral program, a master’s degree is required; however, in cases of exceptional scholarly promise, a student may enter the doctoral program following the completion of the undergraduate degree. Factors considered in admissions decisions include (a) clarity of the applicant’s goals and research interests; (b) relationship between the program and the applicant’s goals and research interests; (c) previous academic experience and performance as indicated by transcripts from previous degrees (a competitive cumulative grade-point average of 3.0 or higher on a 4.0 scale); (d) competitive scores on the Graduate Record Examination (and TOEFL for international students); (e) evidence of research competence such as a master’s thesis, senior research project, or other research experience; and (f) three letters of recommendation. An interview with a committee of faculty members is strongly recommended.

Requirements for the Doctor of Philosophy Degree in Kinesiology

Breadth requirement. Students who have completed a previous degree in kinesiology, or similarly named program such as physical education or exercise science, must complete a minimum of 6 credits of kinesiology courses at the 800-900 level outside of the student’s major area/concentration. Students who have not completed a previous degree in kinesiology must complete a minimum of 9 credits of kinesiology courses at the 800-900 level representing at least two different disciplinary areas (adapted physical activity, athletic training, biomechanics, exercise physiology, growth and motor development, psychosocial aspects of sport and physical activity) outside of the student’s major area/concentration. Courses used to satisfy the breadth requirement must be approved by the student’s guidance committee. Courses that are used to satisfy the requirements referenced in the area below titled Educational Inquiry and Research may not be used to satisfy this requirement. The student must complete a minimum of 60 credits and meet the requirements specified below:

1. Educational Inquiry and Research.

   a. The following courses:
      CEP 904 Educational Inquiry 3
      CEP 932 Quantitative Methods in Educational Research I 3
   
   b. One of the following courses:
      CEP 933 Quantitative Methods in Educational Research II 3
   
   c. A 900-level course in advanced qualitative methods approved by the student’s guidance committee.
   
   d. The following course:
      KIN 995 Research Practicum in Kinesiology 1 to 3

2. Area of Concentration.

   A minimum of four courses at the 800–900 level totaling at least 12 credits in one of the six major areas of study referenced above. At least 6 of the 12 credits must be in Kinesiology courses. Courses in the student’s concentration must be approved by the student’s guidance committee. Courses that are used to satisfy the requirements referenced in item 1. above may not be used to satisfy this requirement.

3. Related Studies.

   A cognate that consists of a minimum of three courses at the 400–900 level totaling 9 credits. All 9 of the credits must be in courses outside the Department of Kinesiology and must be related to the student’s concentration. Both the cognate and the related courses must be approved by the student’s guidance committee.

4. Successful completion of the research practicum.

5. Successful completion and defense of the dissertation. The dissertation must be in the student’s concentration. Students may not earn more than 30 credits in KIN 999 Doctoral Dissertation Research.

6. Teaching.

   Competency in teaching the subject matter of the student’s concentration to undergraduate students or to an outreach audience, as judged by the student’s guidance committee. This requirement may be met as part of a graduate teaching assistantship assignment.

DEPARTMENT of TEACHER EDUCATION

Margaret S. Crocco, Chairperson

UNDERGRADUATE PROGRAM

The Department of Teacher Education offers a Bachelor of Arts degree program with a major in education. This program is a preprofessional program that is designed for students who plan to teach in elementary schools. Students in the program work toward certification as elementary teachers. Upon satisfactory completion of the requirements for the Bachelor of Arts degree with a major in Education, the bachelor’s degree is granted. However, in order for Michigan State University to recommend a person for a teaching certificate, that person must also complete the requirements for the Teacher Certification Internship Year Studies Program described in the section on TEACHER CERTIFICATION below.

Students who plan to teach in secondary schools should refer to the section on “MSU Subject Matter Teaching Majors for Secondary Teacher Certification” in the section on TEACHER CERTIFICATION below.

Students who wish to obtain a special education endorsement in learning disabilities on an elementary teacher certificate should see the Counseling, Educational Psychology, and Special Education section of this catalog for information about majoring in Special Education. These students must be admitted to the Elementary Teacher Certification Program and complete the Planned Program for Elementary Education and one of the required elementary teaching majors in addition to other requirements.

Students who wish to obtain an early childhood endorsement on an elementary teacher certificate should see the Human Development and Family Studies section of this catalog for information about majoring in Child Development. These students must be admitted to the Elementary Teacher Certification Program and complete the Planned Program for Elementary Education and one of the required elementary teaching majors in addition to other requirements.

Requirements for the Bachelor of Arts Degree in Education

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

   The completion of Integrative Studies in Arts and Humanities 208, 209, 241A, 241C, 241D, 241E, or 241F referenced in item 2. b. (7) below may also satisfy the University’s elective requirement in Integrative Studies in Arts and Humanities.

   Students who are admitted to the Elementary Teacher Certification Program and who choose to complete the requirements for the Integrated Science Teaching Major may complete an alternate track to Integrative Studies in Biological and Physical Sciences that consists of Biological Science 161 and 171 and Chemistry 141, all of which are required courses in the Integrated Science Teaching Major.

   The completion of Mathematics 201 referenced in item 2. b. (7) below may also satisfy the University Mathematics requirement.

   The University’s Tier II writing requirement for the Education major is met by completing Teacher Education 301 and 404. Those courses are referenced in item 2a. (1) below.

2. The following requirements for the major:

   a. Professional Education Courses 21

      (1) All of the following courses (21 credits):
      TE 150 Reflections on Learning 3
      TE 250 Human Diversity, Power, and Opportunity in Social Institutions 3
      TE 301 Literacy, Learners, and Learning - Elementary (W) 3
      TE 403 Teaching of Science to Diverse Learners - Elementary 3

   b. The following courses (3 credits):
# Subject Matter Teaching Preparation

## Teaching Major

Four teaching majors (language arts, social studies, integrated science, and mathematics) are available for prospective elementary school teachers. Elementary teacher candidates must choose one of the four teaching majors. These majors, which are housed in the College of Education, provide prospective elementary teachers with the opportunity to focus academic studies in a set of closely allied subject areas that are central to the core curriculum in elementary and middle schools. To enroll in one of these teaching majors, students must be admitted to the College of Education’s Teacher Certification Program.

(a) Language Arts
(b) Social Studies
(c) Integrated Science
(d) Mathematics

## Disciplinary Teaching Minors

For the requirements for the four teaching majors, refer to the section “NSU Subject Matter Teaching Majors for Elementary Teacher Certification” in the section on TEACHER CERTIFICATION below.

### Disciplinary Teaching Minors (41 to 50 credits):

Students may elect to complete one or more optional disciplinary teaching minor(s), in addition to the required teaching major. The following disciplinary teaching minors are available for prospective elementary school teachers:

- Arabic
- Chinese
- Computer Science
- English
- French
- German
- History
- Japanese
- Spanish

### Integrated Science Education

Integrated Science Education 301 is a prerequisite to Teacher Education 403.

### Teaching English to Speakers of Other Languages

This course is required for the Language Arts Teaching Major.

### Integrated Science Education

Integrated Science Education 301 is a prerequisite to Teacher Education 403.

### History of Art, the Visual, and Culture (I)

This course is required for the Social Studies Teaching Major.

### Creative Dance and Learning

This course is waived for the Integrated Science Teaching Major.

### Creative Arts and Humanities: The Creative Process (D)

Students may use Integrative Arts and Humanities 208 or 209 to satisfy the IAH “A” component and Integrative Arts and Humanities 241A, 241C, 241D, 241E or 241F to satisfy the IAH “B” component of the University’s Integrative Studies requirement in Arts and Humanities. (4 credits may count toward both the Planned Program and the University’s Integrative Studies requirement in Arts and Humanities.)

### Physical Activity and Health Education for Elementary Teachers

5. Submitted a completed application to the Office of Student Affairs, College of Education. Applications are accepted

# TEACHER CERTIFICATION

## ADMISSION TO THE TEACHER CERTIFICATION PROGRAM

The number of students admitted to the Teacher Certification Program at the junior level or above is established by the university. Enrollment in the program is limited. The criteria and procedures for the selection of students for admission to the Teacher Certification Program are established by the College of Education.


Students who are enrolled in undergraduate degree programs at Michigan State University generally apply for entry into the program during the first semester of their sophomore year.

To be eligible for consideration for admission to the Teacher Certification Program, the student must have:

1. enrolled in, or have applied for admission to, a disciplinary major that is available for teacher certification.
2. completed at least 60 credits with a cumulative grade-point average of 2.75 or higher.
4. Passed all portions of the Michigan Test for Teacher Certification (MTTC) Basic Skills Test.
5. Submitted a completed application to the Office of Student Affairs, College of Education. Applications are accepted
Once each year during the fall semester. Students who will have completed 56 or more credits by the end of the following summer session may apply for admission to the Teacher Certification Program.

To be eligible for consideration for admission to the Teacher Certification Program with a major in special education, the student must also have completed one or two supervised pre-admission experiences totaling at least 42 hours in the area of learning disabilities. Prospective special education students are strongly encouraged to talk with special education faculty about the potential value of sites for securing the required experience. Prospective applicants to the special education program must submit a form verifying completion of the experience with the completed application. Although applicants to the special education major will not be ranked by their performance in the experience, only students who have completed the required experience will be considered for admission.

Persons Selected for Admission

Persons are selected for admission on the basis of criteria that include consideration of cumulative grade-point average, written communication skills, and experience that is relevant to teacher certification. To be admitted to the Teacher Certification Program, a student must have completed at least 56 credits with a cumulative grade-point average of 2.75 or higher.

To be eligible for consideration for admission to the Teacher Certification Program, persons who hold bachelor’s degrees from Michigan State University and other recognized educational institutions must have submitted a completed application form to the Office of Student Affairs, College of Education. Applications from post baccalaureate candidates are accepted on a rolling admissions basis. Contact the Office of Student Affairs, College of Education, for further information. Admission to the program is competitive. The number of students admitted each year varies by certification area.

REQUIREMENTS FOR TEACHER CERTIFICATION

Disciplinary Course Requirements and Pedagogy Course Requirements

For some majors, disciplinary courses in addition to, or in lieu of, the courses that are required for the bachelor’s degree in the disciplinary major are required for teacher certification. Furthermore, for some disciplines, pedagogy courses in addition to, or in lieu of, the following courses are required for teacher certification: Teacher Education 150, 301, 403, 404, 405, 406, 501, 502, 801, 802, 803, and 804; Teacher Education 250 or Counseling, Educational Psychology and Special Education 240.

For additional information concerning disciplinary course requirements and pedagogy course requirements, refer to the section on teacher certification options in the catalog sections for the colleges, departments, and schools that administer disciplinary majors that are available for teacher certification.

General–Liberal Education Requirements

The State of Michigan requires applicants for provisional certification to have completed at least 40 semester credits in a program of general or liberal education, which is designed to ensure that teachers understand the substance, concepts, and methods of the principal areas of human knowledge, and skills essential to communication and inquiry in modern society. The courses used to fulfill the university’s Integrative Studies and Tier I writing requirements will count for 30 of the 40 credits required in general-liberal education.

Observation and Field Experience Requirements

Included in the requirements for teacher certification are courses that involve observations and field experiences in schools. Students are responsible for their transportation to and from observations and field experiences as well as any associated costs (e.g., transportation).

Teacher Certification Internship Year Studies Program

Persons may gain access to the Teacher Certification Internship Year Studies Program as follows:

1. Elementary Teacher Certification:
   a. Students who complete the requirements for the bachelor’s degree with a major in child development, education, or special education along with the teaching major, Planned Program for Elementary Education and all elementary program requirements are thereby qualified to pursue the Internship Year Studies Program.
   b. Michigan State University students who were admitted to the Teacher Certification Program with a disciplinary major other than those referenced in item 1. a. above, who complete the requirements for a bachelor’s degree at Michigan State University, and who complete the requirements for teacher certification referenced in items 2. and 3. a. (1) through (3) in the section “Prerequisites for Admission to the Internship Year Studies Program” below are thereby qualified to pursue the Internship Year Studies Program.
   c. Students who complete the requirements for a bachelor’s degree at another educational institution, or who complete the requirements for a bachelor’s degree at Michigan State University without having been admitted to the Teacher Certification Program, must meet the requirements referenced in the section “Prerequisites for Admission to the Internship Year Studies Program” below in order to be considered for admission to that program.

Students who plan to direct preschool programs must, and students who plan to teach children under five years of age should, meet the requirements for the Bachelor of Arts degree with a major in Child Development (teacher certification emphasis) and meet the requirements referenced in items 3. a. (1) through (3) in the section “Prerequisites for Admission to the Internship Year Studies Program” below in order to be considered for admission to the Internship Year Studies Program. Students who plan to teach kindergarten or early elementary grades may gain access to the Internship Year Studies Program via any one of the three alternatives referenced in item 1. above.

2. Secondary Teacher Certification:
   a. Michigan State University students who were admitted to the Teacher Certification Program with a disciplinary major other than those referenced in item 1. a. above and those referenced in items 3. a. and b. below, who complete the requirements for a bachelor’s degree at Michigan State University, and who complete the requirements for teacher certification referenced in items 2. and 3. b. (1) through (3) in the section on “Prerequisites for Admission to the Internship Year Studies Program” below are thereby qualified to pursue the Internship Year Studies Program.
   b. Students who complete the requirements for a bachelor’s degree at another educational institution, or who...
complete the requirements for a bachelor’s degree at Michigan State University without having been admitted to the Teacher Certification Program, must meet the requirements referenced in the section on “Prerequisites for Admission to the Internship Year Studies Program” below in order to be considered for admission to that program.

3. **Secondary Teacher Certification K-12 Endorsed Subject Areas:**
   a. Michigan State University students who were admitted to the teacher certification program with either a communicative sciences and disorders or music education disciplinary major and who complete the requirements for teacher certification referenced in items 2. and 3. b. (1) through (3) in the section on “Prerequisites for Admission to the Internship Year Studies Program” below are thereby qualified to pursue the Internship Year Studies Program.
   b. Michigan State University students who were admitted to the Teacher Certification Program with an art education disciplinary major, who complete the requirements for a bachelor’s degree from Michigan State University, and who complete the requirements for teacher certification referenced in items 2. and 3. b. (1) through (3) in the section on “Prerequisites for Admission to the Internship Year Studies Program” below are thereby qualified to pursue the Internship Year Studies Program.
   c. Michigan State University students who were admitted to the Teacher Certification Program with a disciplinary major other than those referenced in items 2. and 3. ab. above, who complete the requirements for a bachelor’s degree at Michigan State University, and who complete the requirements for teacher certification referenced in items 2. and 3. b. (1) through (3) under the heading “Prerequisites for Admission to the Internship Year Studies Program” below are thereby qualified to pursue the Internship Year Studies Program.
   d. Students who complete the requirements for a bachelor’s degree at another educational institution, or who complete the requirements for a bachelor’s degree at Michigan State University without having been admitted to the Teacher Certification Program, must meet the requirements referenced in the section on “Prerequisites for Admission to the Internship Year Studies Program” below in order to be considered for admission to that program.

**Prerequisites for Admission to the Internship Year Studies Program**

All students seeking admission to the Internship Year Studies Program must have:

1. A baccalaureate degree from a recognized educational institution with a cumulative grade-point average of at least 2.5.
2. Passed all portions of the Michigan Test for Teacher Certification (MTTC) Basic Skills Test and completed the State of Michigan Department of Education’s technology requirement.
3. Completed the following undergraduate requirements for teacher certification:
   a. **Undergraduate Requirements for Elementary Teacher Certification:**
      (1) The professional education courses listed in the “Undergraduate Professional Education and Planned Program Course Requirements for Elementary Teacher Certification” section below.
   b. **Undergraduate Requirements for Secondary Teacher Certification:**
      (1) The Professional Education Courses listed below in the section on the “Undergraduate Professional Education Course Requirements for Secondary Teacher Certification.”
      (2) An approved single disciplinary major for secondary teacher certification, with a grade-point average of at least 2.5. The approved disciplinary majors for secondary teacher certification are listed below in the section on “Options for Acceptable Subject Matter Teaching Majors and Minors for Elementary Teacher Certification.” Courses for an optional disciplinary major may be double-counted with the required teaching major and the Planned Program for Elementary Education.
      (3) An approved disciplinary teaching minor for secondary teacher certification, with a grade-point average of at least 2.5. The approved disciplinary teaching minors for secondary teacher certification are listed in the section on “Options for Acceptable Subject Matter Teaching Majors and Minors for Secondary Teacher Certification.”

(2) The Planned Program for Elementary Education listed in the “Undergraduate Professional Education and Planned Program Course Requirements for Elementary Teacher Certification” section below.

(3) The following requirements for subject matter teaching preparation:
A given course may not be counted toward the credit requirements for both the required elementary teaching major and the Planned Program for Elementary Education.

   a. One of the four approved teaching majors for elementary teacher certification (language arts, social studies, mathematics, and integrated science), with a grade-point average of at least 2.5. The teaching majors are described below in the section “MSU Subject Matter Teaching Majors for Teacher Preparation and Certification” and their requirements are listed in the section “Requirements for the Teaching Majors.”
   b. An optional single disciplinary major for elementary teacher certification, in addition to the required teaching major with a grade-point average of at least 2.5. The approved disciplinary majors for elementary teacher certification are listed below in the section on “Options for Acceptable Subject Matter Teaching Majors and Minors for Elementary Teacher Certification.” Courses for an optional disciplinary major or a Second Teaching Major may be double-counted with the required teaching major and the Planned Program for Elementary Education.
   c. Optional disciplinary teaching minors for teacher certification, in addition to the required teaching major, with a grade-point average of at least 2.5. The approved disciplinary teaching minors for elementary teacher certification and their requirements are listed below in the section on “Options for Acceptable Subject Matter Teaching Majors and Minors for Elementary Teacher Certification.” Courses for an optional teaching minor may be double-counted with the required teaching major and the Planned Program for Elementary Education.
Teaching Majors and Minors for Secondary Teacher Certification.

4. Earned a grade point average of 2.5 or above for pre-internship professional education courses required for teacher certification with no individual grade below 2.0.

5. Completed any disciplinary courses and pedagogy courses that are required in addition to the courses that are required for the disciplinary major and the courses that are referenced in item 3.a.(1) or 3.b.(1) above.

Any additional disciplinary courses and any additional pedagogy courses that are required for teacher certification are referenced in the sections on teacher certification options in the catalog sections for the colleges, departments, and schools that administer the disciplinary majors that are available for teacher certification.

6. Passed the required State of Michigan certification tests for elementary teaching or the appropriate major and minor subject area tests for secondary teaching. Elementary Education candidates who request internship placements in grades 6-8 must pass appropriate subject matter major/minor tests in addition to the Elementary Education test.

7. Submitted a complete conviction disclosure form; and

8. Met professional criteria as specified by the College of Education.

Undergraduate Professional Education and Planned Program Course Requirements for Elementary Teacher Certification

All courses are required unless otherwise stated. Some of the courses below are also required for or applicable to the Elementary Teaching Majors but the Planned Program must total at least 20 credits that are not double-counted with the required teaching major.

**GPA Standards:** All elementary teacher candidates must pass each Elementary Planned Program and Professional Education course with a minimum grade of 2.0.

**a. Professional Education Courses (21 credits):**

1. All of the following courses (21 credits):
   - **TE 150** Reflections on Learning ........................................ 3
   - **TE 250** Human Diversity, Power, and Opportunity in Social Institutions ........................................ 3
   - **TE 301** Literacy, Learners, and Learning in Context - Elementary (W) ........................................ 3
   - **TE 403** Teaching of Science to Diverse Learners - Elementary ........................................ 3
   - **TE 406** Teaching of Social Studies to Diverse Learners - Elementary ........................................ 3
   - **TE 405** Teaching of Language and Literacy to Diverse Learners - Elementary ........................................ 3
   - **TE 404** Teaching of Mathematics to Diverse Learners - Elementary ........................................ 3

   Students with a major in Special Education are required to complete Counseling, Educational Psychology and Special Education 240 in lieu of Teacher Education 250.

   Students with a major in child development are required to complete Counseling, Educational Psychology and Special Education 240 in lieu of Teacher Education 250.

2. Planned Program for Elementary Education (minimum of 20 credits):

   (1) Both of the following mathematics courses (6 credits):
   - **MTH 201** Elementary Mathematics for Teachers I ........................................ 3
   - **MTH 202** Elementary Mathematics for Teachers II ........................................ 3

   The completion of Mathematics 201 may also satisfy the university mathematics requirement. These courses are required for the Elementary Mathematics Teaching Major in which case 0 credits count toward the Planned Program.

   Mathematics 201 and 202 are a prerequisite for Teacher Education 406 and must be completed with a minimum grade of 2.0 prior to enrollment in Teacher Education 406.

   (2) The following course in children's literature (3 credits):
   - **TE 348** Reading and Responding to Children's Literature ........................................ 3

   This course is required for the Language Arts Teaching Major in which case 0 credits count toward the Planned Program.

   Teacher Education 348 is a prerequisite for Teacher Education 405 and must be completed with a minimum grade of 2.0 prior to enrollment in Teacher Education 405.

   (3) One of the following language acquisition and development courses (3 or 4 credits):
   - **CSD 333** Oral Language Development ........................................ 3
   - **ENG 302** Introduction to English Language Studies ........................................ 3

   Students with a disciplinary major in art education must complete Studio Art 481 and 482 in lieu of Teacher Education 407 and 408.
Admission to the Internship Year Studies Program
The section on admission to the Internship Year Studies Program pertains to all students who complete the requirements for a bachelor’s degree at another educational institution, or who complete the requirements for a bachelor’s degree at Michigan State University without having been admitted to the Teacher Certification Program.

The number of students admitted to the Internship Year Studies Program is established by the university. Enrollment in the program is limited. The criteria and procedures for the selection of students for admission to the Internship Year Studies Program are established by the College of Education.

Requirements for the Internship Year Studies Program
1. All of the following Professional Education Courses: ........................................ 24
   - TE 501 Internship in Teaching Diverse Learners I ........................................ 6
   - TE 502 Internship in Teaching Diverse Learners II .................................... 6
   - TE 801 Professional Roles and Teaching Practice I ...................................... 3
   - TE 802 Reflection and Inquiry in Teaching Practice I ................................. 3
   - TE 803 Professional Roles and Teaching Practice II .................................... 3
   - TE 804 Reflection and Inquiry in Teaching Practice II ............................... 3

2. Meet all professional standards for the internship year as specified by the College of Education.

Students with a music education disciplinary major must complete approved alternative courses in lieu of Teacher Education 501, 502, 801, 802, 803, and 804.

Students who fulfill all the requirements for a Master of Arts degree with a major in Communicative Sciences and Disorders will have completed the courses that are required in lieu of Teacher Education 502, 801, 802, 803, and 804.

Students with a special education disciplinary major who are seeking both teacher certification and endorsement in learning disabilities must complete Counseling, Educational Psychology and Special Education 502A, 801A, 802A, 803A, and 804A in lieu of Teacher Education 502, 801, 802, 803, and 804. Those courses contain disciplinary content, as well as pedagogical content. Therefore, those courses are also counted toward the requirements for endorsement in the area of learning disabilities. Students who completed Teacher Education 502, 801, 802, 803, and 804 and who are seeking endorsement in learning disabilities must complete Counseling, Educational Psychology and Special Education 502A, 801A, 802A, 803A, and 804A.

Internship Placements
Students seeking teacher certification are required to complete extended internships during the Internship Year Studies Program. Interns who desire to be placed in middle or secondary schools extended internships during the Internship Year Studies Program.

Students in the special education major are recommended for internship year, see Prerequisites for Admission to the Internship Year Studies Program.

Although students are given an opportunity to express their preferences concerning possible internship placement sites, the placement of students in internships is the sole responsibility of the College of Education. The College will not honor student-arranged internship placements.

Students are responsible for their transportation to and from internships. Students are responsible for costs associated with internships; e.g., transportation, or moving to and living in the community in which a student's internship placement is located.

For additional information, students should contact the faculty who are responsible for internship placements.

Relationship of the Internship Year Studies Program to Master's Degree Programs
Students may be admitted to the Internship Year Studies Program without being admitted to a master’s degree program. Students who are admitted to both the Internship Year Studies Program and a master’s degree program may pursue both programs simultaneously and may be allowed to apply 800-level courses from the Internship Year Studies Program to their master’s degree with the approval of the units that administer the master’s degree program.

Students in any master’s program in the College of Education may apply a maximum of 12 credits earned through any combination of courses taken through lifelong education, graduate certification, or in transfer from another institution. Each program may determine if courses are appropriate for the master’s program and may allow fewer than 12 credits to be applied to the specific master’s program.

For additional information about the 800-level courses that are required for the Internship Year Studies Program, refer to the section on "Requirements for the Internship Year Studies Program."

MSU Subject Matter Teaching Majors and Minors for Teacher Preparation and Certification
Michigan State University offers three options for subject matter teacher preparation and certification.

MSU Teaching Majors for Elementary Teacher Certification
The State of Michigan requires a minimum of 36 semester credits for a group (multiple subject) teaching major and a minimum of 30 semester credits for a single subject teaching major for elementary teacher certification. Four teaching majors are available for prospective elementary school teachers:

- **Group (multiple subject) teaching majors**
  - Language Arts
  - Social Studies (with history and geography concentrations)
  - Integrated Science
- **Single subject teaching major**
  - Mathematics

These majors, which are housed in the College of Education, provide prospective elementary teachers with the opportunity to focus academic studies in a set of closely allied subject areas that are central to the core curriculum in elementary and middle schools and that are aligned with Michigan Department of Education standards. To enroll in one of these teaching majors, students must be admitted to the Elementary Teacher Certification Program in the College of Education. The specific course requirements for each of the teaching majors are listed below.

Students in the special education major are recommended for elementary teaching certification and K-12 for their special education endorsement area.

MSU Disciplinary Majors for Elementary and Secondary Teacher Certification
The State of Michigan requires a minimum of 30 semester credits for a single-subject disciplinary teaching major, a minimum of 36 semester credits for a group disciplinary teaching major, and a minimum of 50 semester credits for a comprehensive teaching major. If the minimum number of credits required for teacher certification is not required in the student’s disciplinary major, the stu-
dent must complete additional credits as necessary for teacher certification. Comprehensive majors are not required to have a separate disciplinary minor.

All of the disciplinary majors are undergraduate majors.

Students in the art education, communicative sciences and disorders, kinesiology, and music education majors are recommended only for secondary teacher certification: K–12 endorsed subject area.

Below, the disciplinary majors that are available for teacher certification are identified, along with the colleges that administer them. Group disciplinary majors and comprehensive majors are also identified, and other information is provided.

Some of the disciplinary majors lead to the Bachelor of Arts or the Bachelor of Science degree. Either degree is appropriate for teacher certification. The student should refer to the relevant college section for additional information about a given major.

### MSU Disciplinary Teaching Minors for Elementary and Secondary Teacher Certification

The State of Michigan requires a minimum of 20 semester credits for a single–subject disciplinary teaching minor, and a minimum of 24 semester credits for a group subject disciplinary teaching minor, for elementary or secondary teacher certification. Below, the disciplinary teaching minors that are available for teacher certification are identified, and other information is provided.

### OPTIONS FOR ACCEPTABLE SUBJECT MATTER TEACHING MAJORS AND MINORS FOR ELEMENTARY TEACHER CERTIFICATION

#### Teaching Majors Available for Elementary Teacher Certification

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Integrated Science</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Arts and Letters</td>
</tr>
</tbody>
</table>

#### Disciplinary Majors Available for Elementary Teacher Certification

Students electing to complete the requirements for an optional disciplinary teaching major in addition to their required teaching major should make their choices from the list below.

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Chinese</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>French</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>German</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>History Education</td>
<td>Social Science</td>
</tr>
<tr>
<td>Japanese</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Spanish</td>
<td>Arts and Letters</td>
</tr>
</tbody>
</table>

#### Disciplinary Teaching Minors Available for Elementary Teacher Certification

Students electing to complete a disciplinary teaching minor(s) in addition to their required major should make their choices from the list below.

<table>
<thead>
<tr>
<th>MINOR</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Chinese</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Engineering</td>
</tr>
<tr>
<td>English</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>German</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>History</td>
<td>Social Science</td>
</tr>
<tr>
<td>Japanese</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Mathematics-Elementary</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Russian</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Spanish-Elementary</td>
<td>Arts and Letters</td>
</tr>
</tbody>
</table>

#### Teaching English to Speakers of Other Languages

- Arts and Letters

### Undergraduate Majors Leading to Endorsements on an Elementary Teacher Certificate

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Development</td>
<td>Social Science</td>
</tr>
<tr>
<td>Special Education</td>
<td>Education</td>
</tr>
</tbody>
</table>

Note that child development majors (with the teacher certification emphasis) and special education majors must also complete the requirements for a teaching major, the Planned Program for Elementary Education and all elementary program requirements as specified in the section above, Requirements for Teacher Certification. Child development and special education majors take Counseling, Educational Psychology and Social Education 240 in lieu of Teacher Education 250.

Language arts, social studies, and integrated science are group majors, requiring 36 or more semester credits.

A given course may not be counted toward both the credit requirements for the teaching major and the credit requirements for the Planned Program. Courses for optional teaching majors or minors may be double-counted, including credits toward the Planned Program.

### OPTIONS FOR ACCEPTABLE SUBJECT MATTER TEACHING MAJORS AND MINORS FOR SECONDARY TEACHER CERTIFICATION

#### Disciplinary Majors Available for Secondary Teacher Certification

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Food and Natural Resources Education</td>
<td>Agriculture and Natural Resources</td>
</tr>
<tr>
<td>Arabic</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Biological Science–Interdepartmental</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Chinese</td>
<td>Kuala Lumpur College</td>
</tr>
<tr>
<td>Comparative Cultures and Politics</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Earth Science–Interdepartmental</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>English</td>
<td>French</td>
</tr>
<tr>
<td>French</td>
<td>German</td>
</tr>
<tr>
<td>History Education</td>
<td>Social Science</td>
</tr>
<tr>
<td>Interdisciplinary Studies in Social Science</td>
<td>James Madison College</td>
</tr>
</tbody>
</table>

#### Disciplinary Teaching Minors Available for Secondary Teacher Certification

<table>
<thead>
<tr>
<th>MINOR</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Food and Natural Resources Education</td>
<td>Agriculture and Natural Resources</td>
</tr>
<tr>
<td>Arabic</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Biological Science</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Chinese</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Earth Science</td>
<td>Social Science</td>
</tr>
<tr>
<td>Economics</td>
<td>English</td>
</tr>
<tr>
<td>English</td>
<td>French</td>
</tr>
<tr>
<td>Geography</td>
<td>German</td>
</tr>
<tr>
<td>History</td>
<td>History</td>
</tr>
<tr>
<td>Japanese</td>
<td>Japanese</td>
</tr>
<tr>
<td>Journalism</td>
<td>Language Arts</td>
</tr>
<tr>
<td>Latin</td>
<td>Mathematics-Secondary</td>
</tr>
<tr>
<td>Math Science–Interdepartmental</td>
<td>Political Science</td>
</tr>
<tr>
<td>Political Science</td>
<td>Psychology</td>
</tr>
<tr>
<td>Psychology</td>
<td>Social Science</td>
</tr>
<tr>
<td>Russian</td>
<td>Arts and Letters</td>
</tr>
<tr>
<td>Russian</td>
<td>Arts and Letters</td>
</tr>
</tbody>
</table>
### Undergraduate Majors Leading to K-12 Endorsements on a Secondary Teacher Certificate

#### MAJOR

<table>
<thead>
<tr>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
</tr>
<tr>
<td>Art Education</td>
</tr>
<tr>
<td>Chinese</td>
</tr>
<tr>
<td>Communicative Sciences and Disorders</td>
</tr>
<tr>
<td>Music Education</td>
</tr>
</tbody>
</table>

#### REQUIREMENTS FOR THE TEACHING MAJORS

**Language Arts Teaching Major for Elementary Teacher Certification**

At least 36 credits with a minimum of 17 to 18 credits at the 300-400 level.

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>36 to 46</th>
</tr>
</thead>
</table>

1. **Language, Literacy, and Culture (11 to 15 credits):**
   - One of the following courses (3 or 4 credits):
     - ENG 302 Introduction to English Language Studies
     - LIN 200 Introduction to Language
     - LIN 401 Introduction to Linguistics
     - One of these courses is also required for the Elementary Planned Program, but the credits will count toward Language Arts. Special education majors must also complete 401.

2. **Writing, Rhetoric, and Design (9 to 8 credits):**
   - One of the following courses (3 credits):
     - ENG 223 Introduction to Creative Nonfiction Writing
     - ENG 226 Introduction to Creative Writing
     - ENG 228 Introduction to Fiction Writing
     - ENG 229 Introduction to Poetry Writing
     - ENG 232 Writing as Exploration
     - ENG 327 Introduction to Playwriting
     - JRN 200 Gathering and Writing News
     - TE 458 Reading, Writing, and Teaching Poetry
     - WRA 260 Rhetoric, Persuasion, and Culture
The following requirements for the major (49 credits):

1. All of the following courses (46 credits):
   - EC 201 Introduction to Microeconomics .................................. 3
   - EC 202 Introduction to Macroeconomics .................................. 3
   - GEO 204 World Regional Geography ......................................... 3
   - GEO 221 Introduction to Geographic Information ........................ 3
   - GEO 330 Geography of the United States and Canada ................... 3
   - GEO 333 Geography of Michigan and the Great Lakes Region .......... 3
   - HST 140 World History to 1500 .................................................. 4
   - HST 150 World History since 1500 .............................................. 4
   - HST 201 Historical Methods and Skills ...................................... 3
   - HST 202 History of the United States ......................................... 3
   - HST 203 U.S. History since 1876 ................................................. 4
   - HST 320 History of Michigan ..................................................... 3
   - PLS 150 Introduction to American Government ................................ 3
   - PLS 140 Government and Politics of the World ................................ 3

2. One of the following courses (3 credits):
   - HST 310 African American History since 1876 ......................... 3
   - HST 311 African American History after 1876 .......................... 3
   - HST 312 African American Women ............................................ 3
   - HST 313 Women in the United States ......................................... 3
   - HST 314 Women in the United States since 1869 ......................... 3
   - HST 327 History of Mexican Americans in the United States ....... 3
   - HST 370 Native Americans in North American History to 1830 .... 3
   - HST 379 Native Americans in North American History from 1830 .... 3

3. The following course:
   - BS 161 Cell and Molecular Biology ............................................ 3
   - BS 162 Organismal and Population Biology ............................... 3
   - BS 171 Cell and Molecular Biology Laboratory ........................... 2
   - BS 172 Organismal and Population Biology Laboratory ............. 2
   - PSL 250 Introductory Physiology ............................................. 4
   - ZOL 355 Ecology ........................................................................... 3

4. One of the following mathematics courses (3 or 5 credits):
   - STT 201 Statistical Methods ..................................................... 4
   - STT 250 Statistics and Probability for K-8 Teachers ................... 4

5. All of the following natural science courses (7 credits):
   - PHY 231 Introductory Physics I ................................................. 3
   - PHY 232 Introductory Physics II ............................................... 3
   - PHY 251 Introductory Physics Laboratory I ................................ 1
   - PHY 252 Introductory Physics Laboratory II ................................ 1
   - SME 120 Seminar in Integrated Science for Elementary Schools .... 1
   - SME 320 Integrated Science for Elementary Schools .................. 3

Mathematics Teaching Major for Elementary Teacher Certification

1. All of the following courses (28 credits):
   - MTH 132 Calculus I ..................................................................... 3
   - MTH 133 Calculus II ................................................................... 3
   - MTH 201 Elementary Mathematics for Teachers I ...................... 3
   - MTH 202 Elementary Mathematics for Teachers II ................... 3
   - MTH 301 Foundations of Higher Mathematics ......................... 3
   - MTH 304 Algebra for Elementary and Middle School Teachers ... 3
   - MTH 305 Functions and Calculus for Elementary and Middle School Teachers ......................................................... 3
   - MTH 330 Higher Geometry ....................................................... 3
   - SME 430 History of Mathematics ................................................. 3

For Elementary Mathematics Teaching Majors, Mathematics 201 and 202 will count for 0 credits in the planned program.

2. One of the following courses (4 credits):
   - STT 201 Statistical Methods ..................................................... 4
   - STT 250 Statistics and Probability for K-8 Teachers ................... 4

Requirements for the Disciplinary Teaching Minors

Agriculture, Food and Natural Resources Education

1. ABM 100 Decision-making in the Agri-Food System ................. 3
2. ANS 110 Introductory Animal Agriculture .................................... 4
3. CSS 101 Introduction to Crop Science ......................................... 3
4. CSS 310受限 Fundamentals of Soil Science ................................... 3
5. CSUS 200 Introduction to Sustainability ..................................... 3
6. CSUS 322 Leadership for Community Sustainability ................... 3
7. CSUS 343 Community Food and Agricultural Systems .............. 3
8. HRT 203 Principles of Horticulture ............................................ 2

Arabic

Complete a minimum of 20 credits form the following:

1. All of the following courses:
   - ARB 201 Second-Year Arabic I ............................................... 5
   - ARB 202 Second-Year Arabic II ............................................... 5
   - ARB 301 Third-Year Arabic I .................................................. 4
   - Students with intermediate or advanced-level Arabic can substitute ARB 351, 352, 361, or 362 for any of the courses above.

2. One of the following courses:
   - ARB 460 Special Topics in Arabic Culture (W) ......................... 3
   - ARB 461 Introduction to Arabic Literature (W) ........................ 3

3. The following course:
   - LLT 307 Methods of Second and Foreign Language Teaching ...... 3

Biological Science

1. BS 161 Cell and Molecular Biology ............................................ 3
2. BS 162 Organismal and Population Biology ............................. 3
3. BS 171 Cell and Molecular Biology Laboratory .......................... 2
4. ZOL 341 Fundamental Genetics .................................................. 4
5. ZOL 355 Ecology ........................................................................... 3
6. PSL 250 Introductory Physiology ................................................. 4
7. Or
   - PLB 301 Introductory Plant Physiology ...................................... 3
8. BMB 200 Introduction to Biochemistry ....................................... 4
9. Or
   - MMG 310 Introductory Microbiology ....................................... 3

Chemistry

One of the following sequences:

1. CEM 151 General and Descriptive Chemistry ............................. 4
   - CEM 152 Principles of Chemistry ......................................... 3
2. CEM 141 General Chemistry ..................................................... 4
3. CEM 142 General and Inorganic Chemistry ............................... 3

Required Courses:

1. CEM 161 Chemistry Laboratory I ................................................ 1
2. CEM 162 Chemistry Laboratory II .............................................. 1
3. CEM 262 Quantitative Analysis .................................................. 3

One of the following sequences:

1. CEM 251 Organic Chemistry I .................................................. 3
2. CEM 252 Organic Chemistry II .................................................. 3

Integrated Science, Secondary Education, Comprehensive Endorsement

A secondary education endorsement in Integrated Science is available for students in the undergraduate teaching certification program who are working on their initial certification. This endorsement must be completed in combination with either an approved science major or approved science minor at Michigan State University. When completed with a science major, the Integrated Science courses as a comprehensive teaching endorsement of 50 or more credits waives the requirement for a separate additional minor. Students interested in completing the Integrated Science secondary endorsement should contact an advisor in the College of Education, 134 Erickson Hall, for more information.
and

CEM 255 Organic Chemistry Laboratory ................................. 2

or

CEM 351 Organic Chemistry I ............................................. 3

and

CEM 352 Organic Chemistry II ............................................ 3

and

CEM 355 Organic Laboratory I ............................................ 2

The following course:

CEM 383 Introductory Physical Chemistry I ............................ 3

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EARTH SCIENCE

1. All of the following courses:
   
   CHS 201 Second-Year Chinese I ....................................... 5
   
   CHS 202 Second-Year Chinese II ...................................... 5
   
   CHS 301 Third-Year Chinese I ...................................... 4
   
   CHS 302 Third-Year Chinese II ...................................... 4
   
   LTT 307 Methods of Teaching English to Speakers of Other Languages ............................................. 3

2. One of the following courses:
   
   CHS 350 Studies in Chinese Language ................................ 3
   
   CHS 366 Chinese Culture: Tradition and Modernity (W) ............ 3
   
   CHS 401 Fourth-Year Chinese I .................................... 4
   
   CHS 402 Fourth-Year Chinese II .................................... 3
   
   CHS 466 Modern Chinese Literature and Films (W) .................. 3

   One additional course in Geography at the 300 or 400 level ............ 3

   The total credits for the teaching minor will be 22 or 23 credits.

   CSE 131, 231, 232, 260, and 320 will be available without restriction to students who meet the prerequisites. Students will need to submit a plan for the teaching minor to the Department of Computer Science and Engineering selected from the following: CSE 331, CSE 410, CSE 420, or CSE 460.

   Students may substitute TE 448, Issues of Diversity in Children's and Adolescent Literature, to fulfill this requirement.

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COMPUTER SCIENCE

All of the following courses (19 credits)

CSE 131 Introduction to Technical Computing ............................ 3

CSE 231 Introduction to Programming I ................................ 4

CSE 232 Introduction to Programming II ................................ 4

CSE 260 Discrete Structures in Computer Science .......................... 4

CSE 320 Computer Organization and Assembly Language Programming ............................................. 4

One additional 300-400 level course in the Department of Computer Science and Engineering selected from the following: CSE 331, CSE 410, CSE 420, or CSE 460.

The total credits for the teaching minor will be 22 or 23 credits.

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ECONOMICS

(Available only to students pursuing a major in comparative cultures and politics, international relations, political theory and constitutional democracy, social relations and policy, interdisciplinary studies in social science, interdisciplinary studies in social science: social science education, or history with a teacher certification option)

EC 201 Introduction to Microeconomics .................................. 3

EC 202 Introduction to Macroeconomics .................................. 3

EC 301 Intermediate Microeconomics .................................... 3

EC 302 Intermediate Macroeconomics .................................... 3

Electives from Economics Courses at 300 or 400 level .................. 9

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ENGLISH

1. Both of the following courses:

   ENG 210 Foundations of Literary Study I ............................ 3

   ENG 302 Introduction to English Language Studies .................. 3

2. One of the following courses:

   ENG 308 Literature for Young Adults ................................. 3

   TE 348 Reading and Responding to Children's Literature .......... 3

   Students pursuing elementary certification must take TE 348.

   Students pursuing secondary certification must take ENG 308.

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

   ENG 230 Introduction to Film ........................................ 4

   ENG 280 Foundations of Literary Study II ............................ 3

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

   ENG 320A Methodologies of Literary History: Genre ................. 4

   ENG 320B Methodologies of Literary History: Region, School, or Movement ............................................. 4

   ENG 320C Methodologies of Literary History: Canon Formation ...... 4

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

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

   ENG 362 Studies in Modern/Contemporary Literature (W) ........... 3

   ENG 364 Studies in 19th-20th-Century Literature (W) ............... 3

   ENG 368 Studies in Medieval/Early Modern Literature (W) ....... 3

   ENG 408 Socio-Psycholinguistic Approaches to Reading in the Disciplines ............................................. 4

   Students pursuing elementary certification may not select English 408.

6. At least one 300-400 level ENG course (3 or 4 credits).

   Students pursuing elementary certification may not use ENG 413, 490 or 493 to meet this requirement. Students pursuing secondary certification may not use ENG 490 or 493 to meet this requirement.

   Students may substitute TE 448, Issues of Diversity in Children's and Adolescent Literature, to fulfill this requirement.

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EDUCATION

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FRENCH

FRN 320 Self-Expression in Writing (W) ................................ 3

FRN 321 Oral Expression .................................................. 3

FRN 330 French Phonetics .................................................. 3

FRN 340 Introduction to Reading French Literature (W) ............... 3

FRN 345 Introduction to French Studies I: Metropolitan France ....... 3

FRN 416 Introduction to French Studies II: Francophone Cultures ...... 3

FRN 425 Advanced Studies in French Language .......................... 3

or

FRN 430 French Linguistics ................................................. 3

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GEOGRAPHY

(All courses available to students pursuing a major in comparative cultures and politics, international relations, political theory and constitutional democracy, social relations and policy, interdisciplinary studies in social science, interdisciplinary studies in social science: social science education, or history with a teacher certification option)

GEO 201 Historical Methods and Skills .................................. 3

GEO 204 World Regional Geography ..................................... 3

GEO 206 Physical Geography ............................................... 3

GEO 208 Physical Geography Laboratory .................................. 1

GEO 221 Introduction to Geographic Information ........................ 3

GEO 330 Geography of the United States and Canada .................... 3

GEO 333 Geography of Michigan and the Great Lakes Region ............ 3

One of the following courses:

GEO 113 Introduction to Economics Geography .......................... 3

One additional course in Geography at the 300 or 400 level ............ 3

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Students enrolled in the disciplinary teaching minor in geography must have their programs approved by the department.

GERMAN

1. One of the following groups of courses:

   a. GRM 301 Third-Year German I .................................... 3

   b. GRM 302 Third-Year German II .................................... 3

   c. GRM 311 Business German I ....................................... 3

   d. GRM 312 Business German II ..................................... 3

2. All of the following courses:

   a. GRM 341 German Literature and Culture Before 1918 ............... 3

   b. GRM 342 German Literature and Culture since 1918 ............... 3

   c. GRM 420 Advanced German (W) .................................... 3

   d. GRM 460 Linguistic Analysis of Modern German .................... 3

   e. GRM 481 Teaching German Language and Culture ..................... 3

   LTT 307 Methods of Second and Foreign Language Teaching ............ 3

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HISTORY

The student must complete all of the following courses:

GEO 204 World Regional Geography ..................................... 3

GEO 221 Introduction to Geographic Information ........................ 3

GEO 330 Geography of the United States and Canada .................... 3

HST 140 World History to 1500 .......................................... 4

HST 150 World History since 1500 ....................................... 4

HST 201 Historical Methods and Skills .................................... 3

HST 202 U.S. History to 1876 ............................................. 4

HST 203 U.S. History since 1876 ......................................... 4

HST 320 History of Michigan .............................................. 3

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EDUCATION

Department of Teacher Education

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ENGLISH

1. Both of the following courses:

   ENG 210 Foundations of Literary Study I ............................ 3

   ENG 302 Introduction to English Language Studies .................. 3

2. One of the following courses:

   ENG 308 Literature for Young Adults ................................. 3

   TE 348 Reading and Responding to Children's Literature .......... 3

   Students pursuing elementary certification must take TE 348.

   Students pursuing secondary certification must take ENG 308.

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

   ENG 230 Introduction to Film ........................................ 4

   ENG 280 Foundations of Literary Study II ............................ 3

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EDUCATION

Department of Teacher Education

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ITALIAN

ITL 201 Second-Year Italian I .................................. 4
ITL 202 Second-Year Italian II ................................ 4
ITL 300 Advanced Grammar and Composition ............... 3
ITL 340 Phonetics and History of the Italian Language ......... 3
ITL 350 Introduction to Italian Literature ...................... 3

One of the following:
ITL 330 Italian Culture and Civilization .......................... 3
ITL 360 Topics in Italian Language and Culture ................. 3

JAPANESE

All of the following courses (24 credits):
JPN 201 Second-Year Japanese I .................................. 5
JPN 202 Second-Year Japanese II ................................ 5
JPN 301 Third-Year Japanese I .................................... 4
JPN 302 Third-Year Japanese II ................................... 4
JPN 369 Introduction to Japanese Literature and Culture ....... 3
LLT 307 Methods of Teaching English to Speakers of Other Languages .................................. 3

JOURNALISM

All of the following courses (3 credits):
JRN 200 News Writing and Reporting I ......................... 4
JRN 306 Broadcast News I ...................................... 4
JRN 307 Methods of Teaching English to Speakers of Other Languages .................................. 3

LATIN

One of the following courses:
LTN 206 Nepos and Latin Prose .................................. 3
LTN 211 Livy and Roman Historiography ......................... 3
LTN 208 Catullus and Lucretius .................................. 3
LTN 221 Virgil and Latin Poetry .................................. 3
LTN 206 The Works of Cicero (W) ................................ 3
LTN 211 Augustine and His Age (W) .............................. 3
LTN 307 Roman Comedy (W) ..................................... 3
LTN 321 The Works of Ovid (W) .................................. 3
LTN 406 Senior Seminar: Tacitus (W) ............................ 3
LTN 407 Senior Seminar: Virgil (W) ............................... 3
LTN 411 Senior Seminar: Petronius and Apuleius (W) ....... 3
LTN 421 Senior Seminar: Horace (W) ............................ 3

MTH 330 Higher Geometry ...................................... 3
MTH 432 Axiomatic Geometry .................................... 3

At least three of the following courses (9 or 10 credits):
PLS 100 Introduction to American National Government ..... 3
PLS 140 Government and Politics of the World ................. 3
PLS 190 Introduction to International Relations .................. 3
PLS 170 Introduction to Political Philosophy .................... 3
PLS 191 Politics of European History and Security State ......... 3
PLS 200 The American Judicial Process ......................... 3
PLS 210 American Constitutional Law ........................... 3
PLS 219 Comparative Legal Systems ............................ 3
PLS 220 Religion and Politics .................................... 3
PLS 225 American Legislative Process .......................... 3
PLS 226 American Executive Process ........................... 3
PLS 321 Political Parties and Interest Groups .................... 3
PLS 322 Comparative Political Economy ......................... 3
PLS 324 Political Socialization and Public Opinion .............. 3
PLS 325 Political Science and Public Opinion .................... 3
PLS 326 Political Science and Public Opinion .................... 3
PLS 334 Politics in the Third World .............................. 3
PLS 335 Latin American Politics .................................. 3
PLS 335 African Politics .......................................... 3
PLS 335 Asian Politics ............................................ 3
PLS 337 Politics of English Speaking Democracies .............. 3
PLS 338 Politics of the U.S.S.R. and Its Successor States ......... 3
PLS 339 Foreign Policy .......................................... 3
PLS 339 International Political Conflict ......................... 3
PLS 337 International Organization and Cooperation ............ 3
PLS 340 Classical Political Philosophy .......................... 3
PLS 346 Modern Political Philosophy ............................ 3
PLS 347 Developmental Psychology: Adolescent Throught Youth ....... 3

PSYCHOLOGY

All of the following courses (11 credits):
MTH 132 Calculus I ............................................. 3
MTH 133 Calculus II ............................................ 4
MTH 301 Foundations of Higher Mathematics .................. 3
MTH 330 Higher Geometry ...................................... 3
SME 430 History of Mathematics ................................ 3
STT 201 Statistical Methods .................................... 4

MATHEMATICS-SECONDARY

1. All of the following courses (11 credits):
MTH 131 Calculus I ............................................. 3
MTH 132 Calculus II ............................................ 4
MTH 234 Multivariable Calculus ................................ 4

2. One of the following, either a. or b. (3 or 7 credits):
MTH 299 Transitions ............................................ 4
MTH 309 Linear Algebra ....................................... 3
MTH 317H Honors Linear Algebra ............................... 3

3. One of the following courses (3 credits):
MTH 330 Higher Geometry ...................................... 3
MTH 432 Axiomatic Geometry .................................... 3

PSY 101 Developmental Psychology: Infant Child Development ....... 3
PSY 244 Developmental Psychology: Infancy through Childhood .......... 3
PSY 295 Data Analysis in Psychological Research ................ 3
PSY 424 Child and Family Psychopathology ........................ 3
PSY 344 Developmental Psychology: Adolescent Throught Youth ....... 3

RUSSIAN

All of the following courses (24 credits):
RUS 201 Second-Year Russian I .................................. 4
RUS 202 Second-Year Russian II ................................ 4
RUS 301 Third-Year Russian I .................................... 3
RUS 302 Third-Year Russian II ................................... 3
RUS 401 Fourth-Year Russian I ................................... 3
RUS 402 Fourth-Year Russian II ................................ 3
LL 380 Methods of Teaching Foreign Languages ................. 3

POLITICAL SCIENCE

All of the following courses (12 credits):
PLS 100 Introduction to American National Government ..... 3
PLS 140 Government and Politics of the World ................. 3
PLS 190 Introduction to International Relations .................. 3
PLS 170 Introduction to Political Philosophy .................... 3
PLS 191 Politics of European History and Security State ......... 3
PLS 200 The American Judicial Process ......................... 3
PLS 210 American Constitutional Law ........................... 3
PLS 219 Comparative Legal Systems ............................ 3
PLS 220 Religion and Politics .................................... 3
PLS 225 American Legislative Process .......................... 3
PLS 226 American Executive Process ........................... 3
PLS 321 Political Parties and Interest Groups .................... 3
PLS 322 Comparative Political Economy ......................... 3
PLS 324 Political Socialization and Public Opinion .............. 3
PLS 325 Political Science and Public Opinion .................... 3
PLS 326 Political Science and Public Opinion .................... 3
PLS 334 Politics in the Third World .............................. 3
PLS 335 Latin American Politics .................................. 3
PLS 335 African Politics .......................................... 3
PLS 335 Asian Politics ............................................ 3
PLS 337 Politics of English Speaking Democracies .............. 3
PLS 338 Politics of the U.S.S.R. and Its Successor States ......... 3
PLS 339 Foreign Policy .......................................... 3
PLS 339 International Political Conflict ......................... 3
PLS 337 International Organization and Cooperation ............ 3
PLS 340 Classical Political Philosophy .......................... 3
PLS 346 Modern Political Philosophy ............................ 3
PLS 347 Developmental Psychology: Adolescent Throught Youth ....... 3

MATHEMATICS-SECONDARY

1. All of the following courses (11 credits):
MTH 131 Calculus I ............................................. 3
MTH 132 Calculus II ............................................ 4
MTH 234 Multivariable Calculus ................................ 4

2. One of the following, either a. or b. (3 or 7 credits):
MTH 299 Transitions ............................................ 4
MTH 309 Linear Algebra ....................................... 3
MTH 317H Honors Linear Algebra ............................... 3

3. One of the following courses (3 credits):
MTH 330 Higher Geometry ...................................... 3
MTH 432 Axiomatic Geometry .................................... 3

POLITICAL SCIENCE

All of the following courses (12 credits):
PLS 100 Introduction to American National Government ..... 3
PLS 140 Government and Politics of the World ................. 3
PLS 190 Introduction to International Relations .................. 3
PLS 170 Introduction to Political Philosophy .................... 3
PLS 191 Politics of European History and Security State ......... 3
PLS 200 The American Judicial Process ......................... 3
PLS 210 American Constitutional Law ........................... 3
PLS 219 Comparative Legal Systems ............................ 3
PLS 220 Religion and Politics .................................... 3
PLS 225 American Legislative Process .......................... 3
PLS 226 American Executive Process ........................... 3
PLS 321 Political Parties and Interest Groups .................... 3
PLS 322 Comparative Political Economy ......................... 3
PLS 324 Political Socialization and Public Opinion .............. 3
PLS 325 Political Science and Public Opinion .................... 3
PLS 326 Political Science and Public Opinion .................... 3
PLS 334 Politics in the Third World .............................. 3
PLS 335 Latin American Politics .................................. 3
PLS 335 African Politics .......................................... 3
PLS 335 Asian Politics ............................................ 3
PLS 337 Politics of English Speaking Democracies .............. 3
PLS 338 Politics of the U.S.S.R. and Its Successor States ......... 3
PLS 339 Foreign Policy .......................................... 3
PLS 339 International Political Conflict ......................... 3
PLS 337 International Organization and Cooperation ............ 3
PLS 340 Classical Political Philosophy .......................... 3
PLS 346 Modern Political Philosophy ............................ 3
PLS 347 Developmental Psychology: Adolescent Throught Youth ....... 3

RUSSIAN

All of the following courses (24 credits):
RUS 201 Second-Year Russian I .................................. 4
RUS 202 Second-Year Russian II ................................ 4
RUS 301 Third-Year Russian I .................................... 3
RUS 302 Third-Year Russian II ................................... 3
RUS 401 Fourth-Year Russian I ................................... 3
RUS 402 Fourth-Year Russian II ................................ 3
LL 380 Methods of Teaching Foreign Languages ................. 3
SPANISH-ELEMENTARY

SPN 310 Basic Spanish Grammar ........................................... 3
SPN 320 Cultural Readings and Composition (W) ...................... 3
SPN 330 Phonetics and Pronunciation ................................. 3
SPN 342 Media and Conversation .................................. 3
SPN 350 Introduction to Reading Hispanic Literature (W) .......... 3
SPN 440 The Structure of Spanish ........................................... 3

One of the following courses:

SPN 420 Spain and its Literature ........................................ 3
SPN 432 Latin America and its Literature ................................ 3

SPANISH-SECONDARY

SPN 310 Basic Spanish Grammar ........................................... 3
SPN 320 Cultural Readings and Composition (W) ...................... 3
SPN 330 Phonetics and Pronunciation ................................. 3
SPN 342 Media and Conversation .................................. 3
SPN 350 Introduction to Reading Hispanic Literature (W) .......... 3
SPN 412 Topics in Hispanic Culture ..................................... 3
SPN 440 The Structure of Spanish ........................................... 3

One of the following courses:

SPN 420 Spain and its Literature ........................................ 3
SPN 432 Latin America and its Literature ................................ 3

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

1. One of the following courses: ............................................. 3 or 4
   LIN 200 Introduction to Language .................................. 3
   LIN 401 Introduction to Linguistics .................................. 4

2. All of the following courses: ........................................ 14
   LLT 307 Methods of Teaching English to Speakers of Other Languages ........................................... 3
   LLT 346 Pedagogical English Grammar for English Teachers ........................................... 3
   LLT 361 Second and Foreign Language Learning ........................................... 3
   TE 494 Field Experience in Teacher Education ...................... 5

3. Complete either a. or b.: ................................................. 3 or 7
   a. ANP 420 Language and Culture .................................. 3
   b. COM 391 Topics in Verbal, Intercultural, or Gender Communication ........................................... 4
   LIN 471 Sociolinguistics .............................................. 4

The Teaching English to Speakers of Other Languages minor must be completed in combination with an academic core major. Students should see an academic advisor in the College of Education for more information.

TEACHER CERTIFICATION REGULATIONS IN THE STATE OF MICHIGAN

All persons who teach in Michigan must be certified by the State Board of Education. Candidates who complete an approved teacher education program apply for teacher certification and are recommended to the State of Michigan by the university. Holders of the Michigan Elementary Provisional Teaching Certificate are eligible to teach in the State of Michigan grades K–5 all subjects (K–8 Self-Contained Classrooms) and grades 6–8 in subject areas. Holders of the Michigan Secondary Provisional Teaching Certificate are eligible to teach in the State of Michigan grades 6–12 in subject areas and grades K–12 in specified subject areas.

In order for Michigan State University to recommend a person for a teaching certificate, that person must complete the requirements for the teacher certification program including the Internship Year Studies Program.

Ultimately, teachers must fulfill the requirements for the Michigan Professional Education Teaching Certificate listed below. Initially, Michigan Provisional Teaching Certificates, elementary or secondary, are recommended by Michigan State University upon the successful completion of program requirements and are generally valid for six years.

To be qualified to teach at the expiration of the provisional certificate, one must either qualify for a professional education certificate or for the renewal of the provisional certificate.

If necessary, a three-year renewal of the initial Michigan provisional certificate may be recommended by Michigan State University if the applicant presents evidence that the following requirements have been completed:

(a) Has been officially admitted to Michigan State University to a degree program on a regular or provisional basis or to a Graduate Certification program. Independent enrollment in courses through Lifelong Education Programs does not constitute official admission to a teacher certification program.
(b) Has earned 9 semester credits after the issuance of the provisional certificate in a planned course of study approved by Michigan State University or holds an earned master's or higher degree from an approved institution.
(c) Has completed any additional requirements specified by the State Board of Education.
(d) Has made application for the renewal of the provisional certificate to Michigan State University.

A second three year renewal of the provisional certificate may be recommended if, in addition to items (a), (b), and (d), above, the applicant presents evidence that he or she has earned 18 semester credits after the issuance of the provisional certificate in a planned course of study approved by Michigan State University. A person with an earned master's or higher degree from an approved institution is not required to complete an 18 credit planned program.

Michigan Professional Education Teaching Certificates, elementary or secondary, may be recommended by Michigan State University for an applicant who presents evidence that the following requirements have been completed:

(a) Has been officially admitted to Michigan State University to a degree program on a regular or provisional basis or to a Lifelong Education Teacher Certification program. Independent enrollment in courses through Lifelong Education Programs does not constitute official admission to a teacher certification program.
(b) Has taught successfully for three years according to the validity of the provisional certificate and since the issuance of the provisional certificate.
(c) Has earned 18 semester credits after the issuance of the state provisional certificate in a planned course of study approved by Michigan State University. A person with an earned master's or higher degree from an approved institution may not be required to complete an 18 credit planned program. Each master's degree is reviewed for relevance to the proposed certification area.
(d) Has completed any additional requirements specified by the State Board of Education.
(e) Has made application for the professional education certificate to Michigan State University.

The detailed requirements for teacher certification are not set forth here. Students who plan to teach should consult their academic advisors early in their programs of study to obtain information about the requirements for the particular teaching certificate in which they are interested.

Students who intend to pursue a teaching certificate should know that recommendations for certification will be subject to payment of a required fee to the State Department of Education. Payment of the fee is a certificate requirement that must be met.

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prior to the issuance of the teaching certificate. The Administrative Rules Governing the Certification of Michigan Teachers requires that an application for certification must be made no later than five years after credit requirements have been met. Furthermore, Part 10 ADMINISTRATIVE HEARINGS of the Administrative Rules Governing the Certification of Michigan Teachers \( \text{\textcopyright \hspace{1em} 390.1201} \) states:

Rule 101. (1) The state board may refuse to grant or renew, or may revoke or suspend for a fixed term, or may impose reasonable conditions on, a teaching certificate granted pursuant to these rules for the following reasons:

(a) Fraud, material misrepresentation, or concealment in the application for a certificate.
(b) Failure or ineligibility of the applicant or certificate holder to meet the criteria for eligibility for the certificate.
© Conviction, as an adult, of an act of immoral conduct contributing to the delinquency of a child, or of a felony involving moral turpitude.

Students should be aware that the State Board of Education has issued a statement indicating that the Board has consistently revoked or suspended a teaching certificate for a misdemeanor or felony conviction as an adult involving criminal sexual conduct, child abuse, or distribution of a controlled substance to a minor.

The College of Education will solicit information that will be used in making decisions on admission to or continued enrollment in teacher certification programs, internship placements, and recommendations for teacher certification. Information concerning the procedures that the College follows in soliciting and acting on such information may be obtained in the Office of Student Affairs, College of Education. Since the State of Michigan enters into reciprocal agreements with other states with reference to teacher certification, students should be aware that other states have requirements similar to those of the State of Michigan.

Students who intend to pursue a teaching certificate should also be apprised of the portions of Sec. 1531 of Act No. 267, Public Acts of 1986, that are referenced below:

(2) Beginning July 1, 1992 and subject to subsection (12), the State Board of Education shall only issue a teaching certificate to a person who has passed all portions of the Michigan Test for Teacher Certification (MTTC) as follows:

(a) For a secondary level teaching certificate, has passed both the basic skills test and the appropriate available subject area test for each subject area (major or minor) in which he or she applies to be certified. At the secondary level, at least one major and one minor are required.
(b) For an elementary level teaching certificate, has passed the basic skills test and the elementary certification test, and has passed the appropriate available subject area test for each subject area, if any, in which he or she applies to be certified.

(10) The Michigan Department of Education, or if approved by the state board, a private testing service, may assess fees for taking the basic skills test, elementary certification test, and the subject area tests. The fees, which shall be set by the state board, shall not exceed $50.00 for a basic skills test nor $75.00 for an elementary certification test or a subject area test. Students are responsible for all fees associated with certification, including the test fees.

ENDORSEMENTS

Persons who hold a bachelor's degree and a valid State of Michigan teaching certificate may be eligible for recommendation for additional endorsements. Endorsements are designations on a person's Michigan teaching certificate that identify the substantive field(s) that the person completed, and the relevant level(s) of certification.

Michigan State University's programs that are related to substantive fields and levels of certification are on file with the Michigan Department of Education. The substantive fields are identified by Michigan Department of Education designations and codes.

After a person has met the requirements for an additional substantive field or has met the requirements for an additional level of certification by completing the appropriate Michigan State University program, Michigan State University recommends to the Michigan Department of Education that the person's Michigan teaching certificate be "endorsed" with the additional substantive field designation that represents the program that the person completed, or with the additional level of certification.

Persons may qualify for additional endorsements by meeting the requirements for any Michigan State University disciplinary major or Michigan State University disciplinary minor that is available for teacher certification by completing a minimum of 20 semester hours in a planned program that has been specified with a College of Education advisor. The holder of an elementary or secondary provisional, permanent, continuing or professional education certificate may qualify for another certificate endorsement to be recommended by Michigan State University by completing a planned program with a minimum of 20 semester hours, which have prior approval from Michigan State University's certification office or designee in the following areas: (a) early childhood, (b) general elementary, (c) areas appropriate for the secondary grades for which Michigan State University has State of Michigan approval to offer.

A K-12 reading specialist (BR) endorsement, an elementary reading (BT) endorsement, or a secondary reading (BT) endorsement can be obtained by completing the requirements for Michigan State University's Master of Arts degree program in Counseling. A K-12 special education endorsement can be obtained in hearing impaired, learning disabilities or emotional impairment by completing the requirements for Michigan State University's Master of Arts degree program in Special Education. A K-12 special education endorsement may be placed on either an elementary or secondary teaching certificate. An Educational Technology (NP) endorsement can be added to either an elementary or secondary certificate by completing the requirements for Michigan State University's Master of Arts degree program in Educational Technology or can be obtained by completing a prescribed 21-credit program in educational technology. An Arabic endorsement can be added to either an elementary or a secondary certificate by meeting specified requirements to complete the requirements for Michigan State University's Master of Arts degree program in Teaching and Curriculum. An English as a Second Language endorsement can be added to either an elementary or a secondary certificate by meeting specified requirements to complete the requirements for Michigan State University's Master of Arts degree program in Teaching and Curriculum. Vocational endorsements in agricultural education and consumer homemaking can be obtained by meeting specified requirements.

To be recommended for certification, students completing endorsement areas must pass the appropriate Michigan Test for Teacher Certification Subject Test. Individuals who are interested in seeking additional endorsements must contact an academic advisor in the Office of Student Affairs, College of Education.
GRADUATE STUDY

Graduate study in the Department of Teacher Education leads to the Master of Arts or Doctor of Philosophy degree. Graduate Specializations are also available in Language and Literacy Education for doctoral students and in Literacy and Language Instruction for master’s students. A Graduate Certificate in Science Education and a Graduate Certificate in Urban Education are also available.

TEACHING and CURRICULUM

Master of Arts

The master’s program in teaching and curriculum is designed principally for persons who wish to acquire advanced professional knowledge related to teaching and curriculum diverse learners in K–12 schools. The program is offered in face-to-face, online, and hybrid formats.

This master’s program in teaching and curriculum consists of (1) designated areas of integrated, practice-centered inquiry in professional, disciplinary, and foundational studies and (2) sustained, simultaneous inquiry in both university and public–school settings. The program is designed for certified teachers and other educators who wish to continue their professional studies in teaching and curriculum.

Students wishing to add an Arabic or an English as a Second Language endorsement, a Classroom Reading Teacher (BT) endorsement, or Reading Specialist certification (BR) to their Michigan teaching certificate, as part of their Master of Arts in Teaching and Curriculum program may do so by completing the specified requirements for this endorsement or certification that have been approved by the Michigan Department of Education.

The program also considers applications from students who wish to pursue Michigan teacher certification in tandem with earning the master’s degree in curriculum and teaching. Such students need to apply to and be accepted into the Teacher Certification Program, through which they will meet current Michigan teacher certification requirements in a program of study and in a year-long internship that will be tailored to their teaching aspirations and their previous academic background. [For additional information on the requirements for teacher certification and for admission into Michigan State University’s Teacher Certification Program, see the TEACHER CERTIFICATION section of this catalog.]

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

Admission

Applications for admission to the master’s program are reviewed by faculty who look for evidence of appropriate preparation for advanced disciplinary and professional study at the master’s level and the likelihood of academic success, as indicated by an applicant’s prior educational record, work experience, statement of professional goals, letters of recommendation, and an assigned professional essay.

Requirements for the Master of Arts Degree in Teaching and Curriculum

The program is available only under Plan B (without thesis). Students must complete 30 credits distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional Development and Inquiry Core</td>
<td>9</td>
</tr>
<tr>
<td>a. One of the following courses:</td>
<td></td>
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<tr>
<td>b. One of the following courses:</td>
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<tr>
<td>c. One of the following capstone courses:</td>
<td></td>
</tr>
<tr>
<td>2. Electives:</td>
<td>12</td>
</tr>
<tr>
<td>a. Three 3-credit Teacher Education courses at the 400-level or above from a list of approved courses available in the department.</td>
<td></td>
</tr>
<tr>
<td>b. Three 3-credit courses at the 400-level or above from one of the areas of concentration on an approved list available in the department.</td>
<td></td>
</tr>
<tr>
<td>3. Electives:</td>
<td>12</td>
</tr>
<tr>
<td>a. Three 3-credit Teacher Education courses at the 400-level or above from a list of approved courses available in the department.</td>
<td></td>
</tr>
<tr>
<td>b. Three additional credits of electives as approved by the student’s academic advisor.</td>
<td></td>
</tr>
<tr>
<td>4. A synthesis paper acceptable to the student’s examining committee. This paper must be submitted near the end of the student’s program of study. The submission of an acceptable synthesis paper and professional portfolio satisfies the University requirement of a final examination or evaluation.</td>
<td></td>
</tr>
<tr>
<td>5. A professional portfolio developed by the student throughout the master’s program, beginning in Teacher Education 807 or 808. The portfolio is reviewed by two faculty members. A third reviewer is required if the first two reviewers do not reach consensus regarding the acceptability of the portfolio. The submission of an acceptable portfolio satisfies the University’s requirement of a final examination or evaluation.</td>
<td></td>
</tr>
</tbody>
</table>

CURRICULUM, INSTRUCTION, AND TEACHER EDUCATION

Doctor of Philosophy

The doctoral program in curriculum, instruction, and teacher education is designed for persons who are interested in and show promise of becoming scholars and leaders in the domains of curriculum, teaching, teacher education, and educational policy at the K–12 or college level, or in local, state, regional, national, or international institutions or agencies. The program is characterized by its interdisciplinary and interinstitutional perspectives on problems and issues of educational practice.

Doctoral students in curriculum, instruction, and teacher education link their areas of concentration with one or more of the following emphasis areas:

   Faculty and doctoral students who are associated with this emphasis area are interested in the interactive relationships among curriculum; the teaching and learning of school subjects; and the ideological, social, and disciplinary contexts of teaching and learning within and across subject areas. The curriculum, teaching, and learning emphasis area supports concentration in language education, literacy, mathematics, science, and social studies. Among the areas of central inquiry are curriculum theories, history, design, and development; relationships between disciplines and school subjects; and debates about what knowledge is of most worth, for whom, and for what purposes.

2. Educational Policy and Social Analysis.
   Faculty and doctoral students who are associated with this emphasis area share an interest in the critical analysis of educational policy. The courses that are related to the educational policy and social analysis emphasis area focus on a wide range of issues, including the social–historical contexts within which particular educational policies arise, the pro-
cess by which educational policies are formulated, and the effects that educational policies produce. In analyzing these issues, faculty and students draw on a wide range of perspectives from the social sciences.

3. **Teacher Education and Teacher Learning.**

Faculty and doctoral students who are associated with this emphasis area are concerned with the relationship between teacher education and teacher learning at the preservice, in-service, and inservice levels. The courses that are related to the teacher education and teacher learning emphasis area focus on the enterprise of teacher education, the practices of teacher educators, and the formal and informal learning of prospective, beginning, and experienced teachers over time and in different settings.

Students who are enrolled in the Doctor of Philosophy degree program in Curriculum, Instruction, and Teacher Education in the Department of Teacher Education may elect a specialization in language and literacy. For additional information, refer to the statement on **Graduate Specialization in Language and Literacy** below.

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

**Admission**

Persons who hold degrees in a wide range of disciplines may apply for admission to the doctoral program. Applicants with limited backgrounds in education, however, may be required to complete collateral work in this field. Applicants must submit a sample of scholarly writing.

Review of applicants focuses on their study and experience in education, on the compatibility between their professional goals and the doctoral program, and on their potential for successful advanced degree work.

**Requirements for the Doctor of Philosophy Degree in Curriculum, Instruction, and Teacher Education**

Students must complete the following courses:

1. Core Proseminar sequence. Both of the following courses:

   - TE 901 Proseminar in Curriculum, Instruction, and Teacher Education I .................................................. 3
   - TE 902 Proseminar in Curriculum, Instruction, and Teacher Education II .................................................. 3

2. Research Requirement - Educational inquiry and research.

   a. The following course:

      - CEP 930 Educational Inquiry .................................................. 3

   b. One of the following courses in qualitative methodology:

      - CEP 932 Quantitative Methods in Educational Research I .... 3
      - TE 934 Introduction to Quantitative Methods in Educational Research .................................................. 3

   c. One of the following courses in conceptual or qualitative methodology:

      - TE 931 Introduction Qualitative Methods in Educational Research .................................................. 3
      - TE 939 Special Topics in Advanced Qualitative Methodology .................................................. 3

   d. One of the following courses in advanced methodology:

      - CEP 933 Quantitative Methods in Educational Research II 3
      - TE 939 Special Topics in Advanced Qualitative Methodology .................................................. 3

   e. A research practicum to be taken after the student has completed the courses reference in items 2.a., 2.b., or 2.c. above:

      - TE 995 Research Practicum in Curriculum, Instruction, and Teacher Education ................................ 1 to 3

3. Core studies in education.

   Three courses from a list of approved courses that are designed to provide broad and diverse perspectives on education. The approved list is available from the Department of Teacher Education.

4. Area of concentration.

   At least five additional courses in the student’s area of concentration. Both the area and the related courses must be approved by the student’s guidance committee.

5. Successful completion and defense of the dissertation. Students may not earn more than 30 credits in TE 999 Doctoral Dissertation Research.

**GRADUATE CERTIFICATE IN SCIENCE EDUCATION**

The Graduate Certificate in Science Education, which is administered by the Department of Teacher Education in the College of Education, is designed for doctoral students who are interested in developing expertise in science education across and within a range of theoretical and methodological perspectives. Cognition, sociocultural, and feminist-critical perspectives along with both qualitative and quantitative methodologies are studied.

Persons who hold degrees in a wide range of disciplines may apply for admission to the certificate program. Applicants without sufficient science or science education background will be required to complete collateral course work or demonstrate proficiency through other means. Collateral course work will not count towards the certificate program. Review of applicants focuses on their study and experience in science and education, on the compatibility between their professional goals and the certificate program, and the potential for successful advanced degree work.

With approval of the College of Education, the certificate is available as an elective to any qualified student who is enrolled in a Doctor of Philosophy degree program in the College of Agriculture and Natural Resources, College of Natural Science, or the College of Education. Students must meet the requirements of the certificate specified below, in addition to the requirements for the student’s Doctor of Philosophy degree program.

**Requirements for the Graduate Certificate in Science Education**

<table>
<thead>
<tr>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Both of the following courses (9 credits):</td>
</tr>
<tr>
<td>TE 936 Topics in Research on Teaching and Learning Science. . 6</td>
</tr>
<tr>
<td>TE 937 Topics in Social, Historical, Philosophical Foundations of Science Education ........................................ 3</td>
</tr>
<tr>
<td>Students will enroll in two 3-credit enrollments for Teacher Education 936.</td>
</tr>
<tr>
<td>2. Students must complete a project under the supervision of a Teacher Education science education faculty member. College of Education students may fulfill the project requirement through a science education-focused research practicum by enrolling in Teacher Education 995 for 1 to 3 credits. Students outside the College of Education can meet this requirement by enrolling in a 1-credit section of Teacher Education 990 Independent Study experience with a Teacher Education faculty member.</td>
</tr>
</tbody>
</table>

**GRADUATE SPECIALIZATION IN LANGUAGE AND LITERACY EDUCATION**

The Graduate Specialization in Language and Literacy Education, which is administered by the Department of Teacher Education, is designed for students who aspire to be scholars, curriculum developers, and policy leaders in literacy at school, district, state, national, and international levels. The specialization focuses on literacy theory, research, and education. It is for students who wish to address issues of language and literacy development, literacy use, literacy instruction, literacy contexts of social, cultural, and linguistic differences, and the possibilities of transforming how people read and take action in their worlds.

The graduate specialization is available as an elective to students who are enrolled in the Doctor of Philosophy degree in Educational Psychology and Educational Technology and the Doctor of Philosophy degree in Curriculum, Instruction and Teacher Education and the Doctor of Philosophy degree in Special Education. Students must meet the requirements of the specialization specified below, in addition to the requirements for the Doctor of Philosophy degree in Educational Psychology and Educational Technology or the Doctor of Philosophy degree in Curric-
Requirements for the Graduate Specialization in Language and Literacy Education

CREDITS

1. All of the following courses (9 credits):
   - CEP 930 Educational Inquiry .................................. 3
   - TE 946 Current Perspectives in Literacy Research and Instruction .................................. 3
   - TE 931 Introduction to Qualitative Methods in Educational Research .................................. 3

2. One advanced inquiry/research course related to the student’s field of interest ................................................ 3

3. Four of the following courses (12 credits):
   - CEP 912 Reading Comprehension: Research and Theory .................................. 3
   - CEP 915 Literacy in Sociocultural Context .................................. 3
   - CEP 941 Academic Issues in Special Education for At-Risk Students .................................. 3
   - CEP 980 Writing, Research and Theory .................................. 3
   - CEP 981 Research on Literacy and Technology .................................. 3
   - TE 904 ELL/ESL Research and Practice: K-12 .................................. 3
   - TE 944 Seminar in English Education .................................. 3
   - TE 945 Current Issues in Children’s and Adolescent Literature .................................. 3
   - TE 956 History of Literacy Research and Instruction .................................. 3
   - TE 959 Acquisition and Development of Language and Literacy .................................. 3
   - TE 991B Special Topics in Language and Literacy Education .................................. 3
   - TE 994 Laboratory and Field Experience in Curriculum, Instruction and Teacher Education .................................. 3

4. One of the following research practicums (1 to 3 credits):
   - CEP 995 Practicum in Research Design and Data Analysis .................................. 1 to 3
   - TE 995 Research Practicum in Curriculum, Instruction and Teacher Education .................................. 1 to 3

The practicum should be focused on a problem in language and literacy education.

GRADUATE SPECIALIZATION IN LITERACY AND LANGUAGE INSTRUCTION

The Graduate Specialization in Literacy and Language Instruction, which is administered by the Department of Teacher Education in the College of Education, is designed for students who aspire to develop strong expertise in literacy and language instruction. The specialization is available only online.

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

Requirements for the Graduate Specialization in Literacy and Language Instruction

CREDITS

Students must complete the following (21 credits):

1. All of the following courses (18 credits):
   - TE 807 Professional Development and Inquiry .................................. 3
   - TE 845 Language Diversity and Literacy Instruction and Assessment .................................. 3
   - TE 848 Writing Assessment and Instruction .................................. 3
   - TE 849 Methods and Materials for Teaching Children’s and Adolescent Literature .................................. 3
   - TE 853 Assessing and Responding to Literacy Learning Difficulties I .................................. 3
   - TE 873 Literacy Leadership .................................. 3

2. One of the following courses (3 credits):
   - TE 842 Elementary Reading Assessment and Instruction .................................. 3
   - TE 843 Secondary Reading Assessment and Instruction .................................. 3