SCHOOL OF EDUCATION

Marlene Strathe, Director of the School of Education

School of Education (http://www.education.iastate.edu)

Mission and Goals

The School of Education will be a premier leader in education based on a strong foundation in the humanities and social sciences with a noted emphasis in leadership, and science, technology, engineering and mathematics (STEM) education. The School will advance research and scholarship in the areas of teaching, learning, and leadership and in the preparation of professionals for educational environments across multiple settings. The mission of the School of Education is to create, share, and apply knowledge and to advocate for equal educational opportunities and socially responsible educational reform in lowa, the nation, and the world. The School will prepare excellent research-informed educators, researchers, administrators, and others in educational roles.

- · Support the advancement of specialized academic disciplines through exemplary research and scholarship;
- · Enhance Iowa's families, schools, and communities through exemplary education and teacher preparation; and
- · Provide educators and students with the knowledge, skills, and experience necessary to become leaders in an increasingly changing and interdependent world.

Undergraduate Study

The School of Education provides the professional education coursework that leads to licensure of pre-service teachers. Majors offered in the department include Elementary Education (K-6), and Early Childhood Education-Unified (birth through age 8). The Early Childhood Education-Unified major is an interdepartmental program administered by the School of Education and the Department of Human Development and Family Studies.

Students who are interested in teaching at the secondary level (7-12) major in a specific discipline (e.g. Mathematics, Science, English, Social Studies) and complete additional required coursework in the School of Education for a teaching license.

Early Childhood Education-Unified majors must complete a professional course sequence:

C I 201	Learning Technologies in the PK-6 Classroom	3
C I 204	Social Foundations of Education in the United States	3
SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
C I 332	Educational Psychology of Young Learners	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
Total Credits		15

Total Credits

Elementary Education majors must complete a professional course sequence:

C I 201	Learning Technologies in the PK-6 Classroom	
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Total Credits		21
SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
or PSYCH 230	Developmental Psychology	2
HD FS 102	Individual and Family Development, Health, and Well-being	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
C I 332	Educational Psychology of Young Learners	3
CI245	Strategies in Teaching	3
C I 204	Social Foundations of Education in the United States	3

Secondary education students must complete a professional course sequence:

Total Credits		18
SP ED 401	Teaching Secondary Students with Exceptionalities in General Education	3
C I 426	Principles of Secondary Education *Not all secondary education programs require this course. Check with your program coordinator and/or academic adviser.	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
C I 333	Educational Psychology	3
C I 204	Social Foundations of Education in the United States	3
C I 202	Learning Technologies in the 7-12 Classroom	3

Total Credits

The School of Education offers a Learning Technologies minor that may be earned by registering for the minor and completing the following courses:

C 201 or C 202	Learning Technologies in the PK-6 Classroom Learning Technologies in the 7-12 Classroom	3
C I 280B	Pre-Student Teaching Experience I: Learning Technologies	1
C I 302	Principles and Practices of Learning with Technology	3
C I 407	Principles and Practices of Distance Learning	3
C I 454	Emerging Topics in Learning Technologies (3 modules required, 1 credit each)	3
One of the follow	ing:	3
COM S 107	Applied Computer Programming	
COM S 207	Fundamentals of Computer Programming	
MAT E 370	Toying with Technology	
CPR E 370	Toying with Technology	
Total Credits		16

Total Credits

3

Notes: The School of Education offers courses that can lead to a reading endorsement for grades K-8 or grades 5-12. Students seeking a K-8 endorsement should consult with a School of Education academic adviser. The 5-12 endorsement is offered collaboratively with the English Department. Students seeking this endorsement should consult with an adviser in the English Department. Inquiries can be sent to the Licensure Analyst in Teacher Education Services (133 MacKay) to receive a list of courses needed for an Iowa State University reading

endorsement. Prerequisites for the reading endorsement courses are listed in the catalog course descriptions.

Early Childhood Education – Unified

The curriculum in Early Childhood Education - Unified prepares graduates to teach young children and work with their families. This program leads to careers working with young children (both those who are typically developing and those with special needs) from birth through age eight. Graduates may be employed by either public or private agencies or schools to teach in early childhood classrooms (preschool through 3rd grade) or in home-based programs. This curriculum has been approved by the Iowa Department of Education and meets requirements for the early childhood education - unified teacher license, which permits individuals to teach general and special education for children from birth through age eight. The program is an interdepartmental major administered by the Department of Human Development and Family Studies and the School of Education. For more information about the program, see Early Childhood Education - Unified Curriculum (http:// www.education.iastate.edu/undergraduate-studies/early-childhoodeducation).

Students who enroll in the early childhood education – unified program must apply to and be accepted into the teacher education program prior to enrolling in advanced courses. All early childhood education – unified students must meet general education requirements for teacher licensure.

Elementary Education

The undergraduate curriculum in elementary education leads to the Bachelor of Science degree.

The curriculum in elementary education is planned for students preparing to teach at the elementary school level. This program leads to careers in working with school-aged children in kindergarten through sixth grade. Graduates in this curriculum who meet all requirements set by the Iowa Board of Educational Examiners will be recommended for licensure, which would allow them to teach in elementary classrooms in either public or private schools. For more information about the program, see Elementary Education Curriculum (http://www.education.iastate.edu/assets/files/pdf/TES/Elementary%20Education/15-16%20CURR%20INFO %20SHEET.pdf) .

Endorsements in art, English/language arts, English as a Second Language (ESL), health, history, music, basic science, social studies, mathematics, special education (Instructional Strategist I: Mild/Moderate Disabilities K-8), and speech communication/theater are available for elementary education students. An endorsement for teaching world languages in elementary schools is available through the Department of World Languages and Cultures.

Elementary education majors must satisfy a world languages requirement for graduation.

Students who enroll in elementary education must apply and be accepted into the teacher education program prior to enrolling in advanced elementary education courses. Iowa Department of Education licensure requirements state that every student must meet the performance outcome standards for teacher licensure. Standards will be assessed in each course and students will receive both formative and summative evaluations of their progress toward meeting these standards throughout their program at Iowa State University. A detailed explanation of the standards and assessment process may be found on the school's website at Educator Prep Resources (http://www.education.iastate.edu/ educator-prep-resources), or may be obtained from a School of Education academic adviser.

K-12 and Secondary Education

Students seeking K-12 and Secondary Teacher Licensure major in the content area in which they want to focus. Curriculum for each of the K-12 and secondary programs can be found at Teacher Education (http://catalog.iastate.edu/previouscatalogs/2016-2017/ collegeofhumansciences/schoolofeducation/#teachereducationtext).

Graduate Study

The School of Education offers coursework and experiences for the degrees Doctor of Philosophy, Master of Science, and Master of Education with a major in education. Graduate teacher licensure/ degree programs are offered in secondary science and secondary mathematics, as well as endorsement programs in special education. Graduate students may also pursue administrative licensure for roles as principals and superintendents. The School of Education offers graduate coursework leading to a minor for masters and doctoral students in other fields of study. Several graduate certificate programs are offered through the School of Education.

Doctoral Degree Program

Students in the School of Education may complete the Ph.D. with a major in education. Specializations in Curriculum and Instructional Technology and Educational Leadership are offered. Within the Educational Leadership specialization, students may emphasize educational administration or higher education (higher education administration, community college, social justice). Students pursuing the Ph.D. may earn an education degree with an emphasis area. Emphasis areas include literacy, mathematics education, multicultural education, or science education. Specific information about the requirements of and options available within the Ph.D. degree in education are available from the school office or on the web School of Education Graduate Studies (http:// www.education.iastate.edu/graduate-studies).

The following information refers only to the Ph.D. program:

Prerequisite to major graduate work in education is completion of an undergraduate degree and a masters degree with coursework appropriate to the planned area of study, and evidence that the student ranks above average in scholastic achievement and promise of professional competence. In addition, several areas of emphasis prefer that students have 3-5 years of professional experience. All applicants for the Ph.D. must submit Graduate Record Examination (GRE) scores.

Graduates of the Ph.D. program in education are prepared to pursue careers as scholars, leaders, and administrators in various educational settings, including public and private colleges and universities, community colleges, public and private educational agencies, and corporate training settings.

Master's Degree Programs

Students in the School of Education may seek a specialization in Curriculum and Instructional Technology (M.S., M.Ed.), Educational Administration (M.Ed.), Higher Education (M.S., M.Ed.), Research and Evaluation (M.S.), Special Education (M.S., M.Ed.), or Student Affairs (M.Ed.). Within the Higher Education specialization, students may opt to emphasize community college leadership or leadership and learning. Students may also pursue a master's degree with an emphasis area. Emphasis areas include literacy, mathematics education, multicultural education, or science education.

Graduates of the master's degree programs are prepared to pursue careers as educational leaders, higher education professionals, researchers, and advanced practitioners in colleges and universities, community colleges, public and private schools, education agencies, and informal (free-choice) education settings.

A minor is available in Curriculum and Instructional Technology at both the master's and doctoral level. Information about the minors can be found on the web at Graduate Specializations (http:// www.education.iastate.edu/te/graduate/cit/graduate-specialization).

Other graduate programs related to education (including General Graduate Studies) may be planned for students on the basis of previous education and experiences as well as future plans and needs. For more information, students should refer to Agricultural Education and Studies, Family and Consumer Sciences Education, Kinesiology, and General Graduate Studies or to graduate level course offerings within other departments.

Graduate Teacher and Administrator Licensure Programs

A Master of Arts in Teaching degree program leading to teacher licensure (science education) is available to students who currently have a bachelor's degree in a science area (or a closely related field). A teacher licensure program in mathematics education is also available to graduate students (School of Education). Teacher licensure at the graduate level is also offered in agricultural education (College of Agriculture and Life Sciences), family and consumer sciences (College of Human Sciences), and physical education (College of Human Sciences). The School of Education provides the professional education coursework.

Students in a graduate teacher licensure program must complete specific courses, which can be found in Teacher Education (http://catalog.iastate.edu/previouscatalogs/2016-2017/ collegeofhumansciences/schoolofeducation/#teachereducationtext)

Graduate level teaching endorsements are offered through the School of Education. Graduate students who seek a teaching endorsement in special education, but do not wish to pursue a master's degree can incorporate those courses in a professional certificate program. Endorsement programs include Instructional Strategist I: Mild/Moderate Disabilities (K-8 or 5-12), or Instructional Strategist II: Behavior Disorders/ Learning Disabilities, and special education consultant. A graduate level reading endorsement is also available.

The School of Education offers graduate programs for students seeking Iowa licensure as principals and superintendents. The PreLEAD (Preparation for Leadership) program is designed for working professionals and includes coursework and field experiences leading to Iowa licensure as a principal. Students may complete the program as a certificate (non-degree) or as a Master of Education degree. A Certificate of Advanced Studies program allows students who hold a master's degree in Educational Administration to pursue the coursework and clinical field experiences necessary to earn an Iowa Superintendent or AEA Chief Administrator license.

Graduate Certificate Programs

The School of Education offers Graduate Certificate programs to allow students to enhance their skills outside of full degree programs. The

Certificate programs currently offered include Applied Research Methods in the Human Sciences, Community College Leadership, Community College Teaching, Instructional Design, Literacy Coaching, Principal Licensure (Pre-LEAD), Social Justice in Higher Education, Special Education, and Superintendent Licensure (Certificate in Advanced Studies). Certificate programs require a minimum of 12 graduate credits (several require more than this) and can be earned in conjunction with a degree program. More information about graduate certificate programs can be found on the School of Education web site.

Courses:

Curriculum and Instruction (C I) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/c_i) Educational Administration (EDADM) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/edadm) Educational Leadership and Policy Studies (EL PS) (http:// catalog.iastate.edu/previouscatalogs/2016-2017/azcourses/el_ps) Higher Education (HG ED) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/hg_ed) Historical, Philosophical, and Comparative Studies in Education (H P C) (http://catalog.iastate.edu/previouscatalogs/2016-2017/azcourses/ h_p_c)

Human Sciences (H SCI) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/h_sci) Research and Evaluation (RESEV) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/resev) Special Education (SP ED) (http://catalog.iastate.edu/ previouscatalogs/2016-2017/azcourses/sp_ed)

Teacher Education at Iowa State University

Heidi Doellinger, Director of Teacher Education Services

Educator Preparation (http://www.education.iastate.edu/undergraduatestudies/undergraduate-applicants)

Teacher Education is a shared responsibility that spans three colleges. For most licensure areas, students major in a content area while taking additional education courses. All students who are recommended by lowa State University for teacher licensure must meet the requirements of Teacher Education and be recommended by their department, college, and the ISU recommending official. Students who successfully complete the requirements for any of the endorsement areas offered at ISU must demonstrate the skills and knowledge required of beginning teachers.

Undergraduate Teacher Licensure Areas

An undergraduate student seeking a bachelor's degree must be enrolled in the department in which he or she plans to major and must meet the graduation requirements of that department and college.

Currently, there are fifteen undergraduate teacher licensure areas offered at Iowa State University. These areas and their corresponding grade levels are listed below:

Agricultural Education (grades 5-12) Biology (grades 5-12) Chemistry (grades 5-12) Early Childhood Education-Unified (birth-grade 3, including special education) Earth Science (grades 5-12) Elementary Education (grades K-6) English (grades 5-12) Family and Consumer Sciences (grades 5-12) Health Education (grades 5-12) History-Social Sciences (grades 5-12) Mathematics (grades 5-12) Music (grades K-12) Physical Education (grades K-12) Physics (grades 5-12) World Languages and Cultures (French, German, and Spanish) (grades 5-12)

Endorsements Areas

Students majoring in Elementary Education must complete coursework for at least one endorsement. Students in other programs may complete coursework for additional endorsements (http:// www.education.iastate.edu/undergraduate-studies/endorsements).

Minors

Students in the Teacher Education Preparation Program may also choose to pursue a minor in Learning Technologies (http:// www.education.iastate.edu/undergraduate-studies/learningtechnologies-minor).

Post-Bachelor's Teacher Licensure Areas

Students already holding an appropriate bachelor's degree may pursue teacher licensure in any of the undergraduate licensure programs. Interested students should consult with the program coordinator of the area in which they plan to specialize so that an individualized program of study can be developed.

Teacher Licensure Areas for which candidates take undergraduate Teacher Preparation courses;

Elementary Education (grades K-6) English (grades 5-12) Health Education (grades 5-12) History-Social Sciences (grades 5-12) Music (grades K-12) World Languages and Cultures (French, German, and Spanish) (grades 5-12)

THE PROFESSIONAL TEACHER EDUCATION REQUIREMENT (PROFESSIONAL CORE)

Undergraduate Students

Prospective teachers must complete certain studies related directly to the profession of teaching. All undergraduate students in teacher education must take the following courses prior to student teaching, unless the student's licensure area has an approved content-area course deemed to be equivalent (see specific Licensure Area Requirements section below for details.)

EARLY CHILDHOOD EDUCATION-Unified

C I 201	Learning Technologies in the PK-6 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 332	Educational Psychology of Young Learners	3
C I 406	Multicultural Foundations of School and Society: Introduction	3

SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
Total Credits		15
ELEMENTARY E	EDUCATION:	
C I 201	Learning Technologies in the PK-6 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 245	Strategies in Teaching	3
C I 332	Educational Psychology of Young Learners	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
HD FS 102	Individual and Family Development, Health, and Well-being	3
or PSYCH 230	Developmental Psychology	
SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
CI416	Supervised Student Teaching - Elementary	16
Total Credits		37
K-12 AND SECO	ONDARY EDUCATION:	

IL IZ AND SLOU	DAILI EDUCATION.	
C I 202	Learning Technologies in the 7-12 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 333	Educational Psychology	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
SP ED 401	Teaching Secondary Students with Exceptionalities in General Education	3
C I 426	*Not all secondary Education *Not all secondary education programs require this course. Check with program coordinator and/or academic advisor.	3

14-16 weeks: Student teaching (minimum 14 weeks). See Teacher Licensure Area Coordinactr for more information.

Students in K-12 licensure areas and secondary (grades 5-12) licensure areas must complete the courses listed above unless the student's licensure area has an approved equivalent. Areas with approved equivalents include: Agricultural Education (for Cl 426), Physical Education (for Cl 333, Cl 401, Cl 426) and all Secondary Sciences (for Cl 426). (See licensure area coordinator for more information).

Post-Bachelor's Students

Students who hold an appropriate bachelor's degree and seek a teaching license must complete the professional education requirements listed above through course work or examination.

Master's Students

Prospective teachers must complete certain studies related directly to the profession of teaching. All students enrolled in Master's programs that lead to initial licensure must take the following courses prior to student teaching, unless the student's licensure area has an approved content area course deemed to be equivalent. (See Master's Programs section below for details.)

SP ED 501	Teaching Secondary Students with	3
	Exceptionalities in General Education	
C I 505	Using Technology in Learning and Teaching	3

H P C 504	Studies in the Foundations of Education in the United States	3
C I 506	Multicultural Foundations of School and Society: Advanced	3
C I 526	* Not all programs require this course. Check with program coordinator.	3
C I 529	Educational Psychology and the Secondary Classroom	3

PROGRAM CURRICULUM Undergraduate Students Early Childhood Education – Unified

The curriculum in Early Childhood Education – Unified prepares graduates to teach young children and work with their families. This program leads to careers working with young children (both those who are typically developing and those with special needs) from birth through age eight. Graduates may be employed by either public or private agencies or schools to teach in early childhood classrooms (preschool through 3rd grade) or in home-based programs. This curriculum has been approved by the Iowa Department of Education and meets requirements for the early childhood education - unified teacher license, which permits individuals to teach general and special education for children from birth through age eight. The program is an interdepartmental major administered by the Department of Human Development and Family Studies and the School of Education. For more information about the program, see Early Childhood Education - Unified Curriculum (http:// www.education.iastate.edu/undergraduate-studies/early-childhoodeducation).

Students who enroll in the early childhood education – unified program must apply to and be accepted into the teacher education program prior to enrolling in advanced courses. All early childhood education – unified students must meet general education requirements for teacher licensure.

Elementary Education

The undergraduate curriculum in elementary education leads to the Bachelor of Science degree.

The curriculum in elementary education is planned for students preparing to teach at the elementary school level. This program leads to careers in working with school-aged children in kindergarten through sixth grade. Graduates in this curriculum who meet all requirements set by the Iowa Board of Educational Examiners will be recommended for licensure, which would allow them to teach in elementary classrooms in either public or private schools. For more information about the program, see Elementary Education Curriculum (http://www.education.iastate.edu/assets/files/pdf/TES/Elementary%20Education/15-16%20CURR%20INFO %20SHEET.pdf).

Endorsements in art, English/language arts, English as a Second Language (ESL), health, history, music, basic science, social studies, mathematics, special education (Instructional Strategist I: Mild/Moderate Disabilities K-8), and speech communication/theater are available for elementary education students. An endorsement for teaching world languages in elementary schools is available through the Department of World Languages and Cultures.

Elementary education majors must satisfy a world languages requirement for graduation.

Students who enroll in elementary education must apply and be accepted into the teacher education program prior to enrolling in advanced elementary education courses. Iowa Department of Education licensure requirements state that every student must meet the performance outcome standards for teacher licensure. Standards will be assessed in each course and students will receive both formative and summative evaluations of their progress toward meeting these standards throughout their program at Iowa State University. A detailed explanation of the standards and assessment process may be found on the school's website at Educator Prep Resources (http://www.education.iastate.edu/ educator-prep-resources), or may be obtained from a School of Education academic adviser.

K-12 and Secondary Education

K-12 and Secondary Licensure areas at Iowa State University include:

- AGRICULTURAL EDUCATION (GRADES 5-12) COLLEGE OF AGRICULTURE (http://www.education.iastate.edu/te/programs/ secondary-education/#agricultural-education-grades-5-12agriculture)
- BIOLOGY (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#biology-grades-5-12-liberal-arts-and-sciences)
- CHEMISTRY (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#chemistry-grades-5-12-liberal-arts-andsciences)
- EARTH SCIENCES (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#earth-sciences-grades-5-12-liberal-arts-andsciences)
- ENGLISH (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#english-grades-5-12-liberal-arts-and-sciences)
- FAMILY AND CONSUMER SCIENCES EDUCATION COLLEGE OF HUMAN SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#family-and-consumer-sciences-educationhuman-sciences)
- HEALTH EDUCATION (GRADES 5-12) COLLEGE OF HUMAN SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#health-education-grades-5-12-humansciences)
- HISTORY SOCIAL SCIENCES (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES, HUMAN SCIENCES (http:// www.education.iastate.edu/te/programs/secondary-education/ #history-social-sciences-grades-5-12-liberal-arts-and-scienceshuman-sciences)
- MATHEMATICS (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#mathematics-grades-5-12-liberal-arts-andsciences)
- MUSIC (GRADES K-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/secondaryeducation/#music-grades-k-12-liberal-arts-and-sciences)
- PHYSICAL EDUCATION (GRADES K-12) COLLEGE OF HUMAN SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#physical-education-grades-k-12-humansciences)

- PHYSICS (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/te/programs/ secondary-education/#physics-grades-5-12-liberal-arts-and-sciences)
- WORLD LANGUAGES AND CULTURES (GRADES 5-12) COLLEGE OF LIBERAL ARTS AND SCIENCES (http://www.education.iastate.edu/ te/programs/secondary-education/#world-languages-and-culturesgrades-5-12-liberal-arts-and-sciences)

Students seeking recommendations for a license to teach in the secondary schools must be admitted to the teacher education program. For specific requirements for each area of specialization, see Teacher Education (http://www.education.iastate.edu/undergraduate-studies/ secondary-education) and curricula for the college in which the chosen degree major is sought.

Notes:

- Students seeking licensure in physical education, agriculture and science do not takeC I 426 Principles of Secondary Education Principles of Secondary Education.
- Students seeking a teaching license in physical education must see an adviser in the Department of Kinesiology in the College of Human Sciences.
- All students who are recommended by Iowa State University for teacher licensure must meet the requirements of the Iowa State University teacher education program and the Iowa Board of Educational Examiners.
- Each student must meet the performance outcome standards for teacher licensure by completing a portfolio. Each standard will be assessed in every major. Students will receive both formative and summative evaluations of their progress toward meeting these outcomes throughout their program at Iowa State University.
- A detailed explanation of the standards and assessment process may be found at E (http://www.education.iastate.edu/ educator-prep-resources) ducator Prep Resources (http:// www.education.iastate.edu/educator-prep-resources). For more information, students should contact the academic adviser in their major. Each student will be enrolled in the department in which he or she plans to major, and must meet the graduation requirements of that department and the college in which it is situated.

Post-Bachelor's Students

Students holding an appropriate bachelor's degree who wish to pursue teacher licensure must have at least one course in each of the following five general education groups identified for undergraduate students in the preceding section: Natural Sciences, Mathematics or Statistics, Social Sciences, Humanities, and Communication Skills. Individual departments preparing teachers may require additional credits in general education. (See program coordinator for more information.)

Graduate Students

Each Master's program will determine what, if any, general education requirements Master's students must fulfill beyond a bachelor's degree from a regionally accredited institution. (See program coordinator for more information.)

Standards

Teacher Education has a rigorous standards-based curriculum. Two sets of standards are used in the program, one that is targeted for pre-service teachers (Teacher Education Standards which originates from the Iowa Administrative Code, Chapter 79, Standards for Practitioner Preparation Programs) and the other set that is targeted for in-service teachers (the lowa Teaching Standards and Model Criteria adopted by the State Board of Education), the latter is emphasized during student teaching. Both are listed below in full.

Iowa State University Teacher Education Standards

The Learner and Learning

Standard #1: Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Standard #2: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

Content

Standard #4: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

Instructional Practices

Standard #6: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Standard #7: Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Standard #8: Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Standard #8A: Technology. The teacher integrates current and emerging technology in instruction to encourage student creativity, problem solving, collaboration, and digital literacy. Teachers practice and advocate safe, legal, and responsible use of information and technology.

Professional Responsibility

Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Standard #10: Leadership and Collaboration. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Electronic Portfolio

A portfolio is used to showcase the teacher candidate's understanding and implementation of the Iowa State University Teacher Education Standards throughout the program. Teacher candidates should visit with their program coordinator and/or their academic advisor for information pertaining to the portfolio.

Clinical Experiences

The Standards for Practitioner and Administrator Preparation Programs (chapter 79.13(1)) requires that "candidates admitted to a teacher preparation program participate in field experiences including both observation and participation in teaching activities in a variety of school settings and totaling at least 80 hours' duration, with at least 10 hours occurring prior to acceptance into the program." This requirement may be met through pre-student teaching courses (e.g., C I 280, C I 480, CI 468, C I 580) or, in certain endorsement areas, a course designated to provide an equivalent experience. For most licensure areas, there are four levels for clinical experiences. Level 1 involves observation in local schools. Level 2 involves actively teaching in the classroom with one lesson, at minimum. Level 3 involves actively teaching in the classroom with two lessons, at minimum. Level 4 is student teaching and involves actively teaching for a minimum of 14 weeks where the student teacher bears primary responsibility for planning and instruction within the classroom for a minimum of two weeks (10 days). Level 2, 3 and 4 involve a course fee, which range from \$25.00 to \$328.00 and are assessed to cover the costs of supervision and placement with a cooperating teacher. Course fees are increased when student teaching nationally or internationally. For current course fees, consult the Schedule of Classes. For level 2, 3 and 4, the student needs access to transportation because the placement may be within 60 miles of the university. The time commitment for clinical experiences ranges from 1/2 day for level 2 and 3 to the full day for level 4. Students complete a background check before initial placement in schools and other appropriate locations.

Admission to Teacher Preparation program REQUIREMENTS

Students must have:

- A minimum of 9 credits hours at Iowa State University with a 2.5 cumulative grade-point-average (GPA). (Student must maintain 2.5 cumulative GPA throughout the program in order to continue through the program)
- Praxis CORE scores with a minimum of 156 in Reading, 162 in Writing, and 150 in Mathematics.
- Documented completion of an Iowa State University-approved 10 hours of pre-student teaching field experience.
- A minimum of a "C" in ALL Curriculum and Instruction (C I), Human Development and Family Studies (HD FS), and Special Education (Sp Ed) courses required for licensure (pedagogy coursework).

- A minimum of a "C-" in ALL Major department courses/content courses required for teacher licensure (content coursework). (This is for courses taken from Fall 2007 forward).
- A vaild Iowa criminal background check report processed by ISU's recommending official.
- An e-portfolio started and meeting the program requirements for admission to the teacher education program.

A (http://www.education.iastate.edu/undergraduate-studies/ undergraduate-applicants/admission) dmission to Education Preparation Program (http://www.education.iastate.edu/undergraduate-studies/ undergraduate-applicants/admission)

Graduate Degree Programs with Teacher Licensure

Currently, there are five graduate initial teacher licensure programs. These programs are designed for students who do not currently hold a teaching license. The programs are listed below:

Agricultural Education (M.S.) Family and Consumer Sciences Education (M.Ed. or M.S.) Mathematics Education (M.Ed.) Physical Education (M.S.) Secondary Sciences Education (M.A.T.)

Iowa State University also offers Master's programs for practicing teachers. The Mathematics Department offers a Masters in School Mathematics. (See Mathematics in Courses and Programs section of this catalog.) The Curriculum and Instruction Department offers a Master's degree program and a certificate program that lead to a special education endorsement. (See Curriculum and Instruction in Courses and Programs section of this catalog.)

Graduate programs are also available for those who seek licensure in Educational Leadership and Policy Studies as PK-12 school principals or PK-12 superintendents. (See Educational Leadership and Policy Studies in Courses and Programs section of this catalog.)

Master's Programs that Lead to Initial Teacher Licensure AGRICULTURAL EDUCATION

The Agricultural Education and Studies Department offers a Master's of Science program that prepares Agricultural Education teachers for grades 5-12

See coordinator for program requirements.

MATHEMATICS

The School of Education offers a Master's of Education program that prepares Mathematics teachers for grades 5-12

See coordinator for program requirements.

Physical Education

The Department of Kinesiology offers a Master's of Science program that prepares Physical Education teachers for grades K-12.

See coordinator for program requirements.

Secondary Sciences

The School of Education offers a Master's of Arts in Teaching program that prepares Secondary Science teachers for grades 5-12

See coordinator for program requirements.

Regents Alternative Pathway to Iowa LICENSure

The Regents Alternative Pathway to Iowa Licensure (RAPIL) is a collaborative program involving the three Iowa Regents' universities. The program is designed for adult learners holding a baccalaureate degree who are seeking 5-12 licensure in a high needs area. For more information: R (http://www.iowateacherintern.org) APIL (http:// www.iowateacherintern.org)

Elementary Education, B.S.

Freshman

Freshman		
Fall	Credits Spring	Credits
C I 216 or 315	1 C I 280N or 280T	1
C I 204	3 HIST 221 or 222	3
HD FS 102 or PSYCH 230	3 MATH 195	3
ENGL 150	3 SP ED 250	3
ASTRO 106 or GEOL 106	2 CHEMPHYS 102L	3
ASTRO 106L or GEOL 106L	1 Social Science Option	3
LIB 160	1	
	14	16
Sophomore		
Fall	Credits Spring	Credits
C I 201	3 C I 245	3
HD FS 240^+	3 C I 332	3
ENGL 250	3 Biological Science Option	3
MATH 196	3 ARTED 209	2
Communications Option	3 Math Option	3
Apply to Educator	Endorsement Area	3
Preparation Program		
	Acceptance into Educator	
	Preparation Program	
	15	17
Junior		
Fall	Credits Spring	Credits
Fall Block I: (9 credits total)	Credits Spring Block II: (9 credits total)	Credits
Fall Block I: (9 credits total) C I 377	Credits Spring Block II: (9 credits total) 4 C I 378	Credits
Fall Block I: (9 credits total) C I 377 C I 468A	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B	Credits 4 1
Fall Block I: (9 credits total) C I 377 C I 468A C I 448	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449	Credits 4 1 3
Fall Block I: (9 credits total) C I 377 C I 468A	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B	Credits 4 1
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D	Credits 4 1 3 1
Fall Block I: (9 credits total) C I 377 C I 468A C I 468C C I 406	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275	Credits 4 1 3 1 3
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area	Credits 4 1 3 1 3 3 3 3
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C C I 406 Social Science Option	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275	Credits 4 1 3 1 3
Fall Block I: (9 credits total) C I 377 C I 468A C I 468C C I 406 Social Science Option Senior	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D - 3 KIN 284 or H S 275 3 Endorsement Area 15	Credits 4 1 3 1 3 3 3 15
Fall Block I: (9 credits total) C I 377 C I 468A C I 468A C I 468C C I 406 Social Science Option Senior Fall	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring	Credits 4 1 3 1 3 3 3 3
Fall Block I: (9 credits total) C I 377 C I 468A C I 468C C I 406 Social Science Option Senior	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring 3 Student Teaching	Credits 4 1 3 1 3 3 3 15
Fall Block I: (9 credits total) C I 377 C I 468A C I 468C C I 406 Social Science Option Senior Fall C I 443 MUSIC 265	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring	Credits 4 1 3 1 3 3 3 15
Fall Block I: (9 credits total) C I 377 C I 468A C I 468C C I 406 Social Science Option Senior Fall C I 443 MUSIC 265 Social Science Option	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring 3 Student Teaching 2 C I 416A or 416B 3 C I 416B or 416A	Credits 4 1 3 1 3 3 3 15 Credits
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C C I 406 Social Science Option Senior Fall C I 443 MUSIC 265 Social Science Option Humanities Option	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D - 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring 3 Student Teaching 2 C I 416A or 416B 3 C I 416B or 416A 3	Credits 4 1 3 1 3 3 3 15 Credits 8
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C C I 406 Social Science Option Senior Fall C I 443 MUSIC 265 Social Science Option Humanities Option Endorsement Area	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring 3 Student Teaching 2 C I 416A or 416B 3 C I 416B or 416A	Credits 4 1 3 1 3 3 3 15 Credits 8
Fall Block I: (9 credits total) C I 377 C I 468A C I 448 C I 468C C I 406 Social Science Option Senior Fall C I 443 MUSIC 265 Social Science Option Humanities Option	Credits Spring Block II: (9 credits total) 4 C I 378 1 C I 468B 3 C I 449 1 C I 468D - 3 KIN 284 or H S 275 3 Endorsement Area 15 Credits Spring 3 Student Teaching 2 C I 416A or 416B 3 C I 416B or 416A 3 3	Credits 4 1 3 1 3 3 3 15 Credits 8

Apply for Graduation

14

Total Credits: 122

- *** Will not meet State of Iowa New EL ED licensure requirements beginning September 1, 2015. Must graduate, apply for, and be recommended for EL ED teacher licensure no later than Summer Session 2015.
- ⁺ Do not take before Fall 2012. Might become required for ENGL/LA specialization only.
- @ CI ### Geography for Teachers (3) required if graduating and applying for teacher licensure after August 2015.
- [^] Put Pol S 215 off until here, if projected to graduate after August 2015, take C I ### Civic Lit. & Econ, to meet new requirements.
- * All four Rel methods content areas must be met after August 2015.