

# Teaching and Learning, M.A.T.

## English Education

The Master of Arts in Teaching in teaching and learning with an English education subprogram requires a minimum of 45 s.h. of graduate credit. The program is designed for students who have an undergraduate degree in English and few or no professional education courses. Successful completion of the program enables students to receive a credential to teach English in secondary schools.

The M.A.T. in teaching and learning with an English education subprogram requires the following course work.

## English

| Code          | Title                                      | Hours |
|---------------|--|-------|
| All of these: |  |       |
| EDTL:3382     | Language and Learning                      | 3     |
| EDTL:3393     | Reading and Teaching Adolescent Literature | 3     |
| EDTL:4355     | Approaches to Teaching Writing             | 3     |
| EDTL:6315     | M.A. Seminar: English Education            | arr.  |

Students may take the following English courses as part of the M.A.T. program or as part of their undergraduate program:

A course in Shakespeare

Three courses in American literature

A course in British literature

A course in nonfiction or creative writing, in addition to EDTL:4355

## Education

| Code          | Title  | Hours |
|---------------|--|-------|
| All of these: |  |       |
| EDTL:3002     | Technology in the Classroom (must be taken during student's first semester in the college)                     | 2     |
| EDTL:3091     | Secondary Education Program Orientation and Classroom Management   | 3     |
| EDTL:4087     | Seminar: Curriculum and Student Teaching   | 3     |
| EDTL:4091     | Observation and Laboratory Practice in the Secondary School  | arr.  |
| EDTL:4092     | Observation and Laboratory Practice in the Secondary School  | arr.  |
| EDTL:4314     | Introduction and Practicum: Secondary English (must be completed before enrollment in EDTL:4315 and EDTL:4394) | 3     |

|           |  |   |
|-----------|--|---|
| EDTL:4315 | Learning to Teach Secondary English/Language Arts and Field Experience | 3 |
| EDTL:4394 | Secondary Reading Instruction  | 3 |
| EDTL:4900 | Foundations of Special Education                                       | 3 |
| EPLS:3000 | Foundations of Education   | 3 |
| EPLS:4180 | Human Relations for the Classroom Teacher                              | 3 |
| PSQF:6200 | Educational Psychology   | 3 |

## Comprehensive Examination

The comprehensive examination involves a series of reflective projects supervised by English education faculty. The projects encompass issues explored throughout the course of study and involve integration of theory and practice.

## TEP: Secondary Education

Graduate students may be admitted to a program leading to teacher licensure/certification as "certification only" candidates in the Graduate College. They are subject to all Graduate College policies; see the Manual of Rules and Regulations of the Graduate College. Eligible graduate students also may complete initial teacher licensure/certification requirements by earning an M.A.T. in teaching and learning (English education).

## Admission

Applicants must meet the admission requirements of the Graduate College. They must have been granted a B.A. in English or the equivalent, with an undergraduate g.p.a. of at least 3.00. They also must take the Graduate Record Exam (GRE) General Test and meet all Teacher Education Program (TEP) application requirements. Since the M.A.T. is a credentialing program, candidates must not have qualified previously for a credential. Applicants are expected to have no more than 6 s.h. of course work in professional education courses before admission.

## Foreign Language and ESL Education

The Master of Arts in Teaching in teaching and learning with a foreign language and English as a Second Language (ESL) education subprogram requires a minimum of 54 s.h. of graduate credit. The program is designed for superior liberal arts and sciences graduates who have had few or no professional education courses. Successful completion of the program leads to elementary and/or secondary teacher licensure. The M.A.T. is available in Chinese, French, German, Japanese, Latin, and Spanish.

Students must take 24 s.h. of post-secondary course work in their language of licensure to obtain their teaching license. This work can be taken prior to entry into this program as part of an undergraduate degree program.

The M.A.T. in teaching and learning with a foreign language and ESL education subprogram requires the following course work. Students also must complete at least 9 s.h. in graduate course work either in the language department corresponding to their language of licensure or in foreign language teaching.

## Professional Education

| Code          | Title  | Hours |
|---------------|--|-------|
| All of these: |  |       |
| EDTL:3002     | Technology in the Classroom (must be taken during student's first semester in the college)                 | 2     |
| EDTL:3091     | Secondary Education Program Orientation and Classroom Management   | 3     |
| EDTL:3095     | Teaching Reading in Secondary Content Areas (must be taken during student's first semester in the college) | 1,3   |
| EDTL:4900     | Foundations of Special Education   | 3     |
| EPLS:3000     | Foundations of Education   | 3     |
| EPLS:4180     | Human Relations for the Classroom Teacher  | 3     |
| PSQF:6200     | Educational Psychology   | 3     |

## Foreign Language Teaching

| Code                    | Title   | Hours |
|-------------------------|---|-------|
| All of these (27 s.h.): |   |       |
| EDTL:4087               | Seminar: Curriculum and Student Teaching                    | 1     |
| EDTL:4091               | Observation and Laboratory Practice in the Secondary School | arr.  |
| EDTL:4092               | Observation and Laboratory Practice in the Secondary School | arr.  |
| EDTL:4406               | Foreign Language Education Practicum I                      | 3     |
| EDTL:4407               | Foreign Language Education Practicum II                     | 3     |
| EDTL:4416               | Learning to Teach Second Languages I                        | 3     |
| EDTL:4417               | Learning to Teach Second Languages II                       | 3     |
| EDTL:6483               | Second Language Classroom Learning                          | 3     |

## K-12 Licensure

The K-12 licensure option requires the following course.

| Code      | Title   | Hours |
|-----------|---|-------|
| EDTL:4089 | Elementary School Special Subject Area Student Teaching | 1-4   |

## Comprehensive Examination

A comprehensive examination is required. The examination reflects a candidate's depth and breadth of knowledge in foreign language and ESL education, including but not limited to theory and practice as well as knowledge of and proficiency in the target language and/or literature of the candidate's choice. The candidate and the advisor discuss the exam's content and format eight months before the exam.

## TEP: Secondary Education

Graduate students may be admitted to a program leading to teacher licensure/certification as "certification only" candidates in the Graduate College. They are subject to all Graduate College policies; see the Manual of Rules and Regulations of the Graduate College. Eligible graduate students also may complete initial teacher licensure/certification requirements by earning an M.A.T. in teaching and learning (foreign language and ESL education).

## Admission

Applicants must meet the admission requirements of the Graduate College. They must have been granted a bachelor's degree with a major or a strong concentration in a second language and must have an undergraduate g.p.a. of at least 3.00. They also must meet all Teacher Education Program (TEP) application requirements.

## ESL Endorsement

An ESL endorsement enables an individual to teach English as a Second Language in K-12 in the state of Iowa. Because teaching endorsements are additional areas of expertise added to a teaching license, applicants must be current students in a Teacher Education Program (TEP) or licensed in-service teachers.

## Admission

Applicants to the ESL endorsement program must submit a one-page essay explaining why they wish to teach ESL and a transcript of all university-level course work, along with the English as a Second Language Added Endorsement Program K-12 application. Applicants whose first language is not English must provide evidence of a minimum score of 26 (Internet-based) on the speaking section of the Test of English as a Foreign Language (TOEFL) and have completed one of the following.

| Code   | Title   | Hours |
|--|---|-------|
| Four semesters of commonly taught languages such as French, German, Hebrew, Italian, Portuguese, Russian, or Spanish; or a proficiency level of Intermediate Low on the ACTFL Guidelines |   |       |
| Three semesters of less commonly taught languages such as Arabic, Chinese, or Japanese; or a proficiency level of Novice High on the ACTFL Guidelines                                    |   |       |
| LING:3001  | Introduction to Linguistics (with a grade of B or higher) | 3     |

Applicants are admitted to the ESL endorsement program twice a year; application deadlines are October 1 and March 1.

## Mathematics Education

The Master of Arts in Teaching in teaching and learning with a mathematics education subprogram requires a minimum of 49 s.h. of graduate credit. The program is designed primarily for students who decide they would like to become teachers and have already completed a B.S. or B.A. in mathematics. It features advanced work in mathematics along with the courses required for certification. It is a means by which students can obtain both a Master's degree and certification.

This program assumes a student has completed a baccalaureate degree in mathematics equivalent to one

that would be completed at the University of Iowa, but has no previous course work in education. More course work may be advised if there are mathematics courses a student has not taken as part of the undergraduate mathematics baccalaureate degree program to render the student's degree equivalent to one from the University of Iowa.

The M.A.T. in teaching and learning with a mathematics education subprogram requires the following course work.

## Education

| Code   | Title  | Hours |
|--|--|-------|
| The first three courses should be taken during the first semester of registration:         |  |       |
| EDTL:3002  | Technology in the Classroom                                      | 2-3   |
| EDTL:3091  | Secondary Education Program Orientation and Classroom Management | 3     |
| EDTL:3095  | Teaching Reading in Secondary Content Areas                      | 1     |
| All of these:  |  |       |
| EDTL:3532  | Introduction and Practicum: Mathematics                          | 3     |
| EDTL:3534  | Methods: Middle School Mathematics                               | 3     |
| EDTL:4535  | Methods: High School Mathematics                                 | 3     |
| EDTL:4900  | Foundations of Special Education                                 | 3     |
| EPLS:3000  | Foundations of Education   | 3     |
| EPLS:4180  | Human Relations for the Classroom Teacher                        | 3     |
| PSQF:6200  | Educational Psychology   | 3     |
| The following courses are taken concurrently and constitute the student teaching semester: |  |       |
| EDTL:4087  | Seminar: Curriculum and Student Teaching                         | 1-3   |
| EDTL:4091  | Observation and Laboratory Practice in the Secondary School      | arr.  |
| EDTL:4092  | Observation and Laboratory Practice in the Secondary School      | arr.  |

And:

One additional graduate-level mathematics education course in consultation with an advisor

## Graduate Mathematics Requirements

| Code   | Title                                | Hours |
|--|--------------------------------------|-------|
| If necessary, courses that fulfill the University of Iowa mathematics major with at least one additional mathematics graduate course (one of the following): |                                      |       |
| MATH:4050  | Introduction to Discrete Mathematics | 3     |
| MATH:4060  | Discrete Mathematical Models         | 3     |
| MATH:4120  | History of Mathematics               | 3     |

## Comprehensive Examination

The comprehensive exam includes a required two-part exam in mathematics and mathematics education. At the discretion of the examining committee, this exam may consist of two parts and is both written and oral. The mathematics and mathematics education comprehensive examinations will not duplicate course examinations, but will assess both mathematics education and the mathematics specialization area chosen by a student.

## Admission

Applicants must meet the admission requirements of the Graduate College. They also must take the Graduate Record Exam (GRE) General Test and meet all Teacher Education Program (TEP) application requirements. Candidates should have completed a baccalaureate degree program in mathematics equivalent to that which is offered through the College of Liberal Arts and Sciences at the University of Iowa. An undergraduate g.p.a. of at least 3.00 is required for admission and must be maintained throughout the enrollment period.

## Combined B.A./M.A.T.

The College of Liberal Arts and Sciences and the College of Education offer students the opportunity to earn their Bachelor of Arts in Mathematics/Master of Arts in Teaching degree in education with a mathematics education subprogram in as little as five years.

The Combined B.A./M.A.T. (4+1) program is a seamless process whereby students can progress from undergraduate to graduate status. The usual period of study for both the Bachelor of Arts and the Master of Arts in Teaching degree is six years. Through careful planning, many of the courses required for the M.A.T. program can be taken during the undergraduate years, creating an opportunity to focus the fifth year of study on the comprehensive and student teaching requirements. Visit B.A./M.A.T. (4+1) Mathematics on the College of Education website.

## Admission

Students are eligible to apply to the 4+1 program during their sophomore or junior year if they have a cumulative g.p.a. of at least 3.25 or if they meet special considerations. Application materials must include a completed application to the Teacher Education Program (TEP); two recommendations from University of Iowa faculty; a career plan describing how this program will enhance the student's scholarly and or career goals; and an unofficial transcript of student's prior work.

Students who submit completed applications will be notified within 30 days if they have been accepted into the program. The program accepts a limited number of students each year on a competitive basis. Once accepted into the program, a student meets with an advisor to select an advisory committee to plan a course of study.

During the sixth semester, a student in the program who has completed 80 s.h. of undergraduate work and maintained a 3.00 minimum g.p.a. must apply to the Graduate College. Application to the Graduate College must include a completed Graduate College application form; a letter of application/statement of purpose; one additional letter of recommendation from a faculty member in the mathematics major; Graduate Record Exam (GRE) General Test scores; and

Test of English as a Foreign Language (TOEFL) test scores for international students.

Students will be granted undergraduate/graduate credit for course work during the seventh semester; they begin paying graduate tuition during the eighth semester until completion of the program. The baccalaureate degree must be conferred at the end of the eighth semester or in the program's fourth year.

## Science Education

The Master of Arts in Teaching in teaching and learning with a science education subprogram requires a minimum of 48 s.h. of graduate credit. The program is designed primarily for graduates of bachelor's degree programs in science who decide that they would like to become teachers. It features advanced work in science along with the courses required for certification, enabling students to earn a master's degree and teaching certification at the same time.

The program assumes students have completed considerable course work in science (at least 56 s.h.) as undergraduates, but no previous course work in education. Students' science course work should be equivalent to that required by the University of Iowa Science Education program.

The M.A.T. in teaching and learning with a science education subprogram requires the following work.

## Professional Education Foundation Sequence

| Code   | Title  | Hours |
|--|--|-------|
| All of these:  |  |       |
| EDTL:3002  | Technology in the Classroom (must be taken during student's first semester in the college)                 | 2     |
| EDTL:3091  | Secondary Education Program Orientation and Classroom Management   | 3     |
| EDTL:3095  | Teaching Reading in Secondary Content Areas (must be taken during student's first semester in the college) | 1     |
| EDTL:4900  | Foundations of Special Education   | 3     |
| EPLS:3000  | Foundations of Education   | 3     |
| EPLS:4180  | Human Relations for the Classroom Teacher  | 3     |
| PSQF:6200<br>or PSQF:1075                                  | Educational Psychology<br>Educational Psychology and Measurement   | 3     |
| Science education courses taken in the following sequence: |  |       |
| EDTL:4751  | Science Methods I: Early Learners with Field Experience  | 3     |
| EDTL:4752  | Science Methods II: Junior High with Field Experience  | 3     |
| These two taken concurrently:                              |  |       |
| EDTL:4753  | Science Methods III: High School with Field Experience   | 3     |

|                                 |   |   |
|---------------------------------|---|---|
| EDTL:4779                       | Secondary School Science Practicum                          | 2 |
| These three taken concurrently: |   |   |
| EDTL:4087                       | Seminar: Curriculum and Student Teaching                    | 3 |
| EDTL:4091                       | Observation and Laboratory Practice in the Secondary School | 6 |
| EDTL:4092                       | Observation and Laboratory Practice in the Secondary School | 6 |

## Electives

A minimum of one graduate course in biology, chemistry, earth science, or physics is required. Students who have satisfied portions of the required science course work listed above must take additional science course work to meet the minimum requirement of 48 s.h.

## Comprehensive Examination

Students complete comprehensive examinations before their student teaching semester. Two comprehensive exams, one in science education and one in a science specialization area, are required. Students may not duplicate course examinations in these areas. The science education exam, under the guidance and supervision of the examining committee, consists of two parts, written and oral. Detailed requirements for the science education comprehensive examination are available from the Department of Teaching and Learning office.

## TEP: Secondary Education

Graduate students may be admitted to a program leading to teacher licensure/certification as "certification only" candidates in the Graduate College. They are subject to all Graduate College policies; see the Manual of Rules and Regulations of the Graduate College. Eligible graduate students also may complete initial teacher licensure/certification requirements by earning an M.A.T. in teaching and learning (science education).

## Admission

Applicants must meet the admission requirements of the Graduate College. They must have a bachelor's degree with a major or the equivalent in one of the sciences. A g.p.a. of at least 3.00 is required for admission and must be maintained throughout the program. Applicants must meet all Teacher Education Program (TEP) application requirements.

## Combined B.A./M.A.T.

College of Liberal Arts and Sciences students who want to teach science and are working toward a Bachelor of Arts degree with a major in biology, chemistry, environmental sciences, or physics may apply to the combined Bachelor of Arts/Master of Arts in Teaching with a science education subprogram offered by the College of Liberal Arts and Sciences and the College of Education. The combined program enables students to earn a B.A. and an M.A.T. in five years by beginning to earn graduate credit during their fourth year of undergraduate study and by counting up to 18 s.h. of qualifying credit toward both degrees.

B.A. students are admitted to the combined program before their fourth year. They may begin taking education courses during their third year, but they may not earn graduate credit

for them until their fourth and fifth years, after they have been admitted to the combined program. Students take 30 s.h. of course work during the fifth year and must complete all remaining requirements for both degrees that year.

## Science Specialization (Broad Field Science Block)

The following courses are required for the undergraduate degree in science education at the University of Iowa. They need not be repeated by M.A.T. candidates who need one or more advanced courses in their major science area, or by students from other interdisciplinary science discipline programs that prepare teachers for grades 6-9.

| Code  | Title  | Hours |
|---|--|-------|
| This course:  |  |       |
| SIED:4135   | The Nature of Science  | 3-4   |
| Two of these (unless completed during undergraduate study): |  |       |
| SIED:4102   | Societal and Educational Applications of Earth Science and Environmental | 3-4   |
| SIED:4103   | Societal and Educational Applications of Biological Sciences             | 3-4   |
| SIED:4105   | Societal and Educational Applications of Physical Sciences               | 3-4   |
| SIED:4106   | Societal and Educational Applications of Chemical Concepts               | 3-4   |

Education courses required for the combined program are listed under "Combined B.A./M.A.T." above. Requirements for the B.A. degree are listed under B.A. in Biology, B.A. in Chemistry, B.A. in Environmental Sciences, and B.A. in Physics (College of Liberal Arts and Sciences) in the Catalog.

## Social Studies Education

The Master of Arts in Teaching in teaching and learning with a social studies subprogram requires of 38 s.h. of graduate credit. Students must maintain a g.p.a. of at least 3.00. The program provides an opportunity for interdisciplinary work in education, history, social science, or related areas for classroom teachers, high school department chairs, supervisors, and others interested in advancing their competence in history and the social sciences and greater proficiency in teaching and supervision.

This subprogram is for students who have a bachelor's degree in history or a social science and who wish to obtain a teaching license/certificate while earning the M.A.T. degree. Students must apply to both the Graduate College and the College of Education.

## Requirements

Students should have completed considerable work in the social sciences and/or history as undergraduates. Students in the College of Education's Teacher Education Program for secondary education in social studies may not apply credit they have earned as undergraduates in required licensure courses to the 38 s.h. required for the M.A., even though the credit counts toward state teaching licensure.

Students who completed EDTL:4811 Introduction and Practicum: Secondary Social Studies and/or EDTL:4870

Methods: Secondary Social Studies as undergraduate or postbaccalaureate students at the University of Iowa are required to retake these courses during the M.A.T. program and before student teaching. Required teaching licensure course work completed at other colleges or universities is reviewed on a case-by-case basis.

Students who were accepted to the undergraduate Teacher Education Program before they received a baccalaureate degree must complete a college-level math course.

For licensure, students must complete 30 s.h. in a history or social science area; the 30 s.h. may include previous undergraduate and/or graduate-level course work. Required professional education course work not completed as part of the baccalaureate degree must be completed for licensure.

Students also must complete 15 s.h. in an additional history or social science licensure area; previous undergraduate course work may apply.

Students must complete all of the following professional education courses, unless they completed some of them as part of their bachelor's degree. In such cases, the semester-hour requirement is reduced accordingly, but it never is below 38 s.h. All students must take the course work required for meeting all Iowa Department of Education requirements for teacher licensure/certification.

## Professional Education Courses

| Code          | Title  | Hours |
|---------------|--|-------|
| All of these: |  |       |
| EDTL:3002     | Technology in the Classroom (must be taken during student's first semester in the college)                 | 2     |
| EDTL:3091     | Secondary Education Program Orientation and Classroom Management   | 3     |
| EDTL:3095     | Teaching Reading in Secondary Content Areas (must be taken during student's first semester in the college) | 1     |
| EDTL:4087     | Seminar: Curriculum and Student Teaching   | 3     |
| EDTL:4091     | Observation and Laboratory Practice in the Secondary School  | 6     |
| EDTL:4092     | Observation and Laboratory Practice in the Secondary School  | 6     |
| EDTL:4811     | Introduction and Practicum: Secondary Social Studies   | 3     |
| EDTL:4870     | Methods: Secondary Social Studies  | 3     |
| EDTL:4900     | Foundations of Special Education   | 3     |
| EPLS:3000     | Foundations of Education   | 3     |
| EPLS:4180     | Human Relations for the Classroom Teacher  | 3     |
| PSQF:6200     | Educational Psychology   | 3     |

## Social Studies Education Course

| Code         | Title   | Hours |
|--------------|---|-------|
| This course: |   |       |
| EDTL:6833    | History and Foundations of Social Studies Education | 3     |

## Global Education Courses

| Code          | Title  | Hours |
|---------------|--|-------|
| Two of these: |  |       |
| EDTL:6840     | Theories and Perspectives in Global Education                    | 3     |
| EDTL:6841     | Attaining a Global Perspective                                   | 2-3   |
| EDTL:6842     | Examining Power, Resistance, and Change Through Global Education | 3     |

Students must earn at least 12 s.h. in courses numbered 6000 or above through the social studies education program and a minimum of 9 s.h. of graduate course work in history or a social science area. Students should take at least one course taught by the instructor who will serve on the examining committee in the history or social science area.

## Comprehensive Examination

Candidates select one faculty member from each concentration area to serve as a committee member responsible for creating and reviewing a question for the written exam. Committee members are selected in consultation with a candidate's advisor. The required comprehensive examination consists of three two-hour written exams, one on each of the three concentration fields.

## TEP: Secondary Education

Graduate students may be admitted to a program leading to teacher licensure/certification as "certification only" candidates in the Graduate College. They are subject to all Graduate College policies; see the Manual of Rules and Regulations of the Graduate College. Eligible graduate students also may complete initial teacher licensure/certification requirements by earning an M.A.T. in teaching and learning (social studies education).

## Admission

Applicants must meet the admission requirements of the Graduate College. They should have a bachelor's degree in education, history, or one of the social sciences from an accredited institution; a cumulative g.p.a. of at least 3.00; a g.p.a. of at least 3.00 in history and/or social science courses; a combined verbal and quantitative score of at least 300 on the Graduate Record Exam (GRE) General Test; and two letters of recommendation. Evidence of writing ability in a completed major paper or essay also is required.