## COLLEGE OF ARTS AND SCIENCES

## Dean: Kent Neely

The College of Arts and Sciences offers graduate studies leading to the following degrees: Master of Arts in art therapy counseling, biological sciences, English, history, sociology, and speech communication; Master of Science in biological sciences, chemistry, geographical studies, mass communications, mathematics, and physics; Master of Fine Arts; Master of Music; Master of Public Administration; Master of Social Work. In addition, the college offers an interdisciplinary program leading to the Master of Science degree in environmental sciences and Professional Development Sequences in Geographic Information Systems.

Cooperative programs in conjunction with the School of Education lead to the Master of Science in Education degree in secondary education with teaching fields in art, biology, chemistry, earth and space sciences, English/language arts, foreign languages, history, mathematics, and physics.

The College is the editorial home of three periodicals: Sou'Wester, a literary magazine of fiction and poetry established in 1960, published three times a year; Papers on Language and Literature, an internationally recognized scholarly journal of criticism, published quarterly; and Drumvoices Revue, a multicultural journal of literary and visual arts,published twice yearly with occasional special issues and anthologies.

## ART AND DESIGN

The Department of Art and Design offers graduate programs that lead to the Master of Fine Arts (MFA) degree in art with a specialization in art studio and the Master of Arts (MA) degree in art therapy counseling. In conjunction with the Department of Curriculum and Instruction, the department also provides studies leading to the degree Master of Science in Education, major in secondary education, with a teaching field in art. In addition to the general policies, regulations, and requirements of the Graduate School, the following specific requirements pertain to these degrees.

## ART STUDIO <br> MASTER OF FINE ARTS

The Master of Fine Arts degree is a terminal studio degree designed to further the individual development of degree candidates and to provide them with professional competency in the creative arts of ceramics, photography/digital arts, drawing, metalsmithing, painting, printmaking, sculpture, and textile arts.

## ADMISSION

In addition to meeting the general admission requirements of the Graduate School, an applicant seeking admission to the graduate program leading to the MFA degree shall meet the following requirements:

A slide or CD portfolio of representative work by the applicant must be submitted to the Department of Art and Design to be reviewed by the faculty in the applicant's intended studio area. Where quality of slides or CD images makes evaluation inconclusive, applicants may be asked to submit the actual work. All applicants must present a letter of intention to pursue graduate study.

Persons with deficiencies may enroll as unclassified graduate students for a limited time. Upon completion of the deficiencies, the student submits a portfolio of recent work to the graduate art faculty before admission to the program is granted.

Students pursuing the MFA degree work toward a graduate emphasis or concentration in one of the principal studio areas. Those wishing to transfer from one studio area to another or desiring two studio emphases must submit an acceptable portfolio in each area; however, it is not possible to apply for two studio emphases when making the initial application.

Degree seeking candidates should send the following materials directly to: MFA Admission Committee, Department of Art and Design, Campus Box 1774, Southern Illinois University Edwardsville, Edwardsville, IL 62026-1774, Telephone (618) 6503071:
a. Three (3) letters of recommendation, preferably from art instructors (at the undergraduate degree granting institution) or from artists familiar with the applicant's current artwork.
b. A letter of intent of approximately 500 words, indicating professional aspirations and more immediate objectives pertaining to the program of study the applicant will pursue while in graduate school at SIUE.
c. A slide or CD portfolio consisting of twenty (20) slides in the area in which application is made. (Some areas also require additional drawing slides; contact the area head to discuss any additional image requirements.) The slides should be labeled and submitted in a carousel tray (with the slides placed in the tray so they will project with the correct side up and facing in the proper direction). Accompanying the CD or carousel slide portfolio should be a typewritten list of images (in the same order that the images appear in the carousel or on the CD) indicating name, media, dimensions, and date work was created. Portfolios sent in anything other than a standard CD or slide carousel tray, portfolios not labeled properly, or portfolios not having the corresponding typed list will be returned. Please provide sufficient postage for the return of the portfolio.

It is the candidate's responsibility to make sure the application, transcript(s), letters, and portfolio arrive at SIUE on time. It is recommended that the candidate mail the three letters of reference and the letter of intent together with the portfolio in one mailing. In this way the applicant will know that all materials and documentation have been mailed. Some writers of letters of reference prefer to mail their letters directly. It is the applicant's responsibility to check to make sure that the letters have arrived. The same is true for transcript(s).

The deadline for receipt of all material to begin study in spring semester is October $15^{\text {th }}$ of the preceding fall semester. The deadline for admission for the fall semester is February $1^{\text {st }}$ of the preceding spring semester. Contact the Department of Art and Design for exact dates. Additional applications will be considered after these dates on a space available basis.

A committee consisting of the graduate studio faculty who offer MFA degree classes will review letters, transcript(s), and portfolio. When a decision is reached, the applicant will be notified initially by the Graduate Admissions Office, and a follow-up letter will be mailed by the Department of Art and Design. Letters will be mailed approximately one month following the deadline. If an application is not approved, the carousel portfolio will be promptly returned. If approved, the portfolio will be retained by the department until the student arrives on campus or until its return is requested.

So that the MFA program can achieve a broader perspective, students who receive their undergraduate art degrees at institutions other than SIUE will be given higher priority in acceptance for admission.

## PROGRAM OF STUDY

The full-time student should expect to spend a minimum of three academic years in residency to complete the degree. The program is based on the individual's area of interest and undergraduate training. It is jointly planned by the student, a committee of the graduate faculty, and a professor who serves as adviser to the student in the principal studio area.

- Total 60 credits (at least 30 at the 500-level)
- 21-30 credits in major studio area
- 9 credits in Art History
- Electives: 6-15 (outside major studio area)
- ART 505 Seminar (3 hours) (pending approval of course)
- ART 441 Studio in Drawing (3 hours)
- ART 599a Thesis (3 hours)
- ART 599b Thesis (3 hours)
- ART 599c Exhibition/Thesis (3 hours)


## Mid-Course Review

Prior to the beginning of a student's fourth term or upon completion of 30 hours of graduate credit (whichever comes first), the candidate will undergo a rigorous mid-course academic review, conducted by the candidate's MFA Committee, which should consist of at least three members of the graduate faculty, at least one of whom must be a specialist from the student's major studio area.

The mid-course review consists of an oral interview in which the candidate shall present the creative work completed since arriving at SIUE. In addition the candidate shall present evidence of his/her knowledge of art history and other material deemed pertinent by the committee for successful completion of the degree.

Additional evidence will also be submitted in the form of written essays composed in response to questions from members of the candidate's graduate committee who will evaluate the candidate's answers for clarity of expression as well as for correctness of factual detail. The student's principal studio area adviser shall notify the student of the results of the written portion of this examination.

## Thesis and Thesis Exhibition

During their final year, all candidates for the MFA. degree in Art Studio must complete 8 semester hours of thesis. The thesis topic must be approved by the student's committee at least one term prior to enrolling in ART 599a, in which the candidate writes the initial draft of the thesis.

The written thesis is then completed in ART 599b in consultation with the candidate's committee. In ART 599c, the candidate designs and mounts the thesis exhibition.

The thesis consists of a written exposition of the candidate's artwork, including but not limited to the final studio project(s), accompanied by images, in proper thesis form. As part of this requirement, ordinarily during the candidate's final term, a thesis exhibition of the candidate's work must be presented. The exhibition and all related material pertaining thereto shall be prepared, designed, and installed by the candidate as approved by the candidate's committee. One piece of artwork, chosen by the candidate in consultation with the thesis committee, is retained by the Department of Art and Design for the permanent art collection of the SIUE University Museum.

## EXIT REQUIREMENTS

The final examination for the MFA degree includes both written and oral forms, including a thesis defense. Upon acceptance of the thesis, the student's graduate committee and other members of the graduate faculty are invited to be present for the final oral examination. This examination is typically scheduled during or after the thesis exhibition. The candidate is expected to defend the thesis and exhibition and to show knowledge of the general area of investigation and related areas of art and art history.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/ART

The Department of Art and Design, in cooperation with the Department of Curriculum and Instruction, offers an art education teaching field as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly advised program ordinarily including at least 15 hours in art will be designed, taking into account each student's background and interests. Throughout the program, the student must consult with the art graduate advisor before registering for any courses in art. Upon completion of the program, the student must have accumulated at least 42 semester hours in art (graduate and undergraduate work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in art in order to satisfy degree requirements. Students must achieve a $3.0(\mathrm{~A}=4.0)$ grade point average in the art teaching field, as well as an overall average of 3.0. For further information, see "Secondary Education" elsewhere in this chapter.

## ART THERAPY COUNSELING

## MASTER OF ARTS

The program leading to the Master of Arts degree in art therapy counseling combines classroom instruction, practicum experience, and research. The program is clinically based with an emphasis on experiential learning. Upon completion of their degrees, graduates are prepared to accept positions as art therapists in a wide variety of clinical settings.

## ADMISSION

In addition to the general admission requirements of the Graduate School, an applicant must hold a baccalaureate degree in art studio, art education, psychology, or a related field. Prospective students must show evidence of having completed 18 hours of art studio, 3 hours of art therapy or art education, and 12 hours of psychology, including developmental and abnormal psychology, prior to admission to the program. Applicants with deficiencies will be required to take prerequisite course work before classified status is approved. A statement of intent (500 words or less), three letters of recommendation, and a slide portfolio (12-15 slides) of recent general work are required for admission. Applicants must submit scores on the Miller Analogies Test (MAT) and schedule a group interview with faculty and students in the graduate program in art therapy counseling.

The 48 semester hour art therapy counseling program comprises the following core courses: ART 550, 552, 553, 554, 559 (6 hours), 566, 575, 595.

Electives: PSYC 431, SOCW 517, SOCW 557, ART 549, 551, 555, 556, 557, 558, 573, 574.

Other electives selected by advisement from art therapy counseling, studio art, psychology, social work, or related fields.

Students are required to complete a final project, which can be a traditional research paper or a creative effort accompanied by a written paper in appropriate academic form. The topic and format must be acceptable to the thesis committee, which is composed of the director of the art therapy counseling program and two other graduate faculty members. Students will complete 700 hours of Practicum.

Prior to beginning ART 559 (Practicum in Art Therapy), students must undergo a midcourse review to determine readiness to work with a client population in a counseling setting. The review is comprised of a written and an oral examination designed and conducted by the student's faculty advisor. The art therapy counseling faculty will evaluate a student's ability to continue in the program based on the student's psychological readiness to begin practicum, academic work, ability to participate in and process experiential components, and the written and oral aspects of the mid-course review.

This program of study is designed to meet the requirements for students to become licensed as clinical professional counselors in the state of Illinois and to become registered art therapists with the American Art Therapy Association. The program was approved by the American Art Therapy Association in 1992.

## EXIT REQUIREMENTS

After the final project is submitted and evaluated by the advisory committee, the candidate must successfully complete an oral examination conducted by the thesis committee.

## POST-BACCALAUREATE CERTIFICATE

## ART THERAPY COUNSELING

The Post-baccalaureate Certificate meets the needs of students who are either currently pursuing a master's degree or who already have a master's degree in counseling, social work, fine arts, or a related area, but want the additional specialization of art therapy and want to be eligible for registration as an art therapist (ATR). This 24 -hour sequence of courses will be individualized for each student to meet current standards of the American Art Therapy Association. Interested students should submit an application and transcripts to the Graduate School, and send to the art therapy program director a slide portfolio of artwork, three letters of recommendation, and a statement of intent.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/ART

The Department of Art and Design, in cooperation with the Department of Curriculum and Instruction, offers an art education teaching field as part of the Master of Science in Education (MS/Ed) degree in secondary education. A jointly advised program ordinarily including at least 15 hours in art will be designed, taking into account each student's background and interests. Throughout the program, the student must consult with the art graduate advisor before registering for any courses in art. Upon completion of the program, the student must have accumulated at least 42 semester hours in art (graduate and undergraduate work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in art in order to satisfy degree requirements. Students must achieve a $3.0(\mathrm{~A}=4.0)$ grade point average in the art teaching field, as well as an overall average of 3.0. For further information, see "Secondary Education" elsewhere in this chapter.

## BIOLOGICAL SCIENCES

## MASTER OF ARTS

## MASTER OF SCIENCE

The Department of Biological Sciences offers programs leading to the graduate degrees of Master of Arts and Master of Science and, in conjunction with the Department of Curriculum and Instruction in the School of Education, provides courses that support the Master of Science in Education degree in secondary education with a teaching field in biology.

Graduate students in biology may concentrate in one of several areas such as evolution, ecology and environment, or cellular and molecular biology. Course work in genetic engineering is also available. Students interested in taxonomic studies can benefit from faculty affiliations with the Missouri Botanical Gardens in nearby St. Louis.

Numerous career and advanced training opportunities are available to persons holding a master's degree in biology. These include doctoral training in biology and in the health sciences; secondary and junior college teaching; environmental assessment; and employment in educational, industrial, and governmental laboratories and agencies.

## ADMISSION

Applicants who satisfy the general admission requirements of the Graduate School will be considered for admission to the master's program in biological sciences. Applicants
should submit scores (verbal, quantitative, analytical) from the Graduate Record Examination (GRE) to the Department of Biological Sciences. Under exceptional circumstances, applicants with an unusually strong academic record or with high scores on other standardized tests may be admitted to the program before the results of the GRE scores are received. In these cases, the GRE must be taken and the scores submitted during the first term of the student's master's level work.

Graduate students are expected to maintain at least a B average (3.0) in course work; therefore, applicants with less than a B average as undergraduate students and/or GRE combined verbal/quantitative scores lower than 1050 should present evidence that they can do graduate level course work in an acceptable manner. Upon admission to the program, the Biological Sciences Graduate Committee will inform the student of any undergraduate deficiencies and how they can be corrected.

Applicants should also submit a short statement of goals and interests to the Department of Biological Sciences. The statement should include special qualifications and a description of relevant professional experiences. Reprints of publications, letters of recommendation, and other documents should be submitted to the department to assist the Graduate Committee in evaluating the applicant's qualifications. Applicants are encouraged to contact the Graduate Committee Chair for assistance in identifying faculty members who might serve as graduate mentors.

## PROGRAM OF STUDY

Master of Arts: The Master of Arts degree requires a minimum of 32 semester hours, of which at least 21 semester hours must be in biology. The Master of Arts also requires a reading knowledge of a foreign language. The foreign language requirement must be met at least three months prior to graduation by passing an examination offered by the Department of Foreign Languages and Literature.

Required courses: Enrollment in BIOL 595 or 596 at least twice or in combination is required and must be taken under at least two different faculty members.

Electives: Students may take up to 25 hours of electives.
Thesis: Students must complete a thesis based on the student's original research and must enroll in at least three semester hours of BIOL 599.

Master of Science: Thesis and non-thesis plans of study, and an option in biotechnology management are available for fulfillment of the requirements of the Master of Science degree. The thesis and non-thesis plans require a minimum of 32 semester hours, of which at least 21 semester hours must be in biology. The biotechnolgy management option requires 34 semester hours. There is no foreign language requirement for the Master of Science degree.

Thesis Plan

At least 9 semester hours in biology must be earned in courses numbered BIOL 415-488 or 514-58*.
Required courses: Enrollment in BIOL 595 or 596 at least twice or in combination is required and must be taken under at least two different faculty members.

Electives: Students may take up to 25 hours of electives.
Thesis: Students must complete a thesis based on the student's original research and must enroll in at least three semester hours of BIOL 599.

Non-Thesis Plan
At least 14 semester hours in biology must be earned in courses numbered BIOL 415-488 or 514-58*.
Required courses: Enrollment in BIOL 595 or 596 at least twice is required and must be taken under at least two different faculty members.

Electives: Students may take from 20 to 24 hours of electives.
Research Paper: At least 4, but no more than 8 semester hours must be taken in BIOL 591 and 593, culminating in an acceptable final research paper.

Biotechnology Management
Required (13 hours): Enrollment in a total of 4 hours in BIOL 595 or 596 at least twice or in combination and taught by at least two different faculty members. Enrollment in 9 Hours of ACCT 502, CMIS 515, and a course in business selected in consultation with the Biology faculty adviser.

Electives (15 hours): Students must take a minimum of 15 hours in BIOL electives.
Internship (6 hours): Students enroll in 6 hours of BIOL 598, Internship, and produce an acceptable research paper based upon the internship.

## EXIT REQUIREMENTS

For the final examination in biological sciences for either the Master of Arts or the Master of Science degree, students meet with their advisory committee for a public oral defense of the thesis or research paper.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/BIOLOGY

The Department of Biological Sciences, in cooperation with the Department of Curriculum and Instruction, offers a biology teaching field as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly advised program ordinarily including 15 hours in biology will be designed, taking into account each
student's background and interests. Throughout the program, students must be advised by a member of the biology faculty before registering for any biology courses to be applied toward this degree. Upon completion of the program, students must have accumulated at least 42 semester hours in biology (graduate and undergraduate work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in biology in order to satisfy degree requirements. Students must achieve a 3.0 ( $\mathrm{A}=4.0$ ) grade point average in the biology teaching field, as well as an overall average of 3.0. For further information, see "Secondary Education" in another section of this chapter.

## COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE/MASTER OF SCIENCE DEGREES IN BIOLOGICAL SCIENCES (3+2 PROGRAM)

The Department of Biological Sciences offers a five-year program leading to the Bachelor of Science (B.S.) and the Master of Science (MS) degrees. Undergraduates with senior level status (at least 90 semester hours) and a grade point average of at least 3.0 $(\mathrm{A}=4.0)$ overall may be admitted to the combined program. They may then take 32 semester hours of graduate level courses (400- and 500-level) during their combined senior and graduate years. While completing requirements for the baccalaureate degree, an application for degree-seeking status as a graduate student must be approved by the Graduate School and the Graduate Committee in Biological Sciences following the procedures described under "Admission." A program outline must also be submitted for approval by Graduate Records and the director of the graduate program in biology prior to enrollment in any courses to be included as a part of the master's program. Official admission to the program and to status as a classified graduate student is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## BIOTECHNOLOGY MANAGEMENT MASTER OF SCIENCE

The Department of Biological Sciences offers the graduate degree of Master of Science with a major in Biotechnology Management.

Numerous career and advanced training opportunities are available to persons holding a master's degree in biotechnology management. These include occupations in biomedical and health science agencies and businesses, the pharmaceutical industry, agri-business, small businesses, and governmental laboratories and agencies.

## ADMISSION

Applicants who satisfy the general admission requirements of the Graduate School will be considered for admission to the master's program in biological sciences. Applicants should submit scores (verbal, quantitative, analytical) from the Graduate Record

Examination (GRE) to the Department of Biological Sciences. Under exceptional circumstances, applicants with an unusually strong academic record or with high scores on other standardized tests may be admitted to the program before the results of the GRE scores are received. In these cases, the GRE must be taken and the scores submitted during the first term of the student's master's level work.

Graduate students are expected to maintain at least a B average (3.0) in course work; therefore, applicants with less than a B average as undergraduate students and/or GRE combined verbal/quantitative scores lower than 1050 should present evidence that they can do graduate level course work in an acceptable manner. Upon admission to the program, the Biological Sciences Graduate Committee will inform the student of any undergraduate deficiencies and how they can be corrected.

Applicants should also submit a short statement of goals and interests to the Department of Biological Sciences. The statement should include special qualifications and a description of relevant professional experiences. Reprints of publications, letters of recommendation, and other documents should be submitted to the department to assist the Graduate Committee in evaluating the applicant's qualifications. Applicants are encouraged to contact the Graduate Committee Chair for assistance in identifying faculty members who might serve as graduate mentors.

## PROGRAM OF STUDY

The plan of study requires a minimum of 34 semester hours, of which at least 22 semester hours must be in biology. This program requires an internship in lieu of a thesis.

Required courses: Enrollment in a total of four (4) hours in BIOL 595 or 596 at least twice or in combination and taught by at least two different faculty members. Enrollment in ACCT 502, CMIS 515, and MGMT524 are also required.

Electives: Students may take a minimum of 15 hours in BIOL electives.
Internships (6hrs): Students enroll in 6 hours of BIOL 598, Internship, and produce an acceptable research paper based upon the internship.

## EXIT REQUIREMENTS

For the final examination in biotechnology management, students meet with their advisory committee for an oral defense of the final research paper based upon the internship.

CHEMISTRY

## MASTER OF SCIENCE

The Department of Chemistry offers a graduate program leading to the Master of Science degree in chemistry and, in conjunction with the Department of Curriculum and Instruction in the School of Education, provides courses supporting the Master of Science in Education degree in secondary education with a teaching field in chemistry.

The Master of Science program is highly research oriented. Thesis research topics are available to students in the Department of Chemistry in the areas of analytical chemistry, biochemistry, environmental chemistry, inorganic chemistry, organic chemistry, and physical chemistry. Prospective students can obtain information about specific research topics in these broad areas by directing an inquiry to the Graduate Program Advisor, Department of Chemistry.

## ADMISSION

In addition to the admission requirements of the Graduate School, applicants for the graduate program in chemistry must have completed at least 36 semester hours in chemistry with an overall grade point average of 3.2 ( $\mathrm{A}=4.0$ ). For international applicants, a minimum score of 590 on the TOEFL is required. Applicants who do not meet these requirements may be admitted conditionally on the basis of such factors as outstanding performance in the last two years of undergraduate study. All applicants must provide evidence to show that they can participate effectively in the department's program. Such evidence might be completion of the baccalaureate degree in chemistry or related science, previous related study or creative work, two strong letters of recommendation, research papers, and honors and awards. Applicants are encouraged to submit as much supporting information as possible directly to the Department of Chemistry.

## PROGRAM OF STUDY

All students must complete 30 semester hours of graduate course work with a grade point average of 3.2 or higher. At least 24 hours must be in 500-level chemistry courses. Both thesis and non-thesis plans of study are available.

Both thesis and non-thesis plans require:
Core course requirements (12 hours) selected from: CHEM 511, 531, 541,551, 561.

Graduate seminar (2 hours). Attendance in CHEM 575 is required for each semester during the academic year.

Electives (6 semester hours). Course work may include non-chemistry courses that will contribute to the student's career objectives.

Additional requirements for thesis plan:

Successful completion of at least 10 hours of CHEM 597 and 599 is required. Satisfactory completion requires the submission of an acceptable thesis, oral presentation, and defense of thesis results.

Additional requirements for non-thesis plan:
Acceptance into the non-thesis plan by the graduate committee and ten additional hours of course work at the 500-level are required. Up to four hours of credit from CHEM 596 and 597 can be applied toward the non-thesis plan. Students who pursue the non-thesis plan of study will make an oral presentation and defense of a final paper based on a current literature topic and/or their research achievements.

## EXIT REQUIREMENTS

Students following the thesis plan will make an oral presentation and defense of their thesis results. Students who pursue the non-thesis plan of study will make an oral presentation and defense of a final paper based on a current literature topic and/or their research achievements.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/CHEMISTRY

The Department of Chemistry, in cooperation with the Department of Curriculum and Instruction, offers a chemistry teaching field as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly advised program ordinarily including 15 hours in chemistry will be designed, taking into account each student's background and interests. Throughout the program, students must consult the graduate program advisor before registering for any chemistry courses. Upon completion of the program, students must have accumulated at least 42 semester hours in chemistry (graduate and undergraduate course work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in chemistry in order to satisfy degree requirements. A student must achieve a $3.2(\mathrm{~A}=4.0)$ grade point average in chemistry course work, as well as an average of 3.2 in all course work. For further information, see "Secondary Education" in another section of this chapter.

COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE/MASTER OF SCIENCE DEGREES IN CHEMISTRY (3+2 PROGRAM)

The Department of Chemistry offers a five-year program leading to the Bachelor of Science (BS) and Master of Science (MS) degrees. Students with senior level status (at least 90 semester hours) and a grade point average of 3.0 ( $\mathrm{A}=4.0$ ) overall may be admitted to the BS/MS program that allows them to earn 24 hours of graduate level
credit (400- and 500-level) during their combined senior and graduate years. An application for degree-seeking status as a graduate student must be approved by the Graduate School and the Graduate Committee in Chemistry. A program outline must also be submitted for approval by the Graduate Dean and the director of the graduate program in chemistry prior to enrollment in any courses to be included as a part of the master's program. Official admission to the program and to classified graduate status is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## ENGLISH

## MASTER OF ARTS

The Department of English Language and Literature offers studies leading to the Master of Arts degree in English with specializations in American and English literature, the Teaching of Writing, the Teaching of English as a Second Language, and Creative Writing, each requiring from 30 to 36 hours of course work beyond the Bachelor of Arts degree. The department, in cooperation with the Department of Curriculum and Instruction, also provides studies leading to the degree Master of Science in Education, major in secondary education, with a teaching field in English/Language Arts.

Graduate studies in English can prepare students for advanced graduate work, secondary school teaching, community college teaching, or careers in such fields as law, business, social service, and teaching English as a second language; some graduates find careers in technical writing. Courses in women's studies, creative writing, technical writing, and editing are also available.

## ADMISSION

All applicants must supply, in addition to the general requirements of the Graduate School, three letters of recommendation which must be accompanied by access waiver forms (available from the Department's website or from the graduate program director in the Department of English. Applicants to the various specializations must, in addition, supply the following materials:

American and English Literature: (1) a one-page statement of purpose; (2) a recent sample of the applicant's writing, at least ten pages in length, which demonstrates the ability to conduct scholarly investigation.

Teaching of English as a Second Language and Teaching of Writing: a 3-5 page paper which explains how the applicant became interested in the field of TESL or TOW, what the applicant hopes to learn in the program, and how that learning will help the applicant in a career.

Creative Writing: (1) a one-page statement of purpose; (2) either two complete prose works (short stories, novel chapters, and/or creative non-fiction pieces), or 10 poems, depending upon genre of interest.

For applicants to the American and English Literature, TESL, and Creative Writing specializations, there is a requirement of two years of college-level course work (or its equivalent) in the same modern or classical foreign language, with at least a C average. This requirement may be satisfied during the course of the student's graduate studies.

## AMERICAN AND ENGLISH LITERATURE

## PROGRAM OF STUDY

The specialization in American and English literature requires 30 to 36 semester hours for completion of the Master of Arts degree. Program elements include the following:

Required courses (18 hours):

ENG 501 Modern Literary Studies, taken in the first available term.
ENG 502 - Modern Literary Theory

One course at the 400- or 500-level selected from four of the following six periods: Medieval; Renaissance (1500-1660); 18th Century (1660-1800); 19th Century British; Colonial and 19th Century American; and 20 ${ }^{\text {th }}$ Century American and British.

Electives (12 to 18 hours): Courses may be elected in literature, creative writing, composition, and/or linguistics. Elective hours may also include credit for ENG 598 or 599. In total, no more than 9 hours from 400-level courses can count toward your American and English Literature specialization.

In consultation with a graduate program adviser, the student selects one of three plans to complete the program requirements:

Thesis plan (30 hours)
Enroll in ENG 599 and submit an acceptable thesis in any area of the field, including women's studies.

Three paper plan (30 hours)
Enroll in ENG 598 and prepare three 20-page papers based on a reading list established in consultation with the candidate's committee.

Oral examination plan (36 hours)
Complete an additional 6 hours of course work at the 500-level within the discipline and prepare for an oral examination on a reading list developed in committee.

## EXIT REQUIREMENTS

The mode of final examination is dependent on the activity selected by the student. In the thesis plan, the student must pass a one-hour oral examination on the thesis and related topics. A student may also choose to write three 20-page papers based on a reading list determined by the student and his/her committee. The oral examination plan consists of an oral session on a field selected by the student from within one of the six periods designated previously or two contiguous periods, a genre, major authors, or women's studies. The field must be approved by the examining committee chosen by the student in consultation with the director of the graduate program in English.

## TEACHING OF WRITING

The teaching of writing specialization is designed for the student interested in teaching writing at the university, community college, high school, or middle school level. A student graduating with this specialization will be prepared to teach writing and writing pedagogy as well as conduct research in composition. The program of study does not include requirements necessary for state certification for high school teachers.

## PROGRAM OF STUDY

Required primary courses (18 hours): ENG 488, 552, 554, 556, 558, 596.
Required secondary courses (9 hours): selected from ENG 486, 487, 570, 572, 574, 576, 578, 581. One of the secondary courses can also be fulfilled with one of the following linguistics courses: ENG 400, 541, or 544.
Elective course (3 hours): 400- or 500-level ENG course (e.g., technical, expository, or creative writing; pedagogy; linguistics, literature).

Students are required to complete one of the following options (9 credit hours inside or outside of the English Department).

3 courses in the same foreign language
3 ESL/Linguistics courses
3 American or English literature courses
3 creative writing courses
3 computer and/or internet-based courses
3 literacy and/or reading courses
Alternative 3-course sequence to be determined by student in consultation with graduate advisor (e.g., courses in curriculum and instruction, mass communications, or instructional technology). Course work used to fulfill this option may be completed while student is a candidate in the Teaching of Writing specialization or may have been completed during the five years immediately preceding entrance to the program.

## EXIT REQUIREMENTS

Under the auspices of ENG 596, the student will consult with the graduate adviser to create a three-person graduate faculty committee who will oversee the student's development of pertinent reading lists and the student's successful completion of three research-based essays on topics determined by the committee and student.

## TEACHING ENGLISH AS A SECOND LANGUAGE

The specialization in teaching English as a second language (TESL) prepares the student for professional opportunities related to teaching English to non-native speakers or for advanced graduate programs in similar or related fields. A student completing this specialization will be able to teach English as a second or foreign language, to develop curricula and teaching materials for second language learners, to evaluate the English language capabilities of such learners, and to participate in the advising of students for whom English is not a first language.

## PROGRAM OF STUDY

The specialization in teaching English as a second language requires (TESL) 30 hours of course work. To complete this specialization, the student, in consultation with the TESL advisor may elect a thesis or take ENG 595. Enrolling in 595 is recommended for students with no previous or current TESL experience.

Students taking 595 to complete their exit requirement are required to complete 5 electives from the following list, and students electing the thesis option must complete 4 electives. For all students, at least 3 of the electives must be at the 500 level.

Required courses (12 hours): ENG 400, 416, 468, 542.
Electives (12-15 hours): ENG 405, 408, 409, 470, 472, 474, 540, 541, 543, 544, 597. Final Course or Thesis (3-6 hours): ENG 595 or ENG 599-6.

Students who are pursuing state ESL approval, or who already hold a valid teaching certificate may take a series of courses leading to Illinois and/or Missouri ESL teaching approval. These courses are: ENG 400, 409, 416, 468, 470, 472, 476. Students interested in this specialization should contact the ESL Approval adviser.

## EXIT REQUIREMENTS

The mode of final examination is dependent on the culminating activity selected by the student. A student who elects the thesis option must successfully complete a one-hour oral examination based on the thesis. A student who elects to enroll in 595 must attain at least a B in that course and successfully complete an examination responding to questions submitted by an examining committee of TESL faculty.

## CREATIVE WRITING

The specialization in creative writing is designed for the student interested in pursuing the art of writing fiction, poetry, or creative non-fiction. Students pursuing this specialization will not just develop their skills as writers, they will be better prepared to teach creative writing, pursue other professional writing opportunities, conduct further research into matters of creative writing pedagogy, and publish their own creative works.

## PROGRAM OF STUDY

Completion of the program requires at least 30 hours, however students may enroll in an optional second unit of thesis hours, for a total of 33 hours. Students are required to complete the following primary courses (18 hours):

Required (6 hours): ENG 599 (3-6 hours), 441a or 441b.
Required Literature (6 hours): Choice of two of ENG, 404, 406, 413, 421, 422, 423, 424, 426, 427, 428, 431, 432, 434, 435, 437, 439, 440, 454, 455, 456, 460, 461, 462, 471a/b, $473,475,478,482,505,506,508,510,515,518$, or 521 . At least one choice must be 500-level.
Workshop (12 hours):
ENG 593 (Poetry workshop) taken 4 times
Or
ENG 592 (Fiction workshop) taken 4 times
Or
ENG 594 (Creative Non-fiction workshop) taken 4 times
Electives (6 hours): Electives may be any graduate level course offering, an additional unit of thesis hours, or a workshop in the student's minor genre (492 or 493).

## EXIT REQUIREMENTS

Students will submit as a thesis a book-length, publishable manuscript of poetry (roughly a minimum of 48 pages) prose (usually a minimum of 150 pages), or some hybrid text (length variable, at least 48-150 pages). Successful completion of the thesis defense constitutes completion of ENG 599.

## POST-BACCALAUREATE CERTIFICATE

## AMERICAN AND ENGLISH LITERATURE

The American and English literature certificate is designed for students seeking graduate work in literature and research but not wishing to commit to a two-year MA program. The certificate program offers substantive study in a relatively brief time and is intended for students teaching or planning to teach on the community college, high school, and middle school levels.

In addition to fulfilling the general requirements of the Graduate School, applicants must submit a writing sample (usually a statement of purpose), along with three reference letters from professional sources. The Graduate Adviser may require specific undergraduate course work from students who have not majored in English.

## PROGRAM OF STUDY

At least half of the six courses must be 500-level.

Required courses (6 hours): ENG 501 and 502.
Electives (12 hours): Students may distribute their remaining four course selections among several of the following categories or they may concentrate on one or two of the categories.

Old English and Medieval British Literature: 404, 406, 421, 505.
Renaissance and $17^{\text {th }}$ Century British Literature: 413, 422, 423, 460, 471a, 471b, 473, 506.
$18^{\text {th }}$ Century British Literature: 424, 454, 461, 508.
$19^{\text {th }}$ Century British Literature: 426, 427, 455, 510.
Modern British Literature: 428, 456, 462, 482, 515.
Pre-20 ${ }^{\text {th }}$ Century American Literature: 431, 434, 439, 518.
Modern American Literature: 432, 435, 437, 440, 441a, 441b, 482, 515.
Gender and Ethnic Studies: 446, 457, 478, 526, 570.
Literary Criticism and Theory: 495, 501, 502.
Variable Topic Course: 443, 458, 521.

## POST-BACCALAUREATE CERTIFICATE

## TEACHING OF WRITING

The Teaching of writing post-baccalaureate certificate is designed for students seeking graduate work in composition pedagogy and research but not wishing to commit to a twoyear MA program. The certificate program offers substantive, comprehensive study in a relatively brief time and is intended for students teaching or planning to teach on the university, community college, high school, and middle school levels.

## PROGRAM OF STUDY

Required courses (12 hours): ENG 552, 554, 556, 558.
Electives (6 hours) selected from: ENG 486, 487, 488, 490 (or 491, 492, 493, 592), 541, 570, 572, 574, 576, 578, 581.

The TESL certificate is designed for students seeking graduate work in TESL pedagogy and theory but not wishing to commit to a two-year MA program. The program covers the same core areas that the full MA does, but can be completed in a shorter amount of time, allowing students to pursue other graduate degrees or professional experiences.

## PROGRAM OF STUDY

Required courses (12 hours): ENG 400, 416, 468, 542.
Electives (6 hours) selected from: ENG 540, 541, 543, 544, 597.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/ENGLISH/LANGUAGE ARTS

The Department of English Language and Literature, in cooperation with the Department of Curriculum and Instruction, offers an English specialization as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly advised program ordinarily including 15 hours in English will be designed, taking into account each prospective student's background and interests. Throughout the program, the student must consult with the program adviser in the Department of English Language and Literature before registering for any English courses. Upon completion of the program, students must have accumulated at least 42 semester hours in English (graduate and undergraduate work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in English in order to satisfy degree requirements. Students must achieve a 3.0 ( $\mathrm{A}=4.0$ ) grade point average in course work in the English/language arts teaching field, as well as an overall average of 3.0. For further information, see "Secondary Education" in another section of this chapter.

## ENVIRONMENTAL SCIENCE MANAGEMENT

## MASTER OF SCIENCE

The Environmental Science Management program is a new kind of master’s degree, a Professional Science Master's (PSM). The PSM is a degree in science or mathematics for students interested in a wider variety of career options than provided by current graduate programs in the sciences and mathematics and prepares students for work in fields such as research management and technology transfer.

The New York-based Alfred P. Sloan Foundation has helped launch SIUE's Environmental Science Management program, which has been developed in concert with industry and is designed to dovetail into present and future professional opportunities.

The main difference in the Environmental Science Management program from other master's degrees in the sciences is the real-world experience, internship, and business courses that enhance your environmental sciences coursework.

Part of your program will be an internship opportunity (6 hours credit) at an area company. The companies represented on the Environmental Science Management Advisory Board are Ameren UE, Monsanto Corporation, Triad Industries, Harding ESE Inc., National Corn to Ethanol Research Pilot Plant, Phillips Environmental Services Corp., and Geotechnology, Inc. This Advisory Board ensures that the Environmental Science Management program meets the area’s workforce needs. Companies such as these will be providing the internship opportunities. At the end of the internship, students prepare a thesis based on their internship experience.

## ADMISSION

In addition to the general requirements of the Graduate School, admission to this program requires a positive recommendation from the Environmental Sciences Admissions Committee. The program requires all prospective students to submit a letter stating their academic and professional goals. The GRE is required for those students whose undergraduate GPA is below 3.0 ( 4.0 scale). Additionally, for those students whose GPA is below 2.75 ( 4.0 scale), two letters of recommendation are required. Applicants with less than a 2.5 grade point average will ordinarily not be admitted. Students entering any of the areas of emphasis must have a baccalaureate degree in an appropriate academic major. Computer literacy is strongly encouraged.

Competitive graduate assistantships through the Environmental Sciences Program and Competitive Graduate Awards through Graduate Studies and Research are available. The Office of Student Financial Aid administers most of the University’s financial aid programs.

## PROGRAM OF STUDY

The Master of Science degree in Environmental Science Management requires a minimum of 36 hours of graduate work.

Required core courses (8 hours): ENSC 505, 506, 510, and a 3 - or 4- hour 400- or 500-level statistics course.
Internship (6 hours): ENSC 590.
Business Courses (9 hours): ACCT 502, CMIS 515, and MGMT 524.
Required emphasis courses (12 hours): ENSC 511 or 512, 540, and at least two other ENSC electives.
Thesis (1-3 hours): ENSC 599.
Within the first semester of study, the student must select a graduate faculty member as thesis chairperson for the graduate degree committee. The chairperson will advise the
student on course work and research. Within the first year of study, the graduate degree committee must be complete, consisting of the chairperson and two or more additional graduate faculty members. The graduate degree committee should consist of faculty with expertise or interests that are appropriate to the student's academic background, goals, and career interests. The graduate degree committee and the student will develop a thesis outline before the work begins. The thesis is then approved for initiation and supervised by the committee chairperson.

## EXIT REQUIREMENTS

Following the completion of the program of study, including the thesis, the student will present the thesis, open to the public, to the graduate committee for critique and must pass a final oral examination administered by the graduate committee.

## ENVIRONMENTAL SCIENCES

## MASTER OF SCIENCE

The College of Arts and Sciences administers this interdisciplinary program leading to the Master of Science degree in environmental sciences. The mission of the Environmental Sciences Program is to cultivate students' perspectives of environmental issues and provide students with refined knowledge of environmental issues at the local, regional, and global scale. The Program will increase the student's technical competence in addressing and analyzing these issues, their origins, ramifications, and resolutions. The Environmental Sciences Program at SIUE is designed to enhance and promote professional education and career opportunities in a wide area of interests. There are six areas of emphasis: 1) Environmental Biology; 2) Environmental Chemistry; 3)
Environmental Education; 4) Environmental Policy and Public Administration; 5) Environmental Technology and Assessment, and 6) Environmental Management.

Faculty from several departments in the College of Arts and Sciences provide mentoring, direction, and instruction. Practicing professionals also lend their expertise to this program. A close relationship is maintained with industries and environmental agencies so that both students and faculty members can incorporate real-world issues in their studies and research. Each student is required to complete a research thesis or non-thesis paper. With advisement and agreement of the thesis committee, students may select their own research topic. Students are encouraged to work with faculty on their ongoing research projects. Faculty research interests span the entire discipline and can offer a wide variety of research opportunities. Because of career enhancements, students are encouraged to select the thesis option.

There are excellent research and teaching opportunities for students and faculty on the SIUE campus including long-term environmental monitoring plots and recently developed experimental filter strips, recently acquired experimental plots and restored

Oak Savannah Prairie. Thesis research has been successfully completed in the following areas: air quality, bioremediation and other innovative remediation technologies, carcinogenic effects of ionizing radiation, constructed wetlands to reduce non-point source pollution, ecotoxicological studies, energy, erosion reduction, feedlot runoff, fermentation, insecticide toxicity, metal accumulation in fish, modeling climatic effects on trees and ecosystems, mutagenicity, occupation health, pesticide fate and transport, photovoltaics, population dynamics, radon in the home, regulation, teaching, underground storage tanks, use of sewage sludge, waste incineration, watersheds, water quality, wildlife productivity, and many others.

The program offers challenging environmental research opportunities, which may be related to the campus, home, municipality, business and industry, state or federal government, consulting firms, and various advocacy groups. The Program also has access to a variety of instrumentation, such as an Atomic Absorption Spectrometer, computer access to Geographical Information Systems, several Gas and Liquid Chromatographs, a Mass Spectrometer, a variety of sampling equipment (automated water samplers, low and high volume air samplers (including $\mathrm{PM}_{10}$ ), several soil and sediment coring devices and a LICORR 6400 photosynthesis system), and much more. Students completing this graduate program in Environmental Sciences have career opportunities with governmental agencies, private industries, consulting firms, and educational institutions. Areas of responsibility may include environmental field or laboratory research and analyses, environmental policy and law, environmental remediation, solid and hazardous waste management, groundwater pollution, water management, air quality management, environmental and ecological assessments, resource depletion, and environmental engineering.
For up to date information on the Environmental Sciences Program, consult the program's web site at www.siue.edu/ENVS.

## ADMISSION

In addition to the general requirements of the Graduate School, admission to this program requires a positive recommendation from the Environmental Sciences Admissions Committee. The program requires all prospective students to submit a letter stating their academic and professional goals. The GRE is required for those students whose undergraduate GPA is below 3.0 ( 4.0 scale). Additionally, for those students whose GPA is below 2.75 ( 4.0 scale), two letters of recommendation are required. Applicants with less than a 2.5 grade point average will ordinarily not be admitted. Students entering any of the areas of emphasis must have a baccalaureate degree in an appropriate academic major. Computer literacy is strongly encouraged.

Competitive graduate assistantships through the Environmental Sciences Program and Competitive Graduate Awards through Graduate Studies and Research are available. The Office of Student Financial Aid administers most of the University's financial aid programs.

## PROGRAM OF STUDY

The Master of Science degree in Environmental Sciences requires a minimum of 33 hours of graduate work for those students electing to complete a thesis and 38 hours of graduate work for those students electing to complete a non-thesis paper.

Emphasis Options:

1) Environmental Biology

Required core courses (8-9 hours): ENSC 505, 506, 510, and a 3 - or 4 - hour 400or 500-level statistics course.
Thesis (1-6 hours): ENSC 599 or Final Research Paper (1-3 hours): ENSC 597.
Required emphasis courses (9 hours): ENSC 531, 540 or 550, and either ENSC $528 / 528 \mathrm{~L}$ or 520.

Electives: 9 hours minimum.
2) Environmental Chemistry

Required core courses (8-9 hours): ENSC 505, 506, 510, and a 3 - or 4 - hour 400or 500-level statistics course.
Thesis (1-6 hours): ENSC 599 or Final Research Paper (1-3 hours): ENSC 597. Required emphasis courses (9 hours): ENSC 531, 540, and either ENSC 528/528L or 520.

Electives: 9 hours minimum.
3) Environmental Education

Required core courses (8-9 hours): ENSC 505, 506, 510, and a 3- or 4- hour 400or 500-level statistics course.
Thesis (1-6 hours): ENSC 599 or Final Research Paper (1-3 hours): ENSC 597. Required emphasis courses (9 hours): ENSC 550, either ENSC 528/528L or 520, and either ENSC 580 or CI 510.

Electives: 9 hours minimum.
4) Environmental Policy and Public Administration

Required core courses (8-9 hours): ENSC 505, 506, 510, and a 3 - or 4 - hour 400or 500-level statistics course.
Thesis (1-6 hours): ENSC 599 or Final Research Paper (1-3 hours): ENSC 597. Required emphasis courses (9 hours): ENSC 511, 512, and 516.
Electives: 9 hours minimum.
5) Environmental Technology and Assessment.

Required core courses (8-9 hours): ENSC 505, 506, 510, and a 3- or 4- hour 400or 500-level statistics course.
Thesis (1-6 hours): ENSC 599 or Final Research Paper (1-3 hours): ENSC 597.
Required emphasis courses (9 hours): ENSC 540, 570, and either ENSC $528 / 528 \mathrm{~L}$ or 520.

Electives: 9 hours minimum.

Within the first semester of study, the student must select a graduate faculty member as thesis (or non-thesis) chairperson for graduate degree committee. The chairperson will advise the student on course work and research. Within the first year of study, the graduate degree committee must be complete, consisting of the chairperson and two or more additional graduate faculty members. The graduate degree committee should consist of faculty with expertise or interests that are appropriate to the student's academic background, goals, and career interests. The graduate degree committee and the student will develop a research project outline and will determine before the work begins whether the project is to result in a thesis or a non-thesis paper. The research project is then approved for initiation and supervised by the committee chairperson.

## EXIT REQUIREMENTS

Following the completion of the program of study, including the thesis or non-thesis paper, the student will present the thesis or non-thesis paper, open to the public, to the graduate committee for critique and must pass a final oral examination administered by the graduate committee.

## ENVIRONMENTAL SCIENCE MANAGEMENT

## MASTER OF SCIENCE

The Environmental Science Management program is a new kind of master’s degree, a Professional Science Master's (PSM). The PSM is a degree in science or mathematics for students interested in a wider variety of career options than provided by current graduate programs in the sciences and mathematics and prepares students for work in fields such as research management and technology transfer.

The New York-based Alfred P. Sloan Foundation has helped launch SIUE's Environmental Science Management program, which has been developed in concert with industry and is designed to dovetail into present and future professional opportunities.

The main difference in the Environmental Science Management program from other master's degrees in the sciences is the real-world experience, internship, and business courses that enhance your environmental sciences coursework.

Part of your program will be an internship opportunity (6 hours credit) at an area company. The companies represented on the Environmental Science Management Advisory Board are Ameren UE, Monsanto Corporation, Triad Industries, Harding ESE Inc., National Corn to Ethanol Research Pilot Plant, Phillips Environmental Services Corp., and Geotechnology, Inc. This Advisory Board ensures that the Environmental

Science Management program meets the area’s workforce needs. Companies such as these will be providing the internship opportunities. At the end of the internship, students prepare a thesis based on their internship experience.

## ADMISSION

In addition to the general requirements of the Graduate School, admission to this program requires a positive recommendation from the Environmental Sciences Admissions Committee. The program requires all prospective students to submit a letter stating their academic and professional goals. The GRE is required for those students whose undergraduate GPA is below 3.0 ( 4.0 scale). Additionally, for those students whose GPA is below 2.75 ( 4.0 scale), two letters of recommendation are required. Applicants with less than a 2.5 grade point average will ordinarily not be admitted. Students entering any of the areas of emphasis must have a baccalaureate degree in an appropriate academic major. Computer literacy is strongly encouraged.

Competitive graduate assistantships through the Environmental Sciences Program and Competitive Graduate Awards through Graduate Studies and Research are available. The Office of Student Financial Aid administers most of the University’s financial aid programs.

## PROGRAM OF STUDY

The Master of Science degree in Environmental Sciences Management requires a minimum of 36 hours of graduate work.

Required core courses (9-12 hours): ENSC 505, 506, 510, 599 (1-3), and a 3- or 4 - hour 400- or 500-level statistics course. Internship (6 hours): ENSC 590.
Business Courses (9 hours): ACCT 502, CMIS 515, and MGMT 524. Required emphasis courses (12 hours): ENSC 511 or 512, 540, and at least two other ENSC electives.

Within the first semester of study, the student must select a graduate faculty member as thesis chairperson for the graduate degree committee. The chairperson will advise the student on course work and research. Within the first year of study, the graduate degree committee must be complete, consisting of the chairperson and two or more additional graduate faculty members. The graduate degree committee should consist of faculty with expertise or interests that are appropriate to the student's academic background, goals, and career interests. The graduate degree committee and the student will develop a thesis outline before the work begins. The thesis is then approved for initiation and supervised by the committee chairperson.

## EXIT REQUIREMENTS

Following the completion of the program of study, including the thesis, the student will present the thesis, open to the public, to the graduate committee for critique and must pass a final oral examination administered by the graduate committee.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/FOREIGN LANGUAGES

The Department of Foreign Languages and Literature, in cooperation with the Department of Curriculum and Instruction, offers foreign language teaching fields in French, German, and Spanish as part of the Master of Science in Education (MSEd) degree in secondary education. In addition to meeting the general requirements for admission to the Graduate School and the requirements of the School of Education for admission for study in this program, applicants who wish to pursue a foreign language teaching field within the graduate program in secondary education must receive the approval of the Department of Foreign Languages and Literature.

A jointly advised program ordinarily including 15 hours in French, German, or Spanish will be designed, taking into account each prospective student's background and interests. Throughout the program, it is important to consult with the program advisor in the Department of Foreign Languages and Literature before enrolling in any foreign language courses. Upon completion of the program, students must have accumulated at least 42 semester hours in either French, German, or Spanish (graduate and undergraduate course work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in the selected foreign language in order to satisfy degree requirements. Students must achieve a $3.0(\mathrm{~A}=4.0)$ grade point average in course work in the selected foreign language, as well as an overall average of 3.0. For further information, see "Secondary Education" in another section of this chapter.

## GEOGRAPHICAL STUDIES

## MASTER OF SCIENCE

The Department of Geography offers a program of study leading to the Master of Science degree in geographical studies. Our program offers two professional tracks. Our nonthesis option ( 36 hours of course work culminating in comprehensive exams) is designed for the professional geographer seeking a terminal degree and a career in industry requiring spatial skills, or for geography teachers in public schools and community colleges. Our thesis option with its intensive course structure is designed to further stimulate scientific inquiry for those persons who may intend to pursue a doctoral program at other institutions.

The objective of the graduate curriculum in geography at SIUE is to produce graduates with: (a) a functional understanding of the field of geography and an in-depth knowledge in one or more areas of departmental competence; (b) the pertinent geographic skills and knowledge which are applied in resolving contemporary spatial problems; and (c) proficiency in geographic research methods and skills in critical thinking and writing.

The graduate program is organized around eight areas that reflect the interests and competencies of the graduate faculty. These are Cartography-GIS/Remote Sensing, Climatology, Biogeography, Historical-Cultural Geography, K-12 / Geographic Education, Landforms-Hydrology/Environmental Geography, Political Geography/Human Migration, and Urban Economic Planning/Economic Development. With the assistance of the graduate adviser, students are encouraged to structure their programs around one of these areas and to work closely with graduate faculty having similar interests.

## ADMISSION

Admission is open to geography and non-geography majors with baccalaureate degrees satisfying the general requirements of the Graduate School. Non-geography majors and in some cases geography majors may be required to take prerequisites before beginning the graduate program. Courses taken to remedy any deficiencies will not count as part of the regular program. In addition, the graduate program in geography requires applicants to have at least an over-all grade point average of $2.8(\mathrm{~A}=4.0)$. Applicants who do not meet the required grade point average will be considered if acceptable scores are demonstrated on the Graduate Record Examination.

Students are required to maintain a minimum over-all grade point average of 3.0. If a student earns a grade of "C" or below in a graduate level course he or she will be placed on academic probation. Any student earning two grades of "C" or below in the program will be dropped from the geography graduate program, regardless of GPA. To facilitate the process of student advising and guidance, all applicants must submit a one-page written statement of their graduate education and study plan along with their graduate admissions forms.

## PROGRAM OF STUDY

Thesis Option: A minimum of 30 hours is required for the Master of Science, of which 21 semester hours must be geography graduate-level courses. In addition, at least one half of the required 30 credit hours must be earned at the 500 level. Required courses (12 hours) include: GEOG 520, 521, 522; plus one seminar in Geography. Electives (12 to 15 hours) are additional courses that should be related to the student's needs and interests, and faculty expertise. Candidates must complete a thesis while enrolled in GEOG 599 (3 to 6 credit hours).

Non-Thesis Option: A minimum of 36 hours is required for the Master of Science, of which 24 hours must be geography graduate-level courses. In addition, at least one half of
the 36 required credits must be earned at the 500 level. Required courses ( 15 hours) include GEOG 520, 521, 522, 597, plus one seminar in Geography. Electives (21 hours) are additional courses that should be related to the student's needs and interests, and faculty expertise.

In addition, each graduate student, regardless of option selected, must declare a subject area $\mathrm{s} / \mathrm{he}$ wishes to emphasize. Those in the thesis option must take at least one course (3 credit hours) in their emphasis area as part of the elective package, while those in the non-thesis option must take at least two courses ( 6 credit hours). Before enrolling in the second year of study, each student must have selected a subject area adviser and obtained approval from him/her as well as the Graduate Adviser.

## EXIT REQUIREMENTS

Thesis Option: the final oral examination will be conducted by the candidate's committee. This examination will cover the content of the thesis as well as the fundamental concepts of the discipline as stated in the program's objectives.

Non-Thesis Option: The candidate must register for GEOG 597 (Preparatory Reading) and take a final written examination. This examination will consist of a segment that covers the content of the graduate level core courses taken, as well as fundamental concepts of the discipline as stated in the program's objectives, a segment covering her/his specialty area, and a directed research problem.

## PROFESSIONAL DEVELOPMENT SEQUENCES IN

GEOGRAPHIC INFORMATION SYSTEMS (GIS)
The Professional Development Sequences (PDS) in Geographic Information Systems (GIS) were originally developed by the Department of Geography with the support of the Schools of Business and Engineering. Three separate sequences were developed to accommodate the growing demand for practitioners in this new, specialized field which combines geographic information and graphics technology. In addition, since their origination, these sequences have been regularly updated to remain current with advances in technology and the changing needs of many user groups including the social, natural, physical, and applied sciences.

The PDS in GIS is, therefore, valuable to graduate students and professionals from many diverse fields such as economic development, real estate, environmental assessment, resource management, urban and regional planning, public administration, and health services. These course sequences provide the requisite education and training needed to understand GIS methodology and technology, and how to apply it to one’s particular field. This methodology is particularly valuable for applications requiring area definition coupled with demographic, environmental, and market research and analysis.

## ADMISSION

Graduate students who are officially admitted to and in good standing with the Graduate School may enroll in a GIS PDS provided they have the approval of the Geography graduate adviser and PDS coordinator. As long as the student is enrolled in the PDS, the student will have unclassified graduate status. Students desiring to acquire this specialized GIS training through a degree program (geography, business administration, or civil engineering), must follow the procedures necessary for admission to that degree program. A student completing the first PDS may apply up to three courses (nine semester hours) toward the elective hour requirement for a graduate degree in geography, provided the stipulations for transfer credit are met.

## PROGRAM OF STUDY

The first PDS (Principles and Concepts of Geographic Information Systems) includes: GEOG 418 (Geographic Information Systems), GEOG 422 (Remote Sensing and Digital Image Processing), GEOG 423 (Computer Mapping), and GEOG 520 (Research Methods in Geography). The second PDS (Applied Geographic Information Systems) is comprised of: GEOG 424 (Vector Based GIS), GEOG 425 (Raster Based GIS), and GEOG 450 (Topics in Geography) or GEOG 427 (Internship). The third PDS (Advanced Geographic Information Systems) requires GEOG 522 (Techniques in Geography), GEOG 525 (Seminar in GIS), and GEOG 590 (Independent Study). Depending on the level of GIS education and training desired, a student may take only the first PDS, the first and second PDS, or all three. Completion of each sequence is a prerequisite for enrollment in the next.

## HISTORY

## MASTER OF ARTS

The Department of Historical Studies offers a program of study leading to the Master of Arts degree in history. A teaching field in history can also be taken as part of the Master of Science in Education degree in secondary education, offered by the Department of Curriculum and Instruction in the School of Education.

Graduate work in history contributes to students' personal enrichment, life-long learning skills and recognition of their responsibilities as members of a society composed of many communities of memory. The graduate degree in history also serves as important preparation for the pursuit of a variety of career opportunities. In some cases, it is part of the preparation for entry into or continuation of a career in teaching in the secondary schools, community colleges, and universities. For other students, graduate training in history is helpful in cognate fields such as journalism, museum operations, and library science. Some students have used the graduate program as part of their preparation for work in the business community, the legal profession, or government.

## ADMISSION

Application for admission to the program should be made through Graduate Admissions, but inquiries about the program are welcomed by the department's chairperson or graduate program director. Admission to the graduate program in history requires preparation in the discipline equivalent to at least an undergraduate minor. All applicants must submit a letter discussing their preparation for graduate study in history, their area(s) of historical interest and their career goals, so that the faculty can gauge whether the candidate's interests can be well served by the department's faculty. If an applicant's interests can be met, applicants with a $3.0(\mathrm{~A}=4.0)$ or better undergraduate average overall and in history are accepted in good standing. Applicants with an undergraduate average of 2.8 and a strong record during their junior and senior years will be asked to submit aptitude test scores from the Graduate Record Examination (GRE). The advanced history examination is recommended but not required. Applicants will be considered for entry to either the Fall or Spring Semesters; all required materials for admissions should be received by the department by the end of the Spring Semester for admission the following Fall or by the end of the Fall Semester for admission the following Spring. Students should apply for admission as early as possible prior to the date of the term in which they plan to begin their program of study.

## PROGRAM OF STUDY

Both thesis and non-thesis plans of study are available. Students pursuing either the thesis or the non-thesis plan must complete a minimum of 35 semester hours. All students, whether pursuing the thesis or non-thesis plan, are required to take the Department of Historical Studies' year-long, core course, HIST 555 a,b. Students admitted to begin graduate work in the Fall are required to take the year-long sequence during their first year; students admitted in the Spring are required to take the sequence beginning in the next Fall Semester, in order that the course be taken in sequence. HIST $555 \mathrm{a}, \mathrm{b}$ is designed as an introduction to the core debates and strategies that animate the contemporary discipline and practice of history. Students may, with the approval of the graduate program director, apply up to 9 semester hours from related disciplines toward their credit hour requirements. Students may also apply to participate in an internship program that allows them to obtain practical experience in non-teaching career fields related to history. All students must demonstrate a reading knowledge of a foreign language (modern or classical) either by special examination or by completion of two years of college level study in a single language with an average of C or better. Candidates for the Master of Arts degree in history may pursue one of the two following plans of study:

## Thesis Plan

Students complete 35 hours of graduate credit, 8 of which represent HIST 555 a,b and the History Colloquium Series (HIST 556 a,b) and 6 of which represent a well-conceived thesis on a topic chosen in consultation with an advisory committee. Enrollment in HIST

599 is required. Students must earn the grade of "B" or better in each course counting toward their graduate degree, with the exception of foreign languages.

Non-thesis Plan

This plan emphasizes breadth of historical understanding while not ignoring research techniques. Students concentrating in one primary and two complementary secondary areas of emphasis complete 35 hours of graduate credit, which includes completion of HIST 555 a,b ( 6 credit hours) and the History Colloquium Series (HIST 556 a,b) (2 credit hours). Students must earn the grade of "B" or better in each course counting toward their graduate degree, with the exception of foreign languages.

Suggested areas of emphasis can include:

| U.S. to 1877 | Ancient | Cultural History |
| :--- | :--- | :--- |
| U.S. since 1877 | Medieval | African Diaspora |
| U.S. Economic History | Early Modern Europe | Women’s History |
| African-American History | Modern Europe | Intellectual History |
|  | Middle Eastern History | History of Ideas |
|  |  | Asian History |

The broad fields may be modified in consultation with the student's advisory committee. Before embarking on any area(s) of emphasis, a student should consult the appropriate faculty member(s). All non-thesis students are required to develop a portfolio of two research papers, written for different faculty, that reflect their primary, and one of their secondary fields of interest. All students are required to submit their portfolio to their examination committee a month before the scheduling of their written exams. In order for written examinations to be scheduled, the portfolio must be approved by the student's committee.

## EXIT REQUIREMENTS

Students who follow a thesis plan of study will be required to pass an oral examination on the thesis and related historical material. Upon completion of the course work, students pursuing the non-thesis plan of study must pass a written examination, at least three hours long, covering one principal and two secondary fields. They are also required to take an oral examination based on their written exams, portfolio and related historical material. The chairperson of the student's advisory committee will provide guidance to the student regarding the nature of the examination. Such guidance will include a list of readings compiled by the advisory committee, which, in conjunction with the student's course work, will serve as the basis for the examination. Non-thesis students intending to take examinations in the Spring Semester must declare their intention to take examinations by September $15^{\text {th }}$ of the preceding Fall Semester; students intending to take examinations in the Fall Semester must declare their intention to do so by April $1^{\text {st }}$ of the preceding Spring Semester. Declaring their intention to take exams requires them to form an exam committee and, in consultation with their committee, establish reading lists for the exams.

Spring Semester written exams must be completed by April $1^{\text {st }}$ and an oral examination based on the written exams and the portfolio must be held by April $15^{\mathrm{th}}$. Fall Semester written exams must be completed by November $15^{\text {th }}$ and an oral examination based on the written exams and the portfolio must be held by December $5^{\text {th }}$. Generally, master's exams will not be scheduled during the Summer Term.

## POST-BACCALAUREATE CERTIFICATE MUSEUM STUDIES

The Museum Studies Certificate offers current and future museum professionals an opportunity to gain expertise that will aid in their career advancement. The curriculum combines active learning through exhibit development and internships, along with elective courses that focus on interpretation, administration, education, and the acquisition of disciplinary backgrounds. For most students this program provides education adequate for immediate entry into museum careers. In addition, current museum professionals will acquire new skills to broaden or enhance their expertise.

The program presents students with a foundation in theoretical and applied approaches to the interpretative, legal and ethical, community, and administrative challenges that confront museum employees. This sequence of courses is designed for students who have been admitted to a master's degree or are currently enrolled in a related master's program but who want the additional educational credentials to qualify for a certificate. The program may be completed on a part-time or full-time basis.

The program's curriculum and faculty are interdisciplinary, representing the many, diverse areas of skill and expertise relevant to museum work. Students are encouraged to develop a specialization as they choose their elective courses, while also benefiting from the interdisciplinary nature of the museum studies program.

## ADMISSION

Applicants must have an earned BA or BS, a 3.0 undergraduate grade point average, transcripts, 2 letters of recommendation, and a letter of interest.

## PROGRAM OF STUDY

This program entails the completion of 21 hours of course work, including the following required and elective classes:

Required Courses (12 hours):
HIST 580 Foundations of Museum Studies* (also cross-listed as ART 580)
ART 581 Management of Museum Collections*
HIST 582 Practicum in Exhibit and Program Development* (also cross-listed as ART 582)

HIST 590 Internships in Museology or ART 498 Internship in the Arts or PAPA 595
Public Administration Internship
Elective courses ( 9 hours, at least one at the 500-level): open to all graduate-level offerings. These may include the following:
ANTH 420 Museum Technology
ANTH 435 American Material Culture
ART 413 Digital Arts
ART 454 Curatorship: Exhibition Management and Design
HIST 447 Approaches to Oral History
HIST 470 Preserving the American Past
PAPA 579 Grantsmanship
PAPA 501 Public Organizations
PAPA 575 Nonprofit Leadership
Students must earn the grade of "B" or better in each course counting toward their postbaccalaureate certificate.

## EXIT REQUIREMENTS

The student must successfully complete the program of study.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/HISTORY

The Department of Historical Studies, in cooperation with the Department of Curriculum and Instruction, offers a history teaching field as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly-advised program ordinarily including 15 hours in history will be designed, taking into account each student's background and interests. Throughout the program, the student must consult with the history graduate adviser before registering for any courses in history. Upon completion of the program, students must have accumulated at least 42 semester hours in history (graduate and undergraduate work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in history in order to satisfy degree requirements. A student must achieve a $3.0(\mathrm{~A}=4.0)$ grade point average in the history teaching field as well as an overall average of 3. 0. For further information, see "Secondary Education" in another section of this chapter.

## COOPERATIVE DOCTORAL PROGRAM

Faculty in the Department of Historical Studies participate with department faculty at Southern Illinois University Carbondale in offering a cooperative program leading to the Doctor of Philosophy degree in History. Prospective students may initiate application procedures at either campus and may enroll in courses at either or both campuses
concurrently. The doctoral degree is conferred by Southern Illinois University Carbondale. For application procedures, refer to the section on admission to cooperative doctoral programs in Chapter I of this catalog. For more detailed information, contact the department directly at either Carbondale or Edwardsville.

## MASS COMMUNICATIONS

## MASTER OF SCIENCE

The Department of Mass Communications offers a graduate program leading to the Master of Science degree in mass communications. Our MS is designed for students who wish to concentrate in Professional Media Practice (media message design, and media policy and management) or Media Studies (media and politics, media influence, media ethics, media literacy, transnational media, and media and representation). These concentration areas reflect the expertise of the department's graduate faculty, and thus enable students to attain high levels of competence in pragmatic considerations in media, theoretical sophistication and research design. Recent graduates from the program have applied their degree professionally in television journalism, advertising, public relations, sports marketing, and public policy, as well as gone on to pursue law and doctoral degrees.

The Mass Communications' MS program maintains an enrollment of about 30 students. This size assures small class sizes (normally about 8-15), personalized program advising from the Graduate Program Director based on a student's career goals, and well as a close working relationship with the graduate thesis/final project committee.

Students typically begin courses in August at the beginning of the fall semester and can finish their program as early as the following fall. However, admission to the program is open all year and applications are assessed for acceptance as they arrive.

To assure that students will be able to apply the degree to their professional and intellectual goals, the program stresses a foundation in

- Mass Communication Theory
- Qualitative and Qualitative Research Methods of Mass Communication
- Design, Production and Application of Media Messages

These core foci of our curriculum are pivotal for what practitioners in the field might need as well as what doctoral program selection committees look for when evaluating students for their programs. In short, these three core areas of curriculum concentration combine to foster:

- Critically thinking;
- The ability to communicate clearly, both written and oral;
- Understanding the relations between theory and research, and it application;
- The development of independent and original research;
- The analysis of issues relevant to investigation.

The Mass Communications’ graduate program is able to mentor students who wish to specialize in:

- Media cultural studies
- Media campaigns
- Media management
- Media law \& ethics
- History of mass media
- Documentary media

For more detailed information about the program or to obtain application materials, see our website at: http://www.siue.edu/MASSCOMM/grad/

## ADMISSION

In addition to the requirements of the Graduate School, students applying to the graduate program in Mass Communications must have the following: Undergraduate grade point average of 3.0 (on a 4.0 scale, three letters of recommendation, Department of Mass Communications application, and a statement of purpose.

Students with undergraduate majors in fields other than mass communications will be considered for admission, provided that their statement of purpose, as contained in the Mass Communications Department Graduate Program Application, shows the relationship between the undergraduate major and MS program in mass communications. Students lacking sufficient undergraduate preparation (as determined by the Director of Graduate Studies), will be required to take up to three prerequisite courses (nine hours) that will not count toward the graduate degree. With permission from the Director of Graduate Studies, these courses may be taken concurrently with those toward the M.S. degree.

Following admission, each student should make an appointment with the graduate program director for an initial advisement appointment.

## PROGRAM OF STUDY

Thirty semester hours of graduate credit are required for the degree. No credit will be accepted for a C or lower in the Mass Communications Graduate Degree; students may retake courses one time to improve a grade.

Required courses (9 hours): MC 500, 501, 502.

Electives (15 hours): selected in consultation with the student's graduate adviser. No more than six hours may be taken outside the Department of Mass Communications.

Thesis or Project (6 hours): MC 599 (Thesis) or MC 598 (Final Project).

## EXIT REQUIREMENTS

After the thesis or project is submitted and evaluated by the student's advisory committee, the student must successfully complete an oral examination conducted by the committee. The oral examination will focus primarily on the defense of the thesis or project but may also cover the student's program of study.

## POST-BACCALAUREATE CERTIFICATE

## MEDIA LITERACY

The certificate is designed for teachers of secondary education who wish to address questions of media impact in their curriculum. The certificate provides these teachers with a foundation of theoretical, analytical and applied approaches to current trends in mass media. Issues such as the emergence of new technologies; growth of multinational media conglomeration and their impact on politics; questions of race, class, gender and representation; and the effects of media violence are focused on. In addition, certificate program students can also learn and/or sharpen media production skills through elective courses. This certificate should be particularly useful for teachers of high school courses such as, social studies, contemporary concerns, political science, English, media studies, etc.

## PROGRAM OF STUDY

Core Courses (9 hours):
MC 500 Mass Communication Theory
MC 503 Media Critical Theory
MC 504 Special Topics in Mass Communication
Elective Courses (9 hours)
All other Mass Communications courses.
No more than three semester hours can be taken in independent readings, directed research, or other similar courses. No waiver of courses and/or completion requirements is permissible. See Mass Communications website for details and application materials at http://www.siue.edu/MASSCOMM/grad/

## MATHEMATICS

## MASTER OF SCIENCE

The Department of Mathematics and Statistics offers graduate work leading to the Master of Science degree in mathematics. The curriculum offers opportunities for advanced studies in mathematics, operations research, statistics, or computational and applied mathematics. Students can prepare for positions in business, government and industry, for secondary school or community college teaching, or for advanced work leading to the Ph.D. degree in various areas in or related to the mathematical sciences.

The MS program in Mathematics offers options in the following areas: (1) Mathematics, (2) Statistics and Operations Research, and (3) Computational and Applied Mathematics. Students must select one of these options for their program of study. Entering students are assigned advisors by the director of the graduate program. The adviser helpsdesign a program of study suited to the individual's background and needs.

The computational mathematics option may be of interest to students with undergraduate majors in mathematics, computer science, engineering, or physics, who need to use computers to solve industrial and scientific problems. Graduates choosing this option receive training in the formulation of mathematical solutions to industrial or scientific problems and the development and implementation of algorithms for the solution of such problems.

The Department of Mathematics and Statistics, in conjunction with the Department of Curriculum and Instruction in the School of Education, also provides course work supporting the Master of Science in Education degree in secondary education with a teaching field in mathematics. Teachers interested in advanced course work in mathematics, but not necessarily in a degree program, should contact either the Department of Mathematics and Statistics or the Department of Curriculum and Instruction.

## ADMISSION

To be considered for admission to a graduate program in the Department of Mathematics and Statistics, applicants should have an undergraduate background that includes MATH 150, 152, 223, 250, 321, and 350, or their equivalents. Applicants must also have a working knowledge of FORTRAN, Pascal, C, or C++, and a grade point average of at least 2.7 ( $\mathrm{A}=4.0$ ) in mathematics and statistics courses. A brief statement of educational and career goals and interests, together with any supporting documents and a description of any special qualifications or relevant professional experience, should be submitted directly to the graduate program director in the Department of Mathematics and Statistics. In some cases, applicants who meet the requirements for admission to the Graduate School, but do not have the required background in mathematics as indicated above, may register as unclassified graduate students until deficiencies have been satisfied to permit admission to degree-seeking status.

PROGRAM OF STUDY

The program of study requires a minimum of 30 semester hours of graduate credit, at least 15 of which must be at the 500-level. Students must maintain an overall grade point average of 3.0 for all courses taken in the program. Distribution of hours, by area of emphasis, is as follows:

Mathematics
Required courses (18 hours): MATH 421, 437, 450, 451, 545, and either MATH 520, 550, or 555.

Electives (6 to 9 hours): Electives may be selected from 500-level mathematics, statistics, or operations research courses.

Thesis or research paper (3 to 6 hours): MATH, STAT, or OR 599 (Thesis) or MATH, STAT, or OR 595 (Special Project).

Statistics and Operations Research
Required courses (18 hours): STAT 480a, 480b, OR 440, and either OR 441 or OR 442. One of the following two-semester sets of courses is required: STAT 581, 582; STAT 584, 588; STAT 579, 589; OR 587a, 587b; OR 585, 586.

Electives (6 to 9 hours): Electives may be selected from 500-level mathematics, statistics, or operations research courses.

Thesis or Research Paper (3 to 6 hours): MATH, STAT, or OR 599 (Thesis), or MATH, STAT, or OR 595 (Special Project). Students in the Statistics and Operations Research Option may substitute additional course work for the thesis or research paper to complete the 30 -hour requirement for the degree.

Computational and Applied Mathematics
Required Courses (15 hours): MATH 450, 465, 466, 545, 565.
Electives ( 9 to 12 hours): Students choose one of the following options:
a) MATH 464,552 , and either 555 or 567 ;
b) STAT 480a, 480b, 575;
c) MATH 421, either 437 or 451, and 555;
d) OR 440, 587A, 587b.

Thesis or research paper (3 to 6 hours): MATH 599 (Thesis), or MATH 595 (Special Project).

The 400-level required courses are waived for students who have completed these courses as undergraduates, although graduate credit cannot be given for courses taken as an undergraduate.

## EXIT REQUIREMENTS

For students who complete a thesis or research paper, the final examination consists of an oral presentation based on the content of the thesis or research paper. The examination is administered by the student's advisory committee, which includes the student's research adviser and two other members of the graduate faculty. For those students in the Statistics and Operations Research option who select additional course work in lieu of a thesis or research paper, the final exam covers the content from STAT 480 and five 500-level MATH, STAT, or OR courses chosen jointly by the student and adviser.

## PROFESSIONAL DEVELOPMENT SEQUENCES IN MATHEMATICS

The Department of Mathematics and Statistics offers seven Professional Development Sequences. These PDSs are described below in the section "Program of Study." Each of these PDSs is designed to give students a thorough grounding in one particular subject in mathematics, statistics, or operations research.

## ADMISSION

Graduate students who are officially admitted to, and in good standing with, the Graduate School may enroll in a PDS in the Department of Mathematics and Statistics provided they have the approval of the Graduate Program Director. Students enrolled in a PDS need not be graduate students in the Department of Mathematics and Statistics and they may have the status of "unclassified graduate student." Students are expected to have completed all courses that are prerequisites to the required courses in the PDS.

## PROGRAM OF STUDY

The programs of study of the PDSs are as follows:

1. Quality and Reliability

STAT 484 Reliability Engineering
STAT 488 Design and Control of Quality Systems
STAT 584 Reliability Theory
STAT 588 Advanced Quality Control
2. Design and Analysis of Experiments

STAT 480a,b Mathematical Statistics
STAT 481 Design and Analysis of Experiments
STAT 581 Advanced Experimental Design
3. Applied Statistics

STAT 478 Time Series Analysis
STAT 481 Design and Analysis of Experiments
STAT 482 Regression Analysis
STAT 483 Sample Surveys
4. Mathematical Programming

OR 440 Deterministic Models
OR 587a,b Mathematical Programming
5. Simulation

OR 442 Simulation
OR 585 Simulation Theory
OR 586 Simulation Modeling and Languages
6. Numerical Analysis

MATH 465 Numerical Analysis
MATH 466 Numerical Linear Algebra with Applications
MATH 565 Advanced Numerical Analysis
7. Differential Equations

MATH 464 Partial Differential Equations
MATH 465 Numerical Analysis
MATH 552 Theory of Ordinary Differential Equations
MATH 567 Topics in Applied Mathematical Analysis

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/MATHEMATICS

The Department of Mathematics and Statistics, in cooperation with the Department of Curriculum and Instruction, offers a mathematics teaching field as part of the Master of Science in Education (MSEd) degree in secondary education. A jointly advised program, ordinarily including 15 hours in mathematics, will be designed, taking into account each student's background and interests. Throughout the program, students must consult with the graduate program adviser in the Department of Mathematics and Statistics before registering for any mathematics courses. Upon completion of the program, students must have accumulated at least 42 semester hours in mathematics (graduate and undergraduate course work combined). Thus, students admitted to the program with less than 27 hours of acceptable undergraduate work will be required to complete more than 15 graduate hours in the mathematics teaching field in order to satisfy degree requirements. Students must achieve a 3.0 (A=4.0) grade point average in mathematics course work, as well as an average of 3.0 in all course work. For further information, see "Secondary Education" in another section of this chapter.

The Department of Mathematics and Statistics offers a five-year program leading to the Bachelor of Science (BS) and the Master of Science (MS) degrees. Students with at least 90 semester hours and an overall grade point average of $3.0(\mathrm{~A}=4.0)$ in mathematics, engineering, and physical science courses may be admitted to the BS/MS program that allows them to earn graduate level credit (400- and 500-level) during their combined fourth and fifth years. No course can be counted for both graduate and undergraduate credit, however a student in this program may ask the department to waive up to two required graduate courses provided that student took such courses for undergraduate credit (effectively lowering the number of required credit hours for the graduate degree from 30 to 24).

An application for degree-seeking status as a graduate student must be approved by the Graduate School and the Graduate Admissions Committee in Mathematics. A program outline must also be submitted for approval by the graduate program director in mathematics prior to enrollment in any courses to be included as a part of the master's program. Official admission to the graduate program and the status of classified graduate student is made only after the award of baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## MUSIC

## MASTER OF MUSIC

The Department of Music offers graduate studies leading to the Master of Music (MM) degree with specializations in music education and in performance. The graduate curricula are designed to provide advanced preparation for professional work as a teacher and/or performer. All students must satisfactorily complete placement examinations in music theory and music history/literature, as well as a performance audition if appropriate to the student's specialization. These examinations must be completed or the review courses (MUS 500a,b) passed before students are permitted to enroll in courses to be counted towards the degree (except MUS 440, 441, 501, 540, 541, 565, 566, 567) without prior written consent from the graduate adviser.

## ADMISSION

An applicant for admission to the graduate program is expected to have a baccalaureate degree or its equivalent in music and at least a $2.8(\mathrm{~A}=4.0)$ overall grade point average in undergraduate work. An applicant in music education must have state certification in music; an applicant in performance must pass an audition.

The audition for admission to the specialization in music performance can be accomplished in one of the following ways: (1) a personal audition before a graduate auditioning committee; (2) a tape recording of a full recital that may serve as a basis for provisional acceptance to be followed by a personal audition; or (3) the Senior Recital at

Southern Illinois University Edwardsville that may serve as the audition, provided the student makes application through the graduate program director in music at least three weeks prior to the recital. A student who fails to matriculate in the master's degree program within one year following the Senior Recital will be required to re-audition.

Entering graduate students concentrating in voice or accompanying should have completed one year each of two of the following: Italian, French, and German. Deficiencies can be removed by enrolling in undergraduate foreign language classes and diction class. Students pursuing an instrumental concentration are not required to pass foreign language proficiency examinations.

## PROGRAM OF STUDY

The Master of Music degree program requires a minimum of 32 semester hours for completion.

## Music Education Specialization

Required courses in music (4 hours): MUS 501, 502.
Required courses in music education (12 hours): MUS 520, 525, 530, 535, and 560. Instrumentalists must also complete MUS 415; vocalists must complete MUS 519a.

Electives in Music Education \& Pedagogy (6 hours): Students may substitute up to four semester hours of graduate courses in education if, prior to electing these courses, they submit a written request to the Director of Music Education and obtain approval.

General Music Electives (6 hours): At least one elective in music theory, music history, and ensemble/applied instruction. Students completing the recital with supporting paper must complete a minimum of four semester hours of private applied instruction (MUS 540 or 541) in addition to MUS 591.

Thesis or Graduate Recital with Supporting Paper (4 hours): MUS 599 or MUS 591. These scholarly projects come at the end of graduate study and demonstrate the graduate student's ability to produce an original research document of merit. Most degree candidates complete a thesis, but students desiring to perform a recital and write a supporting paper instead of the thesis may do so with approval from the Director of Music Education, the applied instructor, and the audition committee.

Like the thesis, the supporting paper must be relevant to music education. This paper may focus on issues such as (1) pedagogical implications of the instrument's construction and capabilities, principally as these relate to the recital repertoire; (2) the history and structure of the recital repertoire; particularly as these relate to performance and instruction; and (3) other factors pertaining to teaching, learning, and performing on the instrument.

## Performance Specialization

Required courses in music (4 hours): MUS 501, 502.
In addition to the required courses in music, the program of study includes 8 hours in the principal area of performance and 2 to 6 hours in music literature. Students pursuing a piano performance concentration must take at least 4 hours of MUS 565 (Advanced Piano Ensemble-Accompanying and Chamber Music). Students pursuing a jazz performance concentration must take at least 4 hours of MUS 566 (Instrumental Ensemble).

Electives: Up to 4 hours in the principal applied area and, with approval of the graduate adviser, may include courses outside the field of music to a total of 6 hours. Additional elective hours as needed to complete the minimum program requirement of 32 hours.

Graduate Recital (1 to 4 hours): MUS 590.
Accompanying majors will perform three recitals of ensemble music, including both vocal and instrumental repertoire.

## EXIT REQUIREMENTS

A comprehensive final examination is required of all students. The examination is based on the student's program of study, including theory, literature, and area of emphasis. The examination, which may be both written and oral, will be conducted and evaluated by the advisory committee. Students who fail the examination may repeat it upon recommendation of the committee.

## PHYSICS

## MASTER OF SCIENCE

The Department of Physics offers a program of study leading to the Master of Science degree in physics. This degree program has three options emphasizing optics and photonics, condensed matter theory and computational physics, and physics and astronomy education research. The optics and theory options are especially appropriate for someone seeking a career in industry. The physics and astronomy education research option is especially appropriate for students planning a post-secondary teaching or education research career. All three options are also appropriate for part-time students, including in-service teachers, who are employed in SIUE's service region since many of the required physics lecture courses are offered in the evenings. The research component of the program requires special arrangements with the physics faculty. Research work done elsewhere will be recognized for credit, provided it meets the approval of the Physics Graduate Committee.

Experimental research laboratories and computer facilities are described in the sections in Chapter 1 entitled "Special Instructional, Research and Practicum Facilities" and "Academic Computing Resources." Subscriptions to an adequate number of physics periodicals are maintained in SIUE's Lovejoy Library. The department provides experimental research opportunities in the areas of thin film physics, structural and magnetic ordering of thin films, optical coatings, nonlinear optical properties of materials and holographic data storage, scintillating optical fibers, and the magneto-optic Kerr effect. Our theory group offers research opportunities in mathematical physics, optical properties of solids, single-electron states for electrons confined to two dimensions in the presence of strong magnetic fields and charge impurities and how simple rules can lead to complex phenomena, such as self-organized criticality, self-similar structures, and power laws. The Physics and Astronomy Education Research group studies problem-solving in physics and astronomy, conceptual difficulties in astronomy, inclusiveness issues in science, implementing and developing novel and inquiry-based curricula, and developing reliable and valid assessments.

In addition to Competitive Graduate Awards granted through the Graduate School, graduate assistantships with stipends of up to $\$ 8,550$ plus tuition for the academic year are available from the Department of Physics. Teaching assistants are assigned teaching duties requiring a total of 20 hours per week during the academic year. This typically involves about six to eight contact hours per week. All assistants are required to carry at least 6 hours of graduate course work. Applications for assistantships should be submitted to the Physics Department's Graduate Studies Committee before February 1. Successful candidates will be notified by March 1. Additional financial support is available during the summer months to qualified students, subject to the availability of funds.

In addition to the general Graduate School requirements, the Department of Physics specifies requirements for the Master of Science degree which are outlined below.

## ADMISSION

Applicants with baccalaureate degrees who satisfy the general requirements for admission to graduate studies may qualify for this program. An applicant must have a grade point average of at least $3.0(\mathrm{~A}=4.0)$ in the undergraduate major, which must be in physics or a closely related discipline (such as optics, electrical engineering, materials science, computer science), or approval of the physics graduate faculty.

## ADVISORY COMMITTEE

Each student's program is initially supervised by the advisory subcommittee of the Physics Graduate Studies Committee, composed of physics graduate faculty members.

Before the end of the first year, the student should consult with various physics faculty members about projects for consideration as a thesis or project topic. When the student and particular faculty member have agreed on a project, the faculty member will choose
for the student a thesis or project advisory committee consisting of three to five graduate faculty members. The initiating faculty member will serve as chairperson. These actions will then be reviewed for approval by the Physics Graduate Studies Committee. The advisory committee thus selected is thereafter responsible for advisement of the candidate until the completion of the degree requirements.

## PROGRAM OF STUDY

## Foundation Courses

Foundation courses are designed for students entering the program with baccalaureate degrees in engineering, mathematics, or computer sciences. These courses provide students with the minimal necessary background for the graduate program. Hours completed in the foundation courses cannot be applied toward the MS degree. The foundation courses are:

PHYS 308 (3) Introduction to Classical Mechanics
PHYS 405a(3) Electromagnetic Field Theory
PHYS 410 (3) Optics (Photonics Option only)
PHYS 416(4) Principles of Quantum Mechanics.
In order to receive the degree, a candidate must satisfy the general requirements of the Graduate School and must earn at least 34 or 36 (depending on the option) semester hours of graduate credit in the courses listed below.

The student must maintain a grade point average of $3.0(\mathrm{~A}=4.0)$ for all graduate work in physics as well as for all work to be applied toward the degree.

## Required Courses for all Options

Phys511 (3) Computational Methods in Classical Physics or Math501 (3) Differential Equations and the Fourier Analysis
Phys512 (3) Computational Electrodynamics
Phys513 (3) Computational Quantum Mechanics
Phys599 (6) Thesis / Phys598 (6) Advanced Research Project in Physics
Photonics Option (36 hrs total)
Required Courses:
Phys504 (3) Applications of Fiber Optics
Phys506 (3) Experimental Methods in Optics
Phys514 (3) Photonics I
Phys515 (3) Photonics II
Phys517 (3) Principles of Lasers
Phys518 (3) Nonlinear Optics
Elective Courses - 3 credit hours from the following courses:
Phys450 (3) Solid State Physics

Phys516 (1-3) Independent study
Phys520 (1-3) Graduate Physics Project
Phys580 (2-6) Selected Topics in Physics
Computational / Condensed Matter Option (34 hrs total)
Required Courses:
Phys450 (3) Solid State Physics
Phys518 (3) Non-linear Optics
Math462 (3) Engineering Numerical Analysis
CS402 (3) C++ Programming
Chem569 (3) Advanced Topics in Physical Chemistry OR Chem561(3) Advanced Physical Chemistry

Elective Courses - 4 credit hours from the following courses:
CS404 (3) Scientific Computation
Phys514 (3) Photonics I
Phys516 (1-3) Independent study
Phys520 (1-3) Graduate Physics Project
Phys580 (2-6) Selected Topics in Physics
Physics and Astronomy Education Research Option (34 hrs total)
Required Courses
Educ501 (3) Research Methods in Education
Educ515 (3) Advanced Education Psychology
Sci530 (3) Science Education Research Methods
Phys438 ( $1 \times 4=4$ ) Physics and Astronomy Education Research Seminar
Elective Courses - 6 credit hours from the following courses:
Phys431 (3): Instructional Strategies for Particle and Rigid Body Motion
Phys432 (3): Instructional Strategies for Physical Waves and Thermodynamics
Phys433 (3): Instructional Strategies for Electricity and Magnetism
Phys434 (3): Instructional Strategies for Astronomy
The following courses are suggested but not required:
Edfd451 (3): Gender and Education
Stat410 (3): Statistical Analysis (quantitative).
Sci537 (3): Qualitative Research Methods for Science Education

## Qualifying Examination for M.S. Degree Candidacy

In order to qualify for the degree and to begin research work, the candidate must pass a written examination on undergraduate physics under the supervision of the Physics Graduate Studies Committee. Students should consult the department for format and scheduling information. Part-time students may apply to the Graduate Studies Committee requesting a delay in taking this examination.

## Thesis or Project

Each candidate must either submit to Graduate Records a thesis based on work in an approved physics research program or submit to the Physics Department a detailed report on an approved advanced project. The thesis or project topic is to be approved by the Graduate Studies Committee and pursued under the supervision of the student's advisory committee.

Thesis

After a thesis acceptable to the thesis advisory committee is submitted, the candidate must pass an oral examination, covering the thesis work, in order to be certified for the degree.

## Advanced Project

As an alternative to submitting a thesis based on an approved research program, the physics MS student may submit to the Physics Department a detailed report on an approved advanced project. Examples of appropriate types of projects are: laboratory equipment design and construction, computational physics, library research on an advanced topic in physics, practical experimental project, work in physics undertaken in cooperative programs with other departments or institution, and objective evaluation of methodologies of physics instruction.

The project report is to be prepared in conformity with a style manual officially adopted by the Graduate Studies Committee. There will be a final examination to include presentation of project results in seminar format.

## Special Instructional, Research, and Practicum Facilities

The Department of Physics provides excellent facilities for experimental research in the areas of thin-film optics, optical spectroscopy, nonlinear optics, volume holographic storage, and photon counting in scintillating optical fibers. The optical coating lab has complete facilities for design, production, and analysis of multi-layer thin films. The laser and spectroscopy lab is equipped with state-of-the-art lasers and devices. It contains Nd:YAG, Ti:Sapphire, argon, and cw Spectra Physics "Millennia V" lasers, as well as a Raman \& Fluorescence spectrometer and Perkin-Elmer Lambda 9 UV/VIS/NIR spectrophotometer. The optical scintillating fiber lab is equipped with state-of-the-art photon counting systems and associated electronics.

The Physics and Astronomy education research facilities include a dedicated interview room, equipped with digital audio and video recording capabilities, a laboratory preparation area, and computer facilities with sophisticated software for qualitative, quantitative and interview analysis, as well as graphical image processing. In addition, a high-tech audio system for recording groups in large lecture/ laboratory situations exists.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/PHYSICS

The Department of Physics, in cooperation with the Department of Curriculum and Instruction, offers a physics teaching field as part of the Master of Science in Education degree, major in secondary education. A jointly advised program of 10 to 20 hours in physics is designed taking into account each student's background and interests. A student must achieve at least a grade point average of 3.0 in the physics course work as well as an overall average of 3.0 ( $\mathrm{A}=4.0$ ). For further information, see "Secondary Education" in another section of this chapter.

## PUBLIC ADMINISTRATION

## MASTER OF PUBLIC ADMINISTRATON

The Department of Public Administration offers a graduate program leading to the Master of Public Administration degree, a professional degree designed to prepare persons for management careers in the public and nonprofit sectors. The program serves two types of students: (1) pre-service students who have recently completed a bachelor's degree and wish to use the master's degree to gain entry into a professional career track, and (2) in-service students who have worked for several years in the public sector or nonprofit sector but wish to return to the University to enhance or upgrade their skills and knowledge.

Graduates of the program hold a wide range of positions such as city managers, finance directors, policy analysts, legislative staff, administrators of non-profit agencies, health care administrators, military staff and line commanders, police chiefs, fire chiefs, recreation directors, museum directors, and social service staff and managers.

## ADMISSION

Unconditional admission to the program requires an overall undergraduate grade point average of at least $2.7(\mathrm{~A}=4.0)$ or a grade point average for the last two years of 3.0. An undergraduate background in the social sciences or business administration is useful but not required.

Applicants with an overall undergraduate grade point average between 2.5 and 2.7 may be required to take a test administered by the Department of Public Administration to evaluate their writing and analytical skills. Based on the results of this test, the program director may require students to submit scores from standardized examinations such as Graduate Record Exam (GRE), Graduate Management Admission Test (GMAT), or Miller Analogies Test (MAT); and/or resumés summarizing their work experience over
the last ten years. Applicants who are denied admission may request a review of their credentials by the department's Student Appeals Committee.

## PROGRAM OF STUDY

The Master of Public Administration degree requires the completion of at least 39 semester hours with a grade point average of 3.0 or higher distributed as follows:

Required core courses ( 21 hours): PAPA 420, 500, 501, 510, 530, 540, 550 with a minimum 3.0 grade point average in the core courses.

Computer skills (2 hours): Students without current microcomputer skills should take PAPA 410 and 411 as early as possible in their course of study. Each of these courses counts for one hour of credit toward their area of emphasis. PAPA 410 and 411 are prerequisites for the core course 510. Students already familiar with microcomputers may take another course in their area of emphasis instead of these computer courses.

Area of emphasis courses (18 hours): Chosen from an approved list of courses in public management or nonprofit administration with a minimum 3.0 grade point average in the area of emphasis courses. The computer skills courses, listed above, also may be applied to the area of emphasis. Students may also design their own area of emphasis with the consent of their adviser.
"Unclassified" graduate students may take PAPA courses only with the permission of either the department chair or the MPA program director.

## EXIT REQUIREMENTS

Students submit two papers written during their course work as evidence of their writing skill. Students must also receive a passing grade on a comprehensive written examination. A grade point average of 3.0 or higher in the PAPA "core" courses and a cumulative GPA of 3.0 overall is required to qualify to take the final comprehensive examination.

## SOCIAL WORK

MASTER OF SOCIAL WORK

The program in social work offers a curriculum leading to the Master of Social Work degree. The curriculum is divided into first-year foundation courses and second-year advanced courses in one of two concentrations: (a) services to children and families, and (b) services in health, mental health, and disabilities settings. The program also offers a specialization in school social work associated with the MSW degree, including courses in preparation for school social work certification in the State of Illinois. The Master of

Social Work program is accredited by the Council on Social Work Education, the profession's educational accrediting agency.

The Master of Social Work program prepares students for entering advanced social work practice. The program emphasizes the educational preparation of students for advanced social work practice as community-based professionals to work with and on behalf of underserved and at-risk populations. The program seeks to admit a well-qualified and diverse group of students whose stated professional interests are congruent with the program's mission of service to oppressed and underserved populations in the region.

## ADMISSION

To be considered for regular admission to the graduate program in social work, applicants must have earned a baccalaureate degree from an accredited college or university with an overall grade point average of at least 3.0 ( $\mathrm{A}=4.0$ ). Students with less than a 3.0 undergraduate grade point average may apply and will be considered on a case-by-case basis.

The baccalaureate degree should reflect a strong background in liberal arts and sciences with at least 30 semester hours (or equivalent) earned in liberal arts and sciences with grades of C or better in each course. Included in this total must be a 3 credit hour human biology course and a 3 credit hour course in diversity/race relations. Students who have not met the biology and diversity course requirements must complete these requirements prior to enrollment in the MSW program. Advanced standing students entering with a BSW from an accredited Council on Social Work Education (CSWE) program must have also completed a research methods course and a statistics course with a grade of B or better. Advanced standing students who have not completed courses in research methods and statistics with grades of B or better must complete these requirements prior to enrollment in the MSW program, or be considered for regular standing. Undergraduates who are nearing completion of a baccalaureate degree may submit an application for admission as a degree-seeking student when they have earned at least 88 semester hours of credit toward the undergraduate degree with a grade point average of at least 3.0 ( $\mathrm{A}=4.0$ ).

A combination of commitment to the program's mission and sensitivity to diversity is evaluated during the admissions process through the applicant's personal statement and letters of reference. These are regarded as factors in admissions decisions, along with records of undergraduate work and GRE test scores. Students will not receive academic credit for life experiences or previous work experiences.

The following materials must be submitted to the Social Work Admissions Committee before an application is considered complete:

1. Graduate application to SIUE.
2. Application to the Social Work graduate program. (Visit www.siue.edu/social or call 618/650-5758 to request an application packet.)
3. A personal statement of approximately 750 to 1000 words that discusses the applicant's reasons for pursuing a career in social work and career plans, any special people and experiences that influenced the applicant's decision to pursue a career in social work, evidence of commitment to social and economic justice, and personal strengths and weaknesses. The statement should include narrative information on previous work experience.
4. Three letters of recommendation that discuss the applicant's potential for graduate level academic work, leadership and interpersonal skills, commitment to the mission and values of social work, and, if relevant, professional experience and capabilities. If previous experience includes work (paid, volunteer, or practicum) in a social services environment at least one letter must speak to that experience. Applicants who have recently received their baccalaureate degree should request at least one letter of recommendation from an undergraduate faculty member. Applicants applying as transfer students from CSWE-accredited master's programs should request at least one letter of recommendation from a graduate faculty member.
5. Submission of scores on the general portion of the Graduate Record Examination (GRE). Test scores must be within five years of the application year.

## ADMISSION IN ADVANCED STANDING

Applicants may be considered for admission in advanced standing provided the following criteria are met:

1. The applicant holds a baccalaureate degree in social work from an institution accredited by the Council of Social Work Education, and the degree was awarded in the 7-year period preceding application for graduate study at SIUE.
2. The applicant's grade point average is $3.0(\mathrm{~A}=4.0)$ or higher in undergraduate study. Applicants with less than a 3.0 undergraduate GPA who completed all course work in the baccalaureate foundation area with a grade average of $B$ or better will be considered on a case-by-case basis.

## SOCIAL WORK ADMISSIONS COMMITTEE

The Admissions Committee will examine the complete packet of application materials that includes the application for graduate study, personal statement, letters of recommendation, transcripts, and the GRE scores. Admission to graduate study in Social Work will be based on a full evaluation of all available materials. The applicant will be notified by the MSW Program Director, and the MSW Admissions Director as to the
decision of the Admissions Committee and will be officially notified of admission by the Graduate Admissions Office.

## PROGRAM OF STUDY

The program of study for the Master of Social Work degree requires a minimum of 30 semester hours for students admitted in advanced standing and 57 semester hours of enrollment for students admitted in regular standing. Foundation courses are primarily designed for students whose undergraduate work was in a discipline other than social work or social work graduates whose grades in some undergraduate content areas were lower than B, or for social work graduates who received their degree more than 7 years prior to application. Foundation courses account for 27 hours of graduate study beyond the minimum 30 hours required for degree completion by students admitted in advanced standing. In accordance with Graduate School policy, students are expected to complete their degree programs within six years of the first term of enrollment. There is currently no part-time program of study in the MSW program.

Foundation Courses-27 hours

SOCW 501-Generalist Practice: Individuals and Families-3 hours
SOCW 502-Generalist Practice: Neighborhoods, Organizations, and Communities-3 hours

SOCW 504-Policy and Service Delivery in Social Welfare-3 hours
SOCW 507-Human Behavior in the Social Environment-3 hours

SOCW 514-Descriptive Statistics for Social Work Practice-3 hours
SOCW 515-Research and Evaluation for Social Work Practice-3 hours

SOCW 517-Diversity-3 hours
SOCW 526-Field Instruction I-3 hours
SOCW 527-Field Instruction II-3 hours

Advanced Courses (Common Courses)-18 hours
SOCW 511-Area Development-3 hours

SOCW 524-Human Behavior: Families, Health, Mental Health, and Disabilities-3 hours

SOCW 528-Advanced Field Instruction III-3 hours

SOCW 529-Advanced Field Instruction IV-3 hours
SOCW 545-Administration-3 hours
SOCW 565-Integrative Project- 3 hours
-and-

Children and Families Concentration-12 hours
SOCW 520-Advanced Practice with Children and Families-3 hours
SOCW 530-Advanced Social Policy with Children and Families-3 hours
SOCW 556-Child Welfare Services-3 hours
And One Elective- 3 hours
-or-
Health, Mental Health, and Disabilities Concentration-12 hours
SOCW 580-Advanced Social Policy in Health, Mental Health, and Disabilities-3 hours

Two Courses Selected From: SOCW 583-Advanced Practice in Health-3 hours SOCW 584-Advanced Practice in Mental Health-3 hours SOCW 585-Advanced Practice in Disabilities-3 hours

And One Elective- 3 hours

## Elective Courses:

SOCW 535-Program Evaluation
SOCW 537-Psychopathology
SOCW 555-Women, Work, and Family
SOCW 557-Substance Abuse

SOCW 562-Legal Issues in Social Work SOCW 570-Policy/Practice with Oppressed Populations

SOCW 590-Social Work Practice with African American Families
SOCW 591-AIDS: Issues for Social Work

SOCW 596-Readings in Social Work
The following electives must be approved by the MSW Program Director:
PSYC 487-Psychology of Aging
GRN 588-Programs, Services, and Resources in Aging
SOC 542-Seminar in Gender and Gender Inequality
SOC 574-Seminar in Deviance
SOC 578-Seminar in Criminology
PAPA 577-Needs Assessment and Strategic Marketing
PAPA 578-Strategic Planning and Organizational Development
PAPA 579-Administration and Management of Grantsmanship Process

## EXIT REQUIREMENTS

Enrollment in SOCW 565 is a requirement to satisfy the concluding element of the degree program. A grade of B or better must be earned in this course for the student to have satisfactorily completed all requirements for the Master of Social Work degree. The project is an integration of social work knowledge and skills across curriculum content areas, practicum, and research in relation to a social work practice issue or problem.

In SOCW 565, the student will select a specific social work/social welfare problem, client population, or field of practice, such as school social work, substance abuse, child welfare, or criminal justice, with an emphasis on integrating and synthesizing library and empirical research with major curriculum areas. Focus is placed on social work values and ethics, social and economic justice, and diverse populations.

## SPECIALIZATION IN SCHOOL SOCIAL WORK

The Department of Social Work offers a program of preparation to assist MSW professionals obtain certification for school social work practice in the state of Illinois. This program prepares candidates for advanced MSW level practice in Illinois public schools. MSW students admitted to the program can obtain a specialization in school social work in conjunction with their MSW degree enrollment. The state of Illinois awards certification based on the candidate's demonstrated competency in the knowledge, skills and dispositions for social work practice in schools as evidenced by success in the school social work curriculum and passing scores on the Illinois Basic Skills Test and the Illinois Content Area School Social Work Personnel Services Exam.

## ADMISSION

Application for admission to this program should be filed with the Graduate School and department by March $1^{\text {st }}$ of the year that candidates desire to begin the program. Candidates begin the program in August of the year admitted.

Candidates who have been admitted to the MSW program may apply for admission to the school social work specialization program after their initial enrollment in the MSW program. Candidates who apply to the MSW program for advanced standing may inquire about the feasibility of applying to the school social work specialization with their MSW application.

Candidates should submit the following to the School Social Work Committee:

1) A completed school social work application form.
2) A 500 word letter of application explaining why the applicant wishes to attain Illinois certification for school social work practice. The letter should discuss the applicant's academic and dispositional qualities (i.e., attitudes and ethics) that qualify them as excellent candidates for school social work practice.
3) Letters of reference from three experienced professionals (college teachers, practicing social workers, other professionals) who know the applicant well and can speak to the applicant's academic abilities, ethics, and dispositions for social work practice with children and other professionals in school settings.
4) Passing scores on the Illinois Basic Skills Test.

The MSW School Social Work Committee will evaluate school social work applications for admissions as a separate process from admissions to the MSW program.

## PROGRAM OF STUDY

MSW degree candidates admitted in regular standing who are admitted to the school social work specialization will complete 63 hours of courses and internships to complete the MSW degree and school social work specialization. MSW advanced standing candidates admitted to the school social work specialization will complete 36 hours of courses and internships to complete the MSW degree and the school social work specialization. School social work candidates complete 24 credit hours of school social work preparation as part of their MSW degree requirements. Upon completion of the

MSW degree and school social work specialization, candidates qualify for state school social work certification upon receipt of a passing score on the Illinois School Social Work Content Area Exam.

The 24 credit hours are comprised of two groups of courses:

1) Required School Social Work Courses 15 credit hours

SPE 400-The Exceptional Child 3
SOCW533-Social Work Practice in Schools 2
SOCW567-Seminar in School Social Work 2
SOCW568-Advanced Field III School Social Work 4
SOCW569-Advanced Field IV School Social Work 4
2) Required Supporting Courses

Advanced HBSE theory (SOCW524)1 3
Advanced practice course (i.e., SOCW520, 556, 3 584 or 585) 2
Additional advanced theory or practice course 3
(i.e., psychopathology, substance abuse, practice w/racial ethnic populations, or other comparable courses)

9 credit hours

## 3

## EXIT REQUIREMENTS

In addition to the MSW degree exit requirements, candidates for the specialization in school social work must complete all required social work courses with grades of B or better. Upon completion of the MSW degree and school social work specialization, candidates take the State of Illinois Content Area Exam for School Social Work personnel to qualify for certification as a school social worker in Illinois.

## SOCIOLOGY

## MASTER OF ARTS

The Department of Sociology and Criminal Justice offers studies leading to the Master of Arts degree in sociology. Graduate work in sociology involves the advanced study of human social life, its processes, problems, and possible future forms. Areas of study include interpersonal and family relations; social problems such as illness; deviance and crime; race and ethnic relations; employment relations and complex organizations; inequality; social change; theory; research; and data analysis.

Career objectives are furthered with an advanced degree in sociology. The study of sociology at the master's level strengthens students' analytical, research, and writing skills. These skills are useful in positions involving problem analysis, research and data management, effective communication, and leadership. Graduates of the master's program in sociology have used their degree as a stepping stone to a Ph.D. or law degree, as a credential for a teaching position at a community college, as preparation for doing research for private business or public service agencies, or for decision-making positions in diverse occupational settings. The program also accommodates persons who already hold positions in the public or private sector and for whom the graduate degree improves career benefits and opportunities.

## ADMISSION

For prospective students who meet the Graduate School admissions requirements, admission is usually routine for those who also meet the following requirements and standards: 30 or more semester hours in the social sciences (anthropology, political science, economics, psychology, history) including 21 hours in sociology with grades of B or better, and an overall grade point average of at least 2.7 on the 4-point scale.

Together with the application for admission, all applicants must submit a writing sample and a written personal statement of 1-2 pages indicating their motivations and objectives for graduate study in sociology. The writing sample, which should be between four and fifteen pages in length, may consist of a paper turned in for a course or other written work prepared by the applicant. It should address some social scientific and preferably sociological issue.

Students may be admitted to the program at the beginning of any semester, but because of course sequencing, we encourage applications for admission in the fall semester. Persons seeking admission for fall semester should apply no later than July 10 of the year in which they wish to begin their studies. Although as noted above all applicants are encouraged to apply to begin their studies in the fall semester, applications for other semesters will be considered up to the following deadlines: For spring semester: November 15; for summer term: April 1.

## PROGRAM OF STUDY

Requirements for the Master of Arts degree in sociology include 33 semester hours of graduate credit, distributed as follows:

Required courses (12 hours): SOC 501, 515, 518, 592. SOC 501, 515, and 518 are taken in the first year to ensure a basic knowledge of sociological theory and methods. SOC 592 is taken after completion of 18 hours, including 515 , or with consent of the graduate program director. Students must receive a grade of B or higher in all required courses. Also, during the first 12 semester hours of graduate study, only courses with a grade of B or higher can be counted toward the degree.

Electives (15 hours): At least 9 of which are sociology seminar courses at the 500-level. Up to 6 semester hours of electives may be taken in related fields outside sociology when approved by the graduate program director.

Thesis or Internship: By the completion of 18 semester hours and in consultation with the graduate program director, the student must select either: 6 hours of SOC 599 (Thesis) or 3 hours of SOC 593a (Graduate Internship-Experience) and 3 hours of SOC 593b (Graduate Internship-Report). The internship comprises two parts: (1) at least 140 hours of a supervised work experience in either a research or public service setting (SOC 593a), and (2) a substantial, original written report concerning a sociological issue related to the internship (SOC 593b). Guidelines for the internship report are included in the department's Graduate Student Handbook. Normally, the thesis or internship options will not be taken until the student has completed at least 24 semester hours of course work. Additional information can be obtained from the department office, Peck Hall 1205.

## EXIT REQUIREMENTS

The completed thesis must be defended in a final oral examination administered by the student's thesis committee. Students pursuing the internship option must successfully complete an oral examination administered by the advisory committee. This examination will cover both the internship experience and the written internship report.

## SPEECH COMMUNICATION

## MASTER OF ARTS

The Department of Speech Communication offers a program leading to the degree, Master of Arts, in speech communication.

The goals of the Speech Communication graduate program are to deepen students' understanding of communication theory and to prepare them to analyze, generate, and apply communication research. Students are encouraged to clarify and focus their professional goals and are then assisted in selecting courses in theoretical and applied communication areas that will complement those goals.

Graduates in this discipline often enter careers in applied communication and education (at the community college level). Some graduates have chosen to pursue Ph.D. degrees in communication. In addition, opportunities for speech communication graduates in business, industry, and other non-teaching professions are expanding. Mastery of communication theory, research methods, and application strategies is particularly relevant for those seeking careers in fields such as management, training and development, sales, advertising, public relations, community relations, intra-and interorganizational communication, consulting, government service, fund raising, and human resources.

For persons seeking graduate assistantships, application forms (including directions for submitting three letters of recommendation) are available through the department office. Completed assistantship applications and supporting materials usually must be submitted early in the spring semester preceding the academic year for which the appointment is desired. Please contact the Department of Speech Communication for specific information about assistantship application forms, deadlines, and selection criteria.

## ADMISSION

In addition to Graduate School admission requirements, the following apply:

1. Applicants must have an undergraduate grade point average of at least 2.75 .
2. Applicants must submit a typed statement (of at least 500 words) about the academic and professional goals they plan to attain through their work in the graduate program.
3. Applicants who do not have an undergraduate major in speech communication will be required, if admitted to the program, to demonstrate a knowledge of basic communication theory and research methods before enrolling in any 500-level classes.

This demonstration of proficiency may be accomplished by completing, with a grade of "B" or better, either SPC 329-3 (Communication Research) and SPC 330-4 (Theories of Communication) or proficiency examinations based upon the content of those two undergraduate courses. Please contact the Department of Speech Communication for information about the proficiency examination procedures.

## PROGRAM OF STUDY

Students must complete at least 35 semester hours for this degree. A foreign language is not required. With approval of the student's advisory committee, up to 12 hours of 400level and 500-level graduate course work from outside the speech communication curriculum may be applied toward the minimum of 35 hours.

All students admitted to the program are required to enroll in the program core, which consists of two courses (8 hours total): SPC 500-4 (Seminar in Communication Theory) and SPC 501-4 (Communication Research Methods and Tools). The core courses must be completed with a minimum grade of " B " the first time that they are offered after the student is admitted. Students who fail to meet this stipulation will be restricted from enrolling in any other 500-level courses until the program core requirement is met.

Responsibility for the development of the remainder of the student's program of study rests with the student and student's advisory committee. The Department of Speech Communication offers a variety of courses designed to complement special professional interests in such areas as organizational communication, interpersonal and group communication, public relations, and communication education.

Students may choose either a thesis or a non-thesis plan of study. These plans are comparable, since all 500-level courses in the department will require students to conduct individual or group research projects. Those research projects will directly involve the students (regardless of the study plan that they have chosen) with the tools and methods used by researchers within the given content area of each course.

Thesis Plan

Students who select the thesis plan must declare their intentions by the time they have completed 18 semester hours of graduate work. They will complete a minimum total of 29 hours of course work. They will confirm their ability to conduct research in speech communication by submitting a thesis for six semester hours of credit in SPC 599.

Non-thesis Plan

Students who select the non-thesis plan will complete a minimum total of 35 hours of course work. They will confirm their ability to conduct research in speech communication through the research projects and papers that they complete during their course work.

## EXIT REQUIREMENTS

The comprehensive examination is administered during each student's final term of course work. For students following the thesis plan, the examination is oral and focuses primarily on a defense of the thesis but may also cover the planned program.

For a student electing the non-thesis plan, the examination, which comprises both written and oral elements, includes both the required core courses and the individually planned program. The written examination is composed of two sections. One section focuses on speech communication theory and research methodology from which the student must answer successfully one item on theory and one on research. The other section of the written examination focuses on the individual program of study. The student must respond successfully to two items from this section in which a choice is offered among items prepared by the individual's advisory committee. The oral component then provides a supplemental assessment of the student's performance on the written portion of the examination.

## POST-BACCALAUREATE CERTIFICATE CORPORATE AND ORGANIZATIONAL COMMUNICATION

The Department of Speech Communication offers an 18-hour program of graduate study leading to a post-baccalaureate certificate that is designed to meet the needs of professionals who are seeking advanced education and training in intraorganizational and interorganizational communication. The program centers on a core of courses that provide these professionals with experience in diagnosing communication problems in
organizations and implementing solutions, with a variety of methods to analyze organizational cultures and cultural change, with principles and techniques of communication consulting, and with a survey of the most current research in organizational communication. In addition to this core, certificate program students are offered the opportunity to select from additional courses that can expand their expertise at working with specific organizational communication processes.

## ADMISSION

In addition to Graduate School admission requirements for degree-seeking students, the following apply:

1. Applicants must have an undergraduate grade point average of at least 2.75 .
2. Applicants must have either (a) an undergraduate major or minor in communication, business, or a related discipline, or (b) three years of professional experience in a complex organizational environment. For further information about this requirement, please contact the department's Director of Graduate Studies at (618) 650-3090.
3. Applicants must submit a typed statement of at least 500 words about their professional experience and/or goals as they relate to the post-baccalaureate certificate program in organizational communication.

## PROGRAM OF STUDY

Students will be advised by the Speech Communication Department's graduate program director. They must complete eighteen hours for the certificate.

Required courses (12 hours):
SPC 403 - Organizational Communication Theory and Applications;
SPC 540 - Survey of Organizational Communication Research;
SPC 541 - Seminar in Organizational Culture;
SPC 542 - Communication Consulting.
Elective courses (6 hours): (Select two)
SPC 510 - Seminar in Group Communication;
SPC 511 - Seminar in Intercultural Communication;
SPC 550 - Seminar in Public Relations.

If desired, a student also may choose, with the permission of the Graduate Program Director, any one of the following three courses as a part of the 18 -hour program:

SPC 419 - Special Topics in Speech Communication;
SPC 590 - Individual Research in Speech Communication;
SPC 591 - Internship in Applied Speech Communication.

Substitution of other graduate-level speech communication courses will be allowed only after approval, in advance, by the department's graduate program director.

Each student will have a performance review beginning after the completion of the first two courses.

## EXIT REQUIREMENTS

Students must maintain a cumulative grade point average of 3.0 on a scale of 4.0, and must complete the 18 -hour program of study in four years or less.

## SCHOOL OF BUSINESS

Dean: Gary Giamartino

The School of Business offers the Master of Business Administration degree (MBA) with a specialization in management information systems, Master of Science in Accountancy with a specialization in taxation, Master of Science in Computer Management and Information Systems degree, Master of Arts and Master of Science degrees in Economics and Finance, and the Master of Marketing Research degree.

## FOREIGN EXCHANGE PROGRAMS

The School of Business has developed student and faculty exchange programs with business schools and universities in France, Germany, Great Britain, Mexico, and the Netherlands. These programs permit students to register for course work at SIUE while completing the requirements for credit at one of these foreign institutions. Students interested in studying abroad can obtain more information and an application from Dr. Radcliffe Edmonds, Director, International Exchange Programs, Economics Department, Box 1102, School of Business, Southern Illinois University Edwardsville, Edwardsville, Illinois, 62026 (618-650-2542).

## ACCREDITATION

All degree programs offered through the School of Business are accredited by AACSB The Association to Advance Collegiate Schools of Business. In developing each candidate's program, the program directors follow AACSB standards with respect to the foundation areas of business. Graduate preparatory courses to meet these requirements are available for those who do not have an educational background in business. In no case will a student be required to complete more than 24 additional graduate hours to fulfill this requirement.

## ACCOUNTANCY

## MASTER OF SCIENCE IN ACCOUNTANCY

The Master of Science in Accountancy (MSA) degree program provides an advanced professional plan of study designed to prepare individuals for careers as professional accountants in public accounting, industry, or the not-for-profit and governmental sectors. The degree program provides graduates with the skills and knowledge needed (1) to enter the accounting field and (2) to form a foundation for advancement to the highest levels of the profession. Completion of this program will provide, in most cases, the educational qualifications required to sit for the Uniform Certified Public Accountant Examination. Upon completion of the MSA program, candidates should have acquired the technical knowledge that will serve as a basis for preparation for the relevant professional examination required for certification as a Certified Public Accountant, Certified Management Accountant, or Certified Internal Auditor.

The MSA program builds upon the student's general education and foundation knowledge of business and accounting to provide a deeper understanding and greater knowledge of business and accounting, including specific areas of study. In addition, the program emphasizes the development of problem-solving, reasoning, and analytical abilities, as well as communication and other interpersonal skills.

The MSA program is designed to be completed on either a full-time or part-time basis. Full-time students with a recent undergraduate degree in accounting normally can complete the program courses and elective requirements in 1 year. Part-time students with a recent undergraduate degree in accounting normally can complete the program courses and elective requirements in 2 years. Depending on the number of courses taken each semester, students with undergraduate degrees in non-business fields can complete the program and elective requirements in 2 to 4 years.

## ADMISSION

Applicants for admission to the MSA program must meet the requirements for admission to the Graduate School and must complete the GMAT with a minimum score of 500 and a score of at least 25 each on the verbal and quantitative portions of the examination. Based on the formula where the admission score equals 200 times the undergraduate grade point average ( $\mathrm{A}=4.0$ ) plus the GMAT score, admission requires a total score of 1100. In addition, students must submit GMAT Analytical Writing scores. International students also must earn a minimum score of 550 on the paper-based TOEFL or 213 on the computer-based TOEFL and submit a score on the Test of Spoken English (TSE).

No graduate accounting courses may be taken for credit toward the MSA degree without first completing the following admission prerequisite courses, or their equivalent, with a grade point average of 2.7 or better: ACCT 200 or 501, ACCT 301, 302, 303, 311, 312, 315,321 , and MS 251. These courses do not carry credit toward the MSA degree.
Prerequisite courses taken prior to admission to the MSA program ordinarily must have been taken within 6 years of the date the applicant is admitted. An MSA student undertaking prerequisite courses may be terminated from the program if (1) the student's
grade point average calculated over all prerequisite courses taken at SIUE falls below 2.7 for more than 1 semester, (2) the student receives a grade of less than C in any prerequisite course, or (3) the student fails to make satisfactory progress.

Successful completion of the MSA program requires that the candidate have excellent written and oral communication skills and an aptitude for analyzing complex problems. In addition, computers will be used extensively in the program. Weaknesses in communication skills, computers, or statistics should be corrected through remedial courses or self-study prior to seeking admission to the program.

## PROGRAM OF STUDY

The MSA degree requires completion of a minimum of 30 semester hours of course work and a maximum of 48 hours beyond the prerequisite courses. No more than 12 hours of 400-level course work may apply toward elective requirements of the MSA degree. Specific courses, or their equivalents, used to satisfy a student's undergraduate degree requirements may not be used by that student in satisfying the program or elective requirements of the MSA degree. No more than 9 elective hours taken outside the School of Business will count toward the MSA degree. At the discretion of the program director, a maximum of 6 semester hours of elective requirements may be satisfied by transfer of credit from other institutions. For transfer credit, a grade of B or better must have been earned in the course. Ordinarily, business courses may be transferred only from institutions accredited by American Assembly of Collegiate Schools of Business. Courses transferred may not have been used to satisfy requirements for any other degree.

Each student's program of study must be approved by his or her graduate adviser. The program of study consists of three parts following completion of all admission prerequisites:
(1) Foundation Courses (up to 18 semester hours): For students not having completed appropriate courses in the business disciplines within a reasonable time prior to admission, course work will be determined after evaluation of prior courses completed in the area and grades received in those courses, the time since completion of the prior course work, and other evidence of currency of their business knowledge. Determinations of deficiencies made by the program director are final. An undergraduate business degree from SIUE, or the equivalent, completed within 6 years prior to admission to the MSA program normally will satisfy the foundation course requirements. The foundation courses constituting the core areas of business are: ECON 528, FIN 513, MGMT 514, CMIS 515, MKTG 516, and PROD 519.
(2) Program Courses (9 hours): ACCT 510, 580 (taken in the last semester of study), and one of the following courses: ACCT 531, 541, 561.
(3) Elective Courses (21 hours; the same course may not be used to meet both the program course and elective course requirements):
(a) Accounting Electives ( 6 to 12 hours; at least 3 hours in courses numbered above 530): ACCT 401, 431, 531, 541, 550, 551, 553, 556, 557, 561, 565, 567, 581, 597, 598.
(b) Other Electives ( 9 to 15 hours; no more than 9 hours outside the School of Business): CMIS 464, 468, 472, 520, EBUS 550, 551, 554, 559; ECON 415, 417, 445, 450, 461, 514, 515, 528, 535, 543, 545, 561; FIN 440, 450, 541, 542, 543, 550; MGMT 551, 553, 561, 575, 580; MBA 531, 532, 533, 534; additional courses with the approval of the program director (may include courses outside the School of Business).

To remain in good standing in the MSA program, students must maintain a 3.0 (B) grade point average in all courses taken in the MSA program (excluding prerequisite courses) and in all program and approved elective courses. Students who are not in good standing for more than one semester may be terminated from the program.

To graduate with the MSA degree, students must complete all program requirements and have a 3.0 grade point average in all courses taken in the MSA program (excluding prerequisite courses) and in all program courses and approved elective courses. Only program and elective courses taken within a 6-year period preceding the completion of all requirements for the MSA degree will count toward the degree. Foundation courses taken to provide the common body of knowledge in business must be taken within an 8year period preceding the completion of all requirements for the degree.

## ACCOUNTANCY <br> SPECIALIZATION IN TAXATION

MSA Students may opt for a specialization in taxation. To complete the tax specialization, MSA students should complete ACCT 510 and 580, any one of ACCT 531, 541,or 561 as a program course, and the following electives: ACCT 550 Tax Research, ACCT 553 Taxation of Flow-Through Entities, ACCT 556 Personal Tax Planning, ACCT 557 Corporate Taxation.

## EXIT REQUIREMENTS

A significant research project resulting in a written report and a final examination based on the approved program of study are required of each student to be awarded the MSA degree. Both requirements will be completed as part of the requirements for ACCT 580. A satisfactory grade must be received on both the research report and final examination for completion of the degree requirements.

Ordinarily, the final examination will be administered as part of ACCT 580. The examination will include questions related to the students' program of study, their work in ACCT 580, and their research projects. Some parts of the final examination may be common to all students, while other parts will relate to the individual programs of study of the specific students. Examination committees will consist of the instructor of ACCT 580 and two other members of the Graduate Faculty of the School of Business appointed
by the program director. For a student to pass the final examination, at least two of the three members of the examination committee must concur that the student should receive a passing grade.

Students who do not pass the MSA final examination on the first attempt will have one additional opportunity to complete the final examination. A student who fails the final examination on the second attempt will be required to complete additional course work specified by the program director before attempting the final examination a third time. Students who do not pass the final examination after three attempts will be terminated from the program.

Each student's program will be tailored to that individual so all students can follow their interests through integrated sequences of courses. The entire program is designed to place emphasis on critical thinking, research, and problem-solving. Therefore, the research requirement is not meant to be viewed as the isolated requirement of a single course but the culmination of the student's program of study.

## BUSINESS ADMINISTRATION

## MASTER OF BUSINESS ADMINISTRATION

The Master of Business Administration (MBA) degree is designed to develop business managers who have the ability to lead others in a global, technologically advanced economy. The curriculum emphasizes the social, economic, political, regulatory, technological, and cultural forces that shape the external environment in which an organization operates, as well as the management of human and other resources within the organization. The program aims at preparing individuals for managerial careers leading to advancement through middle and upper level positions in business and not-forprofit organizations. The foundation courses are designed to provide students from diverse professional and educational backgrounds a basic understanding of the various business disciplines. In the program courses, students build on their understanding of the individual disciplines and focus on the interrelationships among the disciplines by solving cases and business problems in the context of the entire firm and its environment. The program is based on the premise that managers need a broad knowledge base as well as functional expertise. Students should select elective courses that prepare them more thoroughly for specific careers.

Courses are offered in both the evening and weekend formats. The evening format is used for courses scheduled on the Edwardsville campus. Courses at Southwestern Illinois College at Belleville, Illinois, are scheduled only in the weekend format. Evening courses are 10 weeks in length with meetings once each week. Weekend courses are six weeks in length with classes generally on the third and sixth weekends.

Applicants to the Master of Business Administration program should complete the following steps: apply for admission to the Graduate School (including providing appropriate support material, e.g., official transcripts) and take the Graduate Management Admission Test (GMAT) prior to beginning course work.

Admission to the MBA program is based on a variety of factors including undergraduate grade point average, overall score on the Graduate Management Admission Test (GMAT) and its parts (Verbal, Quantitative, and Analytical Writing), previous work in other graduate programs, and business experience. The average student admitted to the program recently has a cumulative undergraduate grade point average (UGPA) of 3.2 (out of 4.0) and an overall GMAT score of approximately 520.

The admission process involves two stages: an administrative review, and review by the Admissions and Retention Committee. Students are admitted or denied admission after either stage of the process. The initial administrative review considers only admission score and GMAT scores as outlined below. Students who meet the following criteria are admitted after the administrative review stage and are not further reviewed by the faculty committee. To gain administrative admission, students must have:

1. an admission score of at least 950, where admission score equals 200 times the fouryear cumulative undergraduate grade point average ( $\mathrm{A}=4.0$ ) plus the GMAT score; and
2. a GMAT score of at least 400 with raw scores of at least 20 on both the verbal and quantitative portions of the test and an analytical writing score of at least 4.0.

Students with admission scores below 950 or with overall GMAT scores below 400 are generally denied admission at the administrative review stage. Students who are not admitted at the administrative review stage because of low scores on one of the components of the GMAT (verbal, quantitative or analytical writing) are reviewed further by a faculty committee, which considers additional factors in a student's background such as previous universities attended, specific courses taken, GPA, undergraduate major, business experience, evaluation of the actual writing sample provided with the GMAT, and other factors the committee deems appropriate. Students who were not admitted at the administrative review stage can be admitted after the faculty review based on their potential for success in the program. All final admission decisions are made by the program director.

An applicant with an undergraduate grade point average of 2.8 or higher may be permitted to enroll in classes for one term as an unclassified student prior to taking the GMAT. In most cases, no more than 6 credit hours of course work can be taken prior to receipt of the scores by the School of Business Student Services Office. Applicants who hold a PhD , MD , or the equivalent in a recognized field from an accredited university need not submit a GMAT score. International students must also earn a minimum score of 550 on the paper-based TOEFL or 213 on the computer-based TOEFL.

Students are expected to enter the program with competencies in computer software and statistics. Students without this background in statistics will be required to complete MS 502, Quantitative Methods, or its undergraduate equivalent. Students without this background in computer software are encouraged, but not required, to complete CMIS 108 or its equivalent. Completion of either or both of these courses will not earn academic credit in the MBA program.

Students must maintain a cumulative GPA of 3.0 in their MBA courses. Students who fall below this minimum will be placed on academic probation and referred to the Associate Dean for Academic Affairs. If the student is permitted to continue in the program, the conditions for continuance will be put in writing and communicated to the student. The full MBA retention policy can be found at www.siue.edu\BUSINESS\mba.html; copies are also available through Business Student Services. In addition, students must have a cumulative GPA of 3.0 or higher in order to receive their degree.

## PROGRAM OF STUDY

## MBA Foundation Courses

Foundation courses are designed for students who do not have an academic background in one of the business disciplines. The number of hours to be taken in foundation courses is determined after an analysis of the candidate's previous academic background. The foundation requirements may be met by receiving a waiver based upon a transcript evaluation of previous undergraduate and graduate course work, passing a proficiency examination (if available), or by completing each of the foundation courses in the student's curriculum with a grade of C or above. A department, at its discretion, may grant a request for a proficiency examination for a foundation course if the student has a demonstrable basis for success and if the student has not enrolled previously in the course. The foundation courses are:

ACCT 501, Financial Accounting
ACCT 502, Managerial Accounting
CMIS 515, Information Systems Theory
FIN 513, Corporate Finance
MGMT 514, Management of Organizations
MKTG 516, Marketing Management
PROD 519, Operations Management

## MBA Program Courses

The MBA degree requires a minimum of 30 hours of graduate level course work consisting of five required courses (15 hours) plus five elective courses (15 hours). Students complete five required courses in the second year: ECON 528, Managerial Economics; MBA 531, External Environment of Business; MBA 532, International

Business Environment; MBA 533, Leadership, Influence and Managerial Effectiveness; and MBA 534, Strategic Management. The economics course presents concepts and analysis critical to managerial decision-making. The course provides a framework for managers to analyze markets and market conditions, to evaluate pricing, and to formulate competitive strategy. The economic analysis presented will also aid managers in assessing the social and business implications of government policy and regulation. The external environment course focuses on the ethical, social, legal, economic, political, and regulatory forces that control and shape a firm's environment and, in turn, affect managerial responsibility and organizational performance. The international business course provides students with an awareness of the environment in which international companies operate. The course covers technical issues related to doing business abroad, such as competitive advantage and the balance of trade, as well as such qualitative factors as the culture and the political environment of selected countries. The leadership course focuses on the theoretical foundation of leadership principles and the practical methods that can be used to implement these principles in the workplace. Students learn how to deal effectively with others, how to identify the skills of employees, and how to use these skills to achieve the best performance by the group. In the strategic management course, students learn to analyze a firm's strategy and direction in the context of the entire organization. Students sharpen their decision-making skills by forming teams to compete in a complex, computerized business simulation.

Elective courses provide the opportunity for concentration in one or more of the business disciplines. Each student must take a total of 15 hours ( 5 courses) of electives. Elective courses can be taken in one or more of the following areas: accounting, economics, finance, international business, management, computer management and information systems, marketing, and production. Electives may also be chosen from the courses offered by departments in other schools with the approval of the program director. Such courses, however, must be related to the student's career objectives and must be approved by the director of the MBA program. Only six hours of 400 -level course work may be used to satisfy MBA degree requirements.

## EXIT REQUIREMENTS

In addition to completing the required course work, students must also satisfy a comprehensive examination requirement. To satisfy this requirement, the student must earn a grade of B or above in MBA 534. Students who earn a grade below B will be given a second opportunity to complete the course in a satisfactory manner. Performance of individuals who fail to earn a B or above in the second attempt will be reviewed by two additional members of the School of Business Curriculum Committee who may recommend that the student be dropped from the program or, in rare instances, be permitted a third attempt to earn a grade of B or above under another instructor.

A student may elect to write a thesis for not less than 3 nor more than 6 hours of credit. Thesis hours are counted as elective hours. The thesis must be defended before the candidate's advisory committee.

## BUSINESS ADMINISTRATION

## SPECIALIZATION IN MANAGEMENT INFORMATION SYSTEMS

The School of Business also offers an MBA degree with a specialization in management information systems (MIS). The MBA/MIS specialization is an advanced professional degree that combines management skills with the study of information systems analysis and design. The program is designed to develop the student's ability to formulate and implement management information systems that will promote the achievement of the goals and objectives of the organization. Emphasis is placed upon the theory of information systems analysis and the modeling of the decision-making process in designing effective information systems.

Through the choice of elective courses in the MIS emphasis area, students can combine the study of management information systems with application to a specific discipline. Courses within the program are modified frequently to keep pace with changes in employer expectations and developments in information systems. Upon completion of the degree, persons are qualified for positions such as advanced systems analysts, supervisors of computer and data processing centers, and managers of information centers.

Program content balances theory with applications through case studies and projects that emphasize the effectiveness of organizational information systems in achieving the objectives for which the systems are designed. Factors such as the organizational structure and information requirements are studied within the context of ethical, economic, and socio-technical factors that affect the design of systems.

Some of the elective courses assume that students have an appropriate undergraduate computing background or comparable business experience in the computing field. Students are responsible for ensuring that their background is appropriate to the electives selected through consultation with School of Business advisers.

Students will complete five electives: four from the following list of courses and a fifth elective from any business area. No more than two of the courses selected may be at the 400 level.

CMIS 460 Advanced Visual Basic Programming
CMIS 462 Unix and Server Systems
CMIS 468 Business Telecommunications
CMIS 520 Managing Technology
CMIS 540 Project Management
CMIS 563 SQL-PL/SQL
CMIS 564 Database Design
CMIS 565 Oracle Database Administration
CMIS 570 Software Systems Design
CMIS 572 Rapid Application Development and Prototyping

CMIS 588 Seminar in Computer Management and Information Systems CMIS 597 Independent Study in CMIS

## COMPUTER MANAGEMENT AND INFORMATION SYSTEMS MASTER OF SCIENCE

The Department of Computer Management and Information Systems in the School of Business offers a Master of Science degree in Computer Management and Information Systems (CMIS). The CMIS Graduate Committee oversees this program, which is housed within the School of Business. This is an applied computing program that focuses on the areas of information systems, software engineering, computer system architectures, data communications, and related management issues. The program prepares students to be practitioners in positions such as software developer, consultant, system integrator, technology manager, project leader, and application software specialist.

The program of study conforms to the MSIS 2000 model curriculum and guidelines published by the Association for Computing Machinery (ACM) and Association for Information System (AIS). The curriculum includes specific program foundation courses (prerequisite courses), computing core courses, career track elective courses, and a final examination.

## ADMISSION

The minimum requirements for admission to the graduate major in Computer Management and Information Systems are:

1) A bachelor's degree from an accredited college or university. The undergraduate major is typically in business, engineering, mathematics, or computing. Individuals with other backgrounds who are interested in the program are invited to discuss their career objectives with the program director to determine if their goals are consistent with the objectives of this program.
2) An undergraduate grade point average of 2.5 , or above.
3) Submission of Graduate Management Admission Test (GMAT) scores.
4) Submission of a statement of purpose detailing the applicant's background and career plans.

Applicants should complete the following steps: apply for admission to the Graduate School (including providing appropriate support material, e.g., official transcripts), take the GMAT, and submit a statement of purpose. The admission process involves two stages: an administrative review of your admission packet, and a review by the CMIS Graduate Committee. Admission decisions will be made by the CMIS Graduate

Committee once during the Fall term and once during the Spring term for the upcoming term. Although the average student admitted to the program exceeds these admission requirements, students must have at a minimum:

1. an admission score of at least 1050, where admission score equals 200 times the fouryear cumulative undergraduate grade point average ( $\mathrm{A}=4.0$ ) plus the GMAT score; and
2. a GMAT score of at least 500 with raw scores of at least 20 on the verbal portion and 25 on the quantitative portion, and an analytical writing score of at least 4.0.

Admissions are often limited to the best students meeting the minimum admission standards due to the high demand for graduate computer classes.

## Program Foundation Courses (Prerequisite Courses)

Students entering the program will need the specific background detailed below. The Program Foundation Courses are prerequisite courses that do not count toward completion of the MS in CMIS. The background courses must have been acquired within the past seven years.

Proficiency in:

Quantitative Methods
Technical Writing
Fundamentals of Information
Systems
Operating Systems / Server Systems
Two of the following programming languages:

C++
Visual Basic Language
COBOL Programming
Financial Accounting
Management of Organizations
(Org. Behavior)
A business functional course
with an external customer focus

Prerequisites
MS 502
ENG 491
CMIS 515
CMIS 462 or CMIS
310

CS 140
CMIS 142
CMIS 260
ACCT 501
MGMT 514

One of the following:
FIN 513, MKTG 516,
or PROD 519

Meets Foundation Need

General Skill
General Skill
Information Systems
Foundation
Information Systems
Foundation
Information Systems
Foundation

Business Foundation<br>Business Foundation Internal Focus<br>Business Foundation External Focus

MS 502, CMIS 515, ACCT 501, MGMT 514, FIN 513, MKTG 516 and PROD 519 may be waived by satisfactory completion of a comparable undergraduate course with a grade of "B" or better. Within the School of Business, comparable courses are MS 251, CMIS 342, ACCT 200, MGMT 341, FIN 320, MKTG 300, and PROD 315, respectively.

## PROGRAM OF STUDY

The program requires 31 semester hours and consists of 6 core courses, 4 elective courses, and a final examination course. Students in the program must maintain a grade point average of at least 3.0 in all graduate courses. No credit is allowed toward degree completion for courses in which a grade below C (2.0) is earned. All program foundation courses must be completed with a grade of B (3.0) or better including transfer credit.

Computer Management and Information Systems Core (18 hours)
CMIS 468-3 Business Telecommunications
CMIS 570-3 Software Systems Design
CMIS 520-3 Managing Technology
CMIS 540-3 Project Management
CMIS 564-3 Database Design
MBA 534-3 Strategic Management

## Elective Courses (12 hours)

Elective courses enable students to add a specialized focus to their study of computing. Examples of specialized focuses include, but are not limited to: (1) eCommerce, (2) Systems Design, Development and Implementation, (3) Database Administration and Database Programming, and (4) Computer Networks, among others. The CMIS program director maintains the current list of approved electives. Students must submit a written request to the CMIS program director for approval to deviate from the approved elective list.

Students not possessing prior work experience within the computing and information systems field will be required to select CMIS 587-3 Information Systems Internship as one of their electives. This is to ensure that students not possessing prior work experience are afforded the opportunity to practice learned skills in a supervised information technology environment prior to degree completion. Corporate members of the School of Business Technology Roundtable provide internship opportunities.

## EXIT REQUIREMENTS

Students must enroll in CMIS 589-1 Final Examination for one credit. Each candidate for graduation must pass this final examination conducted by the graduate faculty of the department. The final examination will require candidates to demonstrate an appropriate standard of scholarship and to provide evidence of the ability to think critically, to apply knowledge gained through the program, to draw and defend conclusions, and to complete work in a creditable manner. The examination will address topics covered in the Computer Management and Information Systems core courses and will also examine candidates on knowledge and understanding of topics covered in elective courses that
they completed. The final examination may be written or oral as determined by the faculty.

## ECONOMICS AND FINANCE

## MASTER OF ARTS

## MASTER OF SCIENCE

The Department of Economics and Finance offers two programs of study, one leading to the Master of Arts (MA) degree in Economics and Finance and the other leading to the Master of Science (MS) degree in Economics and Finance. Both degree programs require a common core curriculum followed by emphasis in either Applied Economics or Finance. The MA degree program is intended for the student who wishes to continue with academic work leading to an advanced degree, such as a PhD, MBA, law or other professional degree, or to pursue a career in teaching at the community college level. This program provides a firm understanding of theory, research methodology, concepts and principles in economics and finance; such preparation is essential to successful doctoral studies. The MA curriculum also provides a solid foundation for students interested in attending law school, especially in tax, antitrust, corporate (mergers and acquisitions), or securities law specialties.

The MS degree program is designed for those students who plan to pursue a professional career in business or government upon graduation. The emphasis of this program is on the development of expertise in the application of concepts and methodology. The program's flexibility enables the student to acquire the specialized skills required of professionals in business, industry, government, or other public service. Graduates of this program are prepared for career opportunities offered in financial analysis and services, business economics, or in many areas of government service. Financial analysts work in commercial and investment banks, brokerage houses, mutual funds, life and health insurance companies, real estate investment trusts, pension funds, and corporate finance departments of non-financial firms. Business economists prepare forecasts, perform cost analysis and market studies, develop and evaluate pricing strategies, and assist in corporate planning. Students also find that this degree prepares them well for many positions with government agencies, particularly those offices addressing budget, revenues, debt management, forecasting, economic development, or regulatory issues.

## ADMISSION

Applicants for unconditional admission to the MA or MS program are required to meet the minimum admission requirements of the Graduate School and to have an undergraduate degree with a major or minor in economics or finance from an accredited institution. Their academic records should reflect proficiency in intermediate economic theory, financial accounting, and statistics within seven years prior to admission. Knowledge of the fundamentals of calculus is highly recommended. Applications for
admission must include scores from either the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT).

Applicants with undergraduate degrees in fields other than economics and finance or with deficiencies in economic theory, accounting, or statistics may be admitted subject to passing written examinations on economic theory and statistics or successful completion of courses in financial accounting (ACCT 200 or 501) intermediate microeconomic theory (ECON 301), intermediate macroeconomic theory (ECON 302), and statistics (MS 251 or 502 ) or their equivalents. Credit earned to remove such deficiencies generally may not be applied to the graduate degree program.

For admission, applicants should meet the following criteria:

1. four-year undergraduate GPA exceeding 2.5 or C+;
2. percentile for overall score on GMAT or GRE equal to or greater than 30 ;
3. percentile for verbal score on GMAT or GRE equal to or greater than 10 ;
4. percentile for quantitative score on GMAT or GRE equal to or greater than 30. Applicants with a percentile less than 20 on the verbal section of the GMAT or GRE or a TOEFL score of less than 600 will be required to successfully complete additional work in English composition. Credit earned to remove this deficiency generally may not be applied to the graduate degree program.

The program's graduate admission committee will review applications that do not meet the criteria above and may recommend that an applicant be admitted as an exception. The committee makes recommendations to the Graduate Program Director, whose decision is final. Decisions regarding financial assistance are made primarily on the basis of the amount of aid requested, undergraduate performance, and test scores. In addition, applicants are encouraged to submit up to three letters of recommendation. All inquiries about admissions and financial assistance should be directed to the Graduate Program Director.

## PROGRAM OF STUDY

Within the graduate student's first term of enrollment, an advisory committee of at least three graduate faculty is formed to oversee and direct the student's program in accordance with Graduate School policies. This committee is responsible for monitoring the student's progress in the program. For students selecting an Applied Economics emphasis, the committee includes a graduate adviser from the economics faculty. For students selecting a Finance emphasis, the committee includes a graduate advisor from the finance faculty.

Candidates for the MA and MS degrees must satisfactorily complete a minimum of 30 hours of graduate course work. Required courses for either degree include ECON/FIN 400 and 415 and ECON 501 and 502. All candidates must complete at least 21 hours of program courses at the 500 level, excluding any pre-program requirements. ECON 500a and 500b, 506 and 528 do not count for credit toward either the MA or MS in Economics and Finance.

In addition to the requirements above, candidates for both MA and MS degrees must complete an emphasis in either Applied Economics or Finance. An emphasis in Applied Economics requires six hours of electives in economics and six hours of electives in finance. Candidates for the MS degree must complete six additional hours of electives in economics or finance or (subject to petition to the graduate program director) a related discipline. Candidates for the MA degree must complete a thesis in economics for six semester hours. A graduate adviser must approve all elective courses in the student's program.

An emphasis in Finance requires pre-degree completion of FIN 430 and 431 or the equivalent. Required finance courses include FIN 525, 528, and 532. The student must also complete at least three additional hours of economics at the 500 level. Candidates for the MS degree must add FIN 596 and an additional three hours of economics. Recommended quantitative courses include ECON/FIN 515 and 517. Candidates for the MA degree must complete a thesis in finance for six semester hours. A graduate adviser must approve all elective courses in the student's program.

## EXIT REQUIREMENTS

All candidates for graduation with a MS or MA in Economics and Finance must have completed ECON/FIN 415, ECON 501 and ECON 502 with grades of B or higher in each. Candidates must have a cumulative GPA of 3.0 or higher in economics and finance program courses. In addition, each candidate must submit to the Graduate Program Director a prescribed portfolio of work appropriate to the candidate's curriculum. Typically this portfolio contains final examinations from ECON/FIN 415, ECON 501, and ECON 502 and a writing sample specific to the candidate's curriculum (paper, thesis, or FIN 596 project report). Candidates for the Applied Economics emphasis must also include a final examination from a graduate course in finance.

Candidates for the MA degree must prepare and successfully defend a thesis for 6 hours of credit. Upon or before completion of 21 hours, a student selects a thesis chairperson and a thesis committee of at least two additional members of the graduate faculty in consultation with the Graduate Program Director. This committee and its chairperson assumes responsibility for overseeing the student's satisfactory completion of the remaining thesis requirements.

## MARKETING RESEARCH

## MASTER OF MARKETING RESEARCH

The Master of Marketing Research (MMR) degree is designed to prepare individuals with diverse backgrounds for careers in marketing research and to meet the need of businesses, government, or nonprofit organizations for competent marketing research professionals.

The program's goal is to develop professional marketing researchers who: (1) understand business operations, marketing processes, and the complexity and nature of marketing problems; (2) can apply research to help solve management problems, define marketing opportunities, and aid in decision making; (3) can plan, execute, and manage a research project; (4) know marketing research techniques and specialties; (5) can write a cogent, well-organized research report; and (6) can communicate research proposals, results, conclusions, and recommendations clearly and effectively. The MMR graduate will be well prepared to practice marketing research and to make substantial contributions to the marketing research profession.

The curriculum combines course work involving a balance of theoretical studies and applications through projects with emphasis on the role of research and the effectiveness of marketing decisions within organizations. MMR courses stress the development of strong analytical skills through the solution of class-assigned problems and exercises with courses that use projects, cases, and simulations to illustrate the application of these skills. Courses are scheduled in the evenings and on weekends so that students may participate in an internship program on an ongoing basis.

## CORPORATE SPONSORED GRADUATE ASSISTANTSHIP/INTERNSHIP PROGRAM

In addition to graduate fellowships and department-based graduate assistantships, the MMR program provides all admitted students with an opportunity of corporate-sponsored internships/assistantships. A number of corporations and marketing research agencies provide funding and opportunity to gain valuable research experience for qualified MMR students. Further information can be obtained from the MMR program director.


#### Abstract

ADMISSION

Applicants to the Master of Marketing Research program should complete the following steps: apply for admission to the Graduate School (including providing appropriate support material, e.g., official transcripts); submit to the director of the MMR program an essay articulating effectively the applicant's career goals as these relate to interest in pursuing the program; and take the Graduate Management Admission Test (GMAT). International students must also earn a minimum score of 550 on the paper-based TOEFL or 213 on the computer-based TOEFL. All applicants are also required to submit three letters of recommendation from individuals who can attest to the applicant's qualifications and likelihood of successful completion of degree requirements.


Admission to the MMR program is highly selective and competitive. The program director, in consultation with marketing faculty, decides who will be admitted based on a balanced appraisal of each component of the applicant's credentials. As a general rule, strong undergraduate performance (high grade point average), above average GMAT scores (including Verbal, Quantitative, and Analytical Writing components), and an
intense interest in pursuing a career in marketing research are essential prerequisites for admission to the MMR program. Applicants who are denied admission may request a review of their credentials by the MMR Admissions Review and Retention Committee which makes its recommendation to the program director. The decision of the program director is final. Applicants who hold a PhD or equivalent in a recognized field from an accredited university need not submit a GMAT score.

Successful completion of the MMR program requires that the candidate have excellent written and oral communication skills and an aptitude for analyzing complex problems. Weaknesses in communication and computer skills, or statistics should be corrected through remedial or self-study courses prior to seeking admission to the program. Students are expected to enter the program with competencies in computer software and statistics. Students without this background in statistics will be required to complete MS 502/251, Statistical Analysis for Business Decisions, or its equivalent. Completion of this course will not earn academic credit in the MMR program.

## PROGRAM OF STUDY

Students pursuing the MMR degree must complete a minimum of 30 semester hours beyond the foundation course requirements. Foundation courses are designed to remove deficiencies in the student's background with respect to the foundation areas in business. A maximum of 24 hours of course work must be taken to meet the common body of knowledge requirements for graduate study in marketing research. The foundation courses are ACCT 501, ACCT 502, FIN 513, MGMT 514, CMIS 515, MKTG 516, ECON 528, and PAPA 420 or the equivalent. Foundation courses may be waived by transcript evaluation or proficiency examination. (See the section in this chapter on the MBA program of study for details on obtaining waivers.)

Students are expected to enter the program with competencies in general mathematics (linear algebra, decision theory, integral and differential calculus), computer software, and statistics. Students without such a background are required to complete necessary courses. Completion of these courses will not earn credit in the MMR program.

Program courses (15 hours): MKTG 530, 544, 546, 548, 550 or 589.
Elective courses ( 15 hours): taken from the following:
MKTG 476, 478, 540, 541, 560, 561, 562, 595, STAT 487, 583, 589.
Other business electives consistent with the program's goals and student's career objectives may be taken with approval from the program director. Only 3 hours of 400level course work may be used to satisfy MMR degree requirements.

## EXIT REQUIREMENTS

In addition to completing the required coursework, students must also satisfy a comprehensive examination requirement. To satisfy this requirement, the student must earn a grade of B or above in MKTG 550. Students who earn a grade below B will be given a second opportunity to complete the course in a satisfactory manner. Performance of individuals who fail to earn a B or above in the second attempt will be reviewed by two additional members of the marketing faculty who may recommend that the student be dropped from the program or, in rare instances, be permitted a third attempt to earn a grade of B or above under another instructor.

Under unusual circumstances with the approval of the program director, a student may elect to complete a marketing research project in lieu of MKTG 550 by registering for MKTG 589 (3 to 6 hours). This course, in which the student designs and completes a marketing research project, is an integrated experience and will ordinarily be the last course taken. The research proposal must be approved by the program director and the student's advisory committee. The advisory committee shall consist of three faculty members. The chair of the committee and at least one member must be from marketing.. Upon completion of the marketing research project, the written report must be in a form suitable for presentation to the management of the participating organization and must be defended orally before the student's advisory committee.

## SCHOOL OF EDUCATION

## Dean: Elliott Lessen

The School of Education offers programs of study leading to graduate degrees in education and in psychology as follows: specialist degree in educational administration; Master of Science in Education with majors in educational administration, elementary education, instructional technology, kinesiology, secondary education, and special education; Master of Science with a major in speech pathology; specialist degree in school psychology; Master of Arts in Teaching; Master of Arts in psychology with specializations in clinical-adult, general psychology, and industrial-organizational psychology; and Master of Science in psychology with a specialization in communityschool psychology. The School of Education also has two new Master's of Science in Education graduate programs pending: Master’s of Science in Education in Literacy Education and Master's of Science in Education in Learning, Culture, and Society. For more information on these degrees, please contact the Educational Leadership program at 618/650-3277. Most programs of study for the Master of Science in Education degree include a general professional core of studies consisting of EPFR 501 (Research Methods in Education), EPFR 515 (Advanced Educational Psychology), and EPFR 506 (Analysis of Educational Issues). The School of Education also offers an interdisciplinary Graduate Sequence in gerontology.

In addition to graduate degree programs, described later in this section, the Department of Educational Leadership offers graduate courses in several supporting areas of study,
including educational psychology, educational research, and foundations of education (including multicultural education).

## ACCREDITATION

All graduate degree programs in education are fully accredited by the National Council for the Accreditation of Teacher Education. The Illinois State Board of Education has approved the following programs leading to state certification: general administrative, superintendent, and school psychology. The Master of Science, major in Speech Pathology, is accredited by the Educational Standards Board of the American Speech-Language-Hearing Association.

## ADMISSION TO GRADUATE STUDY IN THE SCHOOL OF EDUCATION

Persons seeking admission to a graduate program in the School of Education must complete two separate applications: one to the Graduate School as a classified graduate student seeking a degree in a specific program in education, psychology, or speech pathology and one to the specific program in the School of Education. Both Graduate School application forms and program application forms are available from the appropriate departmental office.

After a faculty admissions committee in the specific program acts upon the application, the applicant is notified by the Graduate School of the result. Ordinarily, the procedure requires about one academic term to complete.

Applicants should carefully examine the information that accompanies each program application since requirements vary among programs. Persons seeking additional information about a particular program should contact the department offering the program. Information on the location of each department can be obtained from the Office of the Dean of the School of Education.

## EDUCATIONAL ADMINISTRATION

Faculty in the School of Education participate with department faculty at Southern Illinois University Carbondale in offering a cooperative program leading to a Doctor of Philosophy degree in Educational Administration. Prospective students may initiate application procedures at either campus and may enroll in courses at either or both campuses concurrently. Southern Illinois University Carbondale confers the doctoral degree. For more detailed information and current information, consult the department's website through www.siue.edu.

## SPECIALIST DEGREE

The Department of Educational Leadership offers a program of study leading to the specialist degree in educational administration. Programs of study can be designed for persons desiring career positions as principals or supervisors.

## ADMISSION

General requirements for admission to the specialist degree program include: a Master of Science in Education degree or its equivalent; a grade point average of $3.25(\mathrm{~A}=4.0)$ or higher in graduate study, and a score of $38^{\text {th }}$ percentile or higher on the Miller Analogies Test (MAT). Applicants must meet Illinois State Board of Education (ISBE) requirements for certification prior to admission. These requirements currently require a minimum of two years teaching experience for individuals seeking admission to the General Administrative Program, or two years administrative experience (in a position requiring a Type 75 Certificate) for individuals seeking admission to the Superintendent's Program. A separate program application form that solicits additional admission data must also be completed.

## PROGRAM OF STUDY

Thirty-three (33) semester hours of acceptable graduate credit are required for the specialist degree in educational administration. Two areas of emphasis are available: general administrative, and superintendent. General requirements are as follows:

## General Administrative Area of Emphasis

Required courses (24 hours)
Instructional Leadership: EDAD 525, 535, and 545.
Management of Public Schools: EDAD 510, 520, 530.
Schools and Public Policy: EDAD 500, 505.
Internship practicum/Principalship (3 hours): EDAD 590 or approved elective for students with supervisory experience who have successfully completed EDAD 550, with consent of adviser.

Field study (3 hours): EDAD 595.
Cognates/directed electives (3 to 6 hours).
Superintendent Area of Emphasis
Required Courses (21 hours)
Governance of Public Schools: EDAD 555, 560.

Management of Public Schools: EDAD 565, 570, 585.
Educational Planning: EDAD 575, 580.
Internship practicum/Superintendency (3 hours): EDAD 591.
Field study (3 hours): EDAD 595.
Cognates/directed electives (6 hours).

## EDUCATIONAL ADMINISTRATION

## MASTER OF SCIENCE IN EDUCATION

The Department of Educational Leadership offers studies leading to the Master of Science in Education (MSEd) degree in educational administration with an emphasis in general administrative. The degree program provides students with a broad theoretical background that facilitates career movement in a variety of administrative positions.

Completion of the Master of Science in Education degree in educational administration ordinarily satisfies Illinois certification requirements for general administrative (required for elementary, middle school, and high school principals, assistant principals, assistant superintendents, or other positions carrying multi-department or building-wide responsibility), and Missouri certification requirements for the initial principal endorsement. Courses are generally acceptable for certification in other states. Individuals who may have unusual certification problems should consult with the graduate program director for additional information. Illinois certification for various administrative endorsements may also be met through the specialist degree in educational administration.

## ADMISSION

General requirements for admission to graduate study at the master's level in educational administration are the same as those of the Graduate School. Applicants are also required to take the Miller Analogies Test (MAT) and provide the score to the program admission committee. Applicants must meet Illinois State Board of Education (ISBE) requirements for certification, which is currently two full years of K -12 teaching experience, prior to admission

## PROGRAM OF STUDY

Thirty-six (36) semester hours of graduate credit are required for the Master of Science in Education degree with a major in educational administration. General requirements are as follows:

General Administrative Area of Emphasis
General professional core (9 hours): EPFR 501, 506a or 506b, 515.
Required courses (27 hours)
Instructional Leadership: EDAD 525, 535, 545, 550.
Management of Public Schools: EDAD 510, 520, 530.
Schools and Public Policy: EDAD 500, 505.

## EXIT REQUIREMENTS

All candidates for the master's degree in educational administration must complete a comprehensive program portfolio. Students are required to participate in a school/school district based internship experience. The program portfolio standards follow the National Council for Accreditation of Teacher Education standards, Educational Leadership Constituent Council standards, and Illinois State Board of Education General Administration Endorsement standards. The portfolio is evaluated for content (knowledge and information gained from the Educational Administration program as related to the most recent educational research), and rationale (supporting basis from the literature in educational administration). The internship is supervised and evaluated by an administrator in the field and a faculty member of Educational Administration of Southern Illinois University Edwardsville.

## ELEMENTARY EDUCATION

## MASTER OF SCIENCE IN EDUCATION

The Department of Curriculum and Instruction offers a program leading to the Master of Science in Education (MSEd) degree with a major in elementary education. Within this program, students are offered a choice from among three areas of study: general elementary education, reading, and early childhood education.

The general elementary education area is intended to provide advanced preparation and to improve the instructional effectiveness of elementary classroom teachers. Completion of the reading program prepares the graduate to serve as a remedial reading teacher or as a reading consultant at the district or school level. The early childhood education area is for persons who are pursuing teaching and other early childhood careers. Completion of this option qualifies a student for the Illinois Early Childhood Education Certificate, Type 04, which is valid for teaching children from birth through third grade. For the student who possesses a bachelor's degree in early childhood education or a certificate in early
childhood education, the program of study is comprised of elective courses rather than required courses.

## ADMISSION

General requirements for unconditional admission to the graduate program in elementary education include a bachelor's degree and a grade point average of 3.0 or above ( $\mathrm{A}=4.0$ ) during the last two years of undergraduate work. An applicant with a grade point average between 2.5 and 2.9 may also be considered for admission. All applicants must take the Miller Analogies Test (MAT) and obtain a minimum score of 32.

An applicant who does not meet the department's requirements for admission can appeal to the Department Graduate Admissions and Review Committee and present additional evidence of competence to undertake graduate degree work. Additional evidence may include an interview with the student and/or probationary course work of 9 semester hours of graduate work in which a B average is maintained. The Graduate Admissions and Review Committee's decision is based on all available relevant information.

## PROGRAM OF STUDY

Ordinarily, candidates for the Master of Science in Education degree with a major in elementary education will complete a 36 -semester hour program of study planned in consultation with an adviser. Each approved program of study has three components:

General professional core (9 hours): EPFR 501, 506a or b, 515.
Elementary education core (6 hours)
Early Childhood Emphasis: CI 412, 530; or
Reading and General Elementary Emphasis: CI 510, 561.
Area of emphasis (21 hours): Courses selected from elementary education, reading, or early childhood education.

Students may elect to prepare a thesis. Those who do so should refer to the thesis section in Chapter 1 of this publication and consult with their advisers.

The possession of a valid elementary or early childhood teaching certificate is a requirement for graduation.

## EXIT REQUIREMENTS

All candidates must pass a final examination. Candidates who select the thesis option will be required to pass a final oral examination, the content of which focuses on the thesis. Candidates who do not select the thesis option will either present a seminar in which the
student prepares in writing and discusses orally a topic that has been studied on an independent basis or will sit for a written examination based on the content of courses taken.

## CERTIFICATION ONLY

## Elementary and Early Childhood Education Program

Students who hold a baccalaureate degree but do not possess a teaching certificate should contact the Office of Clinical Experience, Certification and Advisement (OCECA) for information on the undergraduate certification program.

## GERONTOLOGY

## GRADUATE SEQUENCE (CERTIFICATION OF COMPLETION)

The interdisciplinary graduate sequence in gerontology was developed by the AllUniversity Committee on Gerontology to help meet the personnel needs in the field of aging. Qualified students and community professionals can obtain a Graduate Certificate of Completion in Gerontology by successfully completing the interdisciplinary gerontology sequence.

The gerontology program is a member of the Association for Gerontology in Higher Education, Partnerships for Aging, the National Council on Aging, and the Gateway Geriatric Education Center of Missouri and Illinois. Faculty and staff also hold numerous individual memberships in local, state, and national organizations concerned with research, training, and service programs in the field of aging.

The gerontology sequence provides students and community professionals from diverse disciplinary backgrounds and professional programs with a working knowledge of the basic processes of aging; the needs, characteristics, and problems of the aging; and a practicum experience utilizing programs, agencies, and institutions serving the aging. Individuals who complete the gerontology interdisciplinary graduate sequence are qualified for positions in a variety of agencies and organizations serving older persons. These agencies and organizations include area agencies on aging, business and industry, senior citizen centers, long-term care facilities, educational institutions, hospitals, mental health centers, social service organizations, nutrition sites for the elderly, hospice programs, retirement centers, local and state government, recreation programs, and churches and synagogues.

Degree-seeking graduate students who are officially admitted and in good standing with the Graduate School may enroll in courses in the gerontology sequence provided they have the approval of their degree program academic advisor and the gerontology program director. Community professionals with a minimum of a baccalaureate degree who are not planning to pursue a graduate degree may take the interdisciplinary graduate sequence in gerontology upon admission to the Graduate School and with approval of the gerontology program director. Unclassified graduate students must have the approval of the gerontology program director prior to registration in any of the gerontology courses. All students seeking the Graduate Certificate of Completion in Gerontology must complete the application for admission to the gerontology program and submit three letters of recommendation.

## PROGRAM OF STUDY

The four courses comprising the sequence in gerontology are PSYC 487 (Psychology of Aging), GRN 587 (Interdisciplinary Seminar in Gerontology), GRN 588 (Programs, Services, and Resources in Aging), and GRN 598 (Practicum in Gerontology). The sequence may be taken either in conjunction with a graduate degree program or independently. Students also may access gerontological education and training by participating in the workshops, conferences, public lectures, and seminars sponsored by the gerontology program.

Gerontology Program applications, letter of recommendation forms, Dialogue schedules, conference information (including dates, program schedules and registration forms), gerontology job listings, class schedules and information and links to other gerontological websites are available on the Gerontology Program web page at www.siue.edu/GERONTOLOGY.

## INSTRUCTIONAL DESIGN AND LEARNING TECHNOLOGIES

## MASTER OF SCIENCE IN EDUCATION

The Department of Educational Leadership offers a program of study leading to the Master of Science in Education degree with a major in Instructional Design and Learning Technologies. The program prepares individuals for a variety of instructional development and technology-related positions in education, business, and industry. Areas of emphasis within the program include Interactive Multimedia Technologies, Instructional Design and Performance Improvement, and Educational Technologies.

The Educational Technologies emphasis area enables teachers and other school personnel to learn how to plan, implement, and evaluate technology-based instruction and learning activities in p-12 settings. Students pursuing this option will become knowledgeable users of technology as well as designers of curriculum and instruction that effectively utilize and integrate technology to improve student learning. The curriculum focuses on the design and creation of effective materials, strategies, environments, and experiences
for education, as well as on the evaluation of hardware and software for use in schools, and the coordination of efforts to improve student learning through technology integration. Students interested in leadership roles in educational technology, such as those wishing to become technology coordinators in schools or school districts, can work toward meeting the standards for the Illinois State Board of Education’s Technology Specialist certificate through this program.

The Instructional Design \& Performance Improvement emphasis area focuses on skills necessary for careers in the areas of instructional technology, performance technology, instructional design, training, and performance consulting. Emphasis is placed on systematic instructional design and on the use of various media and technologies for learning and instruction. Students in this option may also focus on the design and development of online learning and other performance improvement strategies.

The Interactive Multimedia Technologies emphasis area is appropriate for people wishing to pursue the design and development of various interactive multimedia and web-based learning experiences. This option prepares students for careers with publishing and production companies, consulting firms, and other businesses that produce engaging multimedia applications for learning and other opportunities. Course work focuses on theories and methods for designing compelling user experiences, developing skills with tools for web and other delivery media, and project management strategies.

Two unique features of the program, juried presentations and design studios, provide students with opportunities for important practical experiences that complement the course work. Throughout the program, students will participate in three juried presentations at roughly one-third and two-thirds of the way through the program, with the final jury coming at the end of the degree program. Juries provide students with an opportunity to share their work with a jury of professors and peers, and defend their work in light of their own goals and the content of their degree programs. The juried presentations of students' work include both face-to-face and online components. Even though the three juries are spread across the degree program, successful completion of all three is an exit requirement for the Master's degree.

Design Studios provide students with opportunities to work on projects for a variety of real clients. As they participate in various design studio projects, students develop skills in collaboration, design, development tools and techniques, project management, and self-directed learning. Students will also gain practical experience as a member of a design team, and by the time they complete their design studio experience, students will be leading a team of their peers through a real-world project.

## ADMISSION <br> The general requirements for admission and retention are the same as for the Graduate School. In addition to these requirements, applicants must submit scores received on the

Miller Analogies Test (MAT). Applicants may arrange for an appeal interview with the Admissions Committee if admission is denied.

## PROGRAM OF STUDY

Students must complete 36 semester hours for a master's degree in Instructional Design and Learning Technologies. Courses of study for the three areas of emphasis are as follows:

## Educational Technologies

Required Courses:

- Theories (12 hrs.): IT 500, EPFR 501, 506a or 506b, 515.
- Methods ( 9 hrs ): IT 481, IT 435, IT 560
- Tools and Technologies (9 hrs.): IT 486 and 6 hours of electives selected from Instructional Design and Learning Technologies courses, or other courses across the university.
- Design Studio (6 hrs.): IT 592 (3 hrs), and IT 598 (3 hrs.) or IT 599 (3 hrs.)


## Instructional Design and Performance Improvement

Required Courses:

- Theories (12 hrs.): IT 500, EPFR 501, 506a or 506b, 515.
- Methods (9 hrs.): IT 510, IT 520, IT 530,
- Tools and Technologies (9 hrs): IT 486 and 6 hours of electives selected from Instructional Design and Learning Technologies courses, or other courses across the university.
- Design Studio (6 hrs.): IT 592 (3 hrs), and IT 598 (3 hrs.) or IT 599 (3 hrs.)

Interactive Multimedia Technologies
Required Courses:

- Theories (12 hrs.): IT 500, EPFR 501, 506a or 506b, 515.
- Methods (9 hrs.): IT 510, IT 530, IT 585
- Tools and Technologies ( 9 hrs.): IT 430, IT 486 and 3 hours of electives selected from Instructional Design and Learning Technologies courses, or other courses across the university.
- Design Studio (6 hrs.): IT 592 (3 hrs), and IT 598 (3 hrs.) or IT 599 (3 hrs.)


## EXIT REQUIREMENTS

Students must successfully complete 3 juried presentations and Design Studio requirements. All candidates must present an oral defense of an electronic portfolio summarizing Design Studio activities.

## KINESIOLOGY

## MASTER OF SCIENCE IN EDUCATION

The Department of Kinesiology and Health Education offers a program of study leading to the Master of Science in Education degree with a major in kinesiology. Within the degree program five emphases are available. The Exercise Physiology option is designed to prepare students for careers in scientifically-based exercise programs of research, health maintenance, cardiovascular risk identification, and rehabilitation; the Pedagogy option is designed for students interested in the analytic study of teaching and/or curriculum development in physical education. It serves primarily those teaching in area public schools who wish to pursue advanced study to enhance their teaching qualifications. The Sport and Exercise Behavior option is designed for individuals interested in the relationship between psychosocial variables and physical activity. This area will appeal to individuals wishing to pursue careers in coaching, teaching, fitness/wellness, and rehabilitation. The Sport Management option is designed to prepare students with management skills for careers as athletic directors or physical education department heads in public schools or community colleges or as administrators in the burgeoning sport industry, including professional and amateur sport organizations and corporate settings. The Special Physical Education option is designed for students interested in the analytic study of teaching and/or curricular development related to providing physical activity for individuals with disabilities. The degree is designed to meet the needs of graduate students with and without teaching backgrounds.

## ADMISSION

Selection for admission is determined by the graduate faculty in kinesiology in the Department of Kinesiology and Health Education. In addition to Graduate School admission standards, program admission criteria include grade point average achieved in previous professional preparation, experience, communication skills, and recommendations from professional associates indicating the applicant's competency and interest in the discipline and the related professions. Applicants must have an undergraduate grade point average of at least 2.75 ( $\mathrm{A}=4.0$ ). Applicants wishing to transfer from another university must have a graduate grade point average of at least 3.0 for consideration. Only courses in which the student earned a grade of "B" or better will be considered for transfer credit.

Admission may be granted to applicants who have a bachelor's degree and meet the aforementioned criteria, although any prerequisites necessary to study in a particular emphasis are at the discretion of the program adviser.

PROGRAM OF STUDY

A non-thesis plan of study is available for the Pedagogy option, the Sport Management option, and the Special Physical Education Option. Both a thesis and non-thesis plan of study are available for the Exercise Physiology and Sport and Exercise Behavior options.

Pedagogy Option: (33 hours)
General professional core (9 hours): EPFR 501, 506a or 506b, 515.
Required Courses ( 21 hours): KIN 499, 510, 515, 520, 530, 535, 552 or 500.
Electives: (3 hours).
Exercise Physiology Option: (Thesis, 30 hours; non-thesis, 33 hours)
Required courses (18 hours): KIN 505, 510, 515, 540, 500 or 552, 560.
Thesis (12 hours): KIN 599 (6 hours), PSYC 520 (3 hours) or SOC 515 (3 hours) recommended (or suitable alternative), Elective (3 hours).

Non-Thesis: Electives (15 hours).
Sport and Exercise Behavior Option: (Thesis, 30 hours; non-thesis, 33 hours)
Required courses (18 hours): KIN 490 or 530, 500, 505, 510, 515, 552.
Thesis (12 hours): KIN 599 (6 hours), PSYC 520 (3 hours) or SOC 515 (3 hours) recommended (or suitable alternative), Electives (3 hours).

Non-Thesis: Electives (15 hours).
Sport Management Option: (33 hours)
Required Courses (21 hours): KIN 500, 510, 515, 535, 555, ECON 439, MKTG 470.
Electives (12 hours): Choose four courses from the following:
FIN 595, KIN 552, MGMT 595, PSYC 473/573, PSYC 564, or other approved electives.
Special Physical Education Option: (33 hours)
General Professional Core (9 hours): EPFR 501, 506a or 506b, 515.
Required Courses (21 hours): KIN 410 or 414, 520, 525, 539, SPED 430, 514, 575.
Electives: (3 hours).

## EXIT REQUIREMENTS

Sport Management Option: Students must demonstrate competence in the content comprising the major (kinesiology and area of emphasis) by passing a written comprehensive examination.

Sport/Exercise Behavior Option: Students selecting the non-thesis track must demonstrate competence in the content comprising the major (kinesiology and area of emphasis) by passing a written comprehensive examination. Students who elect to prepare a thesis must present an oral defense of the thesis.

Exercise Physiology Option: Students selecting the non-thesis track must demonstrate competence in the content comprising the major (kinesiology and area of emphasis) by successful performance on a written final examination. Students who elect to prepare a thesis must present an oral defense of the thesis.

Special Physical Education Option: Students must demonstrate competency in the content comprising the area of emphasis by passing a comprehensive examination or successfully completing the Adapted Physical Education National Standards (APENS) exam.

Pedagogy Option: Students must demonstrate competence in the content comprising the major (kinesiology and area of emphasis) by passing a written comprehensive examination.

## POST-BACCALAUREATE CERTIFICATE

The Department of Kinesiology and Health Education offers three certificates for those individuals desiring specific graduate coursework without the requirements associated with the pursuit of a graduate degree. A certificate consists of a set of specific courses that focus on a particular knowledge base in Kinesiology and confirms that a student has mastery of the content of a clearly defined sub-field of Kinesiology. No substitution or waiver of courses is permissible within a certificate program. When two or more certificate programs share common courses, a student may count those hours toward completion of each program. A student must complete the certificate within six (6) years from the time of enrollment in the initial course that is a part of the certificate.
Courses taken as part of a certificate may also satisfy a portion of the requirements for a Kinesiology graduate degree (MSEd).

## ADMISSION

Classified graduate students only (i.e., those who are officially admitted to both the Graduate School and the Department of Kinesiology and Health Education) may enroll in one or more certificate programs after obtaining written approval from the Kinesiology Graduate Program Director. Students whose admission status is either "pending" or "unclassified" may not enroll in a certificate program. A GPA of 3.0 (A=4.0) in all graduate coursework is required for awarding a certificate.

## PROGRAM OF STUDY

Post-Baccalaureate Certificate in Pedagogy/Administration (18 hours):
EDAD 500-Organization and Administration of Education - 3 hours.
KIN 500 - Behavioral Analysis of Sport or
KIN 552 - Behavioral Analysis of Exercise - 3 hours.
KIN 510 - Historical, Current, and Comparative Issues in Kinesiology - 3 hours.
KIN 520 - Pedagogy in Special Physical Education - 3 hours.
KIN 525 - Principles of Assessment in Special Physical Education - 3 hours.
KIN 535 - Administrative Theory and Practice in Kinesiology - 3 hours.
Post-Baccalaureate Certificate in Sport \& Exercise Behavior (18 hours):
KIN 414 - Exercise Adherence - 3 hours.
KIN 500 - Behavioral Analysis of Sport - 3 hours.
KIN 510 - Historical, Current, and Comparative Issues in Kinesiology - 3 hours.
KIN 530 - Advanced Motor Learning - 3 hours.
KIN 552 - Behavioral Analysis of Exercise - 3 hours.
KIN 580 - Readings in Kinesiology - 3 hours.
Post-Baccalaureate Certificate in Exercise Physiology (18 hours):
KIN 410 - Exercise for Special Populations - 3 hours.
KIN 412 - Body Composition - 3 hours.
KIN 505 - Advanced Physiology of Motor Activity* - 3 hours.
KIN 510 - Historical, Current, and Comparative Issues in Kinesiology - 3 hours.
KIN 540 - Exercise Assessment and Prescription - 3 hours.
KIN 560 - Cardiovascular and Neuromuscular Functions of Exercise - 3 hours.
*Prerequisite for this course is KIN 420 or similar course approved by Kinesiology Graduate Program Director

## PROFESSIONAL DEVELOPMENT SEQUENCE IN KINESIOLOGY

The Department of Kinesiology and Health Education offers a Professional Development Sequence (PDS) for those individuals desiring specific graduate coursework without the requirements associated with the pursuit of a graduate degree. The PDS consists of a set of specific courses that focus on a particular knowledge base in Kinesiology and provides exposure to new knowledge and practical techniques. Under no circumstances may courses be substituted for those constituting the PDS. A student must complete the PDS within three (3) years from the time of enrollment in the initial course that is a part of the PDS. Courses taken as part of a PDS may also satisfy a portion of the requirements for a Kinesiology Post-Baccalaureate Certificate or a Kinesiology graduate degree.


#### Abstract

ADMISSION Graduate students who are officially admitted to, and in good academic standing with, the Graduate School may enroll in a PDS in the Department of Kinesiology and Health Education provided they have the approval of the Kinesiology Graduate Program Director. Students may enroll in a PDS as either a classified (accepted into the Kinesiology graduate program), classification pending (acceptance into Kinesiology graduate program is pending), or unclassified student (i.e., student has not applied and been accepted into the Kinesiology graduate program).

\section*{PROGRAM OF STUDY}

Professional Development Sequence in Kinesiology (9 hours): KIN 500 - Behavioral Analysis of Sport or KIN 552 - Behavioral Analysis of Exercise - 3 hours. KIN 510 - Historical, Current, and Comparative Issues in Kinesiology - 3 hours. KIN 535 - Administrative Theory and Practice in Kinesiology - 3 hours.


## PSYCHOLOGY

## SPECIALIST DEGREE

The Psychology Department offers the Specialist Degree in school psychology. This program provides advanced academic and professional training for students pursuing a career in school psychology. The program leads to certification as a school psychologist in the State of Illinois and follows the guidelines recommended by the National Association of School Psychologists.

## ADMISSION

Admission to this program requires a master's degree in psychology or a related field. The current admission standards of the master's degree programs also apply to the Specialist Degree. Prospective students must submit applications to the SIUE Graduate School and the Psychology Department and must submit scores on the Graduate Record Examination. For complete information, see "Admission" under the master's degree portion later in this section.

## PROGRAM OF STUDY

The Specialist Degree in school psychology requires a minimum of 32 hours beyond the Master of Science degree.

Required Courses (15 hours): PSYC 539, 594 plus three education courses (selected in conjunction with adviser).

Required practicum (4 hours): PSYC 524.
Internship (10 hours): PSYC 596.
Thesis (3 hours): PSYC 599.

## EXIT REQUIREMENTS

Candidates for the Specialist Degree must submit a thesis proposal for approval by a thesis advisory committee, carry out the proposed thesis, submit a written report, and complete an oral examination.

## PSYCHOLOGY

## MASTER OF ARTS

## MASTER OF SCIENCE

The Department of Psychology offers graduate programs leading to the Master of Arts degree in psychology (Clinical-Adult, and Industrial-Organizational specializations) and the Master of Science degree in psychology (Clinical Child and School specialization).

The Clinical-Adult specialization is intended for students who seek to acquire master's level training appropriate for clinical work with adult clients. This training often leads to employment in organizations providing clinical psychological services (e.g., community mental health agencies, hospitals, mental health facilities) or continued education in doctoral training programs.

The Industrial-Organizational specialization provides knowledge and skills to analyze and solve problems of motivation, leadership, communication, job satisfaction, productivity, training, and others faced by business and organizations. Training in this specialization leads to possible employment in administration, supervision, organizational development, and personnel positions.

The Clinical Child and School specialization trains students to work in organizations serving children, adolescents, and families. Graduates work as clinical child psychologists in community mental health agencies, corrections, hospitals, and residential treatment centers. This specialization provides the foundation for entry into the specialist degree program for students intending to be certified as school psychologists.

Students in any specialization can earn a certificate in Gerontology.

## ADMISSION

Individuals satisfying the requirements for admission to the Graduate School may apply for admission to psychology graduate programs. A separate application form is required and can be obtained from the Department of Psychology or it can be accessed from our website at www.siue.edu/PSYCHOLOGY. Admission is thus dependent upon approval by both the Graduate School and the Psychology Department. In addition to other requirements, applicants must submit scores on the Graduate Record Examination (GRE) verbal, quantitative, and writing areas to the Psychology Department.

All application materials must be submitted by March 1 in order for the applicant to be considered for admission for the following fall semester. Applicants are not admitted for enrollment in the spring or summer terms. Applicants should have an undergraduate grade point average of at least $3.0(\mathrm{~A}=4.0)$ for the last two years of undergraduate work and a combined verbal-quantitative GRE score of at least 1000. Exceptions may be made for special circumstances.

Completing an undergraduate major or minor in psychology is the desirable and typical undergraduate preparation for a graduate degree in psychology. Qualified applicants from other academic backgrounds may enter the psychology graduate program provided they have completed the prerequisites. In addition to completing at least one course each in general psychology, experimental psychology, and statistics, each specialization has additional required courses that must be completed prior to beginning the graduate program. Information on these courses can be obtained from the Department of Psychology.

## PROGRAM OF STUDY

The Master of Arts degree program requires 42 semester hours of graduate credit to complete the specializations in Clinical-Adult, and Industrial-Organizational psychology. The Master of Science degree with a specialization in Clinical Child and School psychology requires 40 semester hours for completion.

Clinical-Adult Specialization
Required courses (27 hours): PSYC 514, 520, 521, 531, 535, 537b, 538, 541b, 543b.
Required practicum (6 hours): PSYC 523.
Electives: (6 hours).
Thesis (3 hours): PSYC 599.
Industrial-Organizational Specialization

Required courses (27 hours): PSYC 520, 521, 571, 572, 573, 574, 575, 576, 580 plus one course selected from a 400 or higher-level management course approved by your adviser (3 hours).

Required practicum (3 hours): PSYC 525.
Electives: 6 hours.
Thesis (3 hours): PSYC 599.
Clinical Child and School Specialization
Required courses (30 hours): PSYC 514, 520, 521, 537a, 541a, 543a, 553, 556, 557, 565.
Required practicum (7 hours): PSYC 524.
Thesis (3 hours):PSYC 599, or
Final Project (3 hours): PSYC 598.

## EXIT REQUIREMENTS

Candidates for the Master of Arts must submit a thesis proposal for approval by a thesis advisory committee, carry out the proposed thesis, submit a written report, and complete an oral examination. Candidates for the Master of Science degree who do not intend to pursue the Specialist Degree must also successfully complete a thesis. MS candidates intending to pursue the Specialist Degree may choose to complete an acceptable research paper rather than a thesis.

## SECONDARY EDUCATION

## MASTER OF SCIENCE IN EDUCATION

The Department of Curriculum and Instruction offers a course of study leading to the Master of Science in Education (MS/Ed) degree with a major in secondary education and a concentration in any one of 9 teaching fields. The program is designed for professional educators who hold teaching positions in middle schools, junior and senior high schools, community colleges, or adult education agencies. The approved teaching fields are art, biology, chemistry, earth and space sciences, English/language Arts, foreign languages, history, mathematics, and physics.

The curriculum addresses two sets of program objectives: those related to professional education and those related to the teaching field. The following objectives are appropriate
to professional education: (1) to develop the ability to read with understanding published research in the teaching field; (2) to increase knowledge of philosophical, political, or social aspects of education; (3) to increase knowledge of how adolescents learn and develop; and (4) to develop the ability to critique one's own instruction. Teaching field objectives are: (1) to increase knowledge associated with a specific teaching field (e.g., art); (2) to increase knowledge associated with a related specific teaching field (e.g., an algebra teacher might wish to take advanced work in geometry); and (3) to enhance the ability to teach certain skills (e.g., science laboratory skills). Thus, the program generally aims at providing opportunities for self-renewal in pedagogy.

## ADMISSION

In addition to the Graduate School requirements, the requirements for admission include a grade point average of at least $3.0(\mathrm{~A}=4.0)$ during the last two years of undergraduate study, a grade point average of 3.0 or better in the teaching major, a minimum raw score of 32 on the Miller Analogies Test (MAT). Applicants not holding a valid teaching certification must pass the Illinois Certification Testing System (ICTS) Basic Skills Test. Applicants who do not meet these program requirements may be considered for admission; however, some conditions may be applied to that admission. Applicants may not enroll in any courses applicable to the graduate degree until they have consulted with the director of the graduate program in secondary education and with the graduate adviser in the teaching field.

## PROGRAM OF STUDY

The program of study is more than a series of individual courses. While courses must necessarily have a beginning and an end, students should view the program in its entirety. A minimum of 36 semester hours is required for degree completion. These are ordinarily distributed as follows:

General professional core (9 hours): EPFR 501, 506a or 506b, 515.
Secondary education (12 hours): CI 510. The remaining course hours are determined in consultation with the student's adviser.

Teaching field (15 hours): These hours are determined in consultation with the teachingfield adviser. The student must complete at least 42 semester hours in the teaching field (graduate and undergraduate course work combined) in order to be eligible for the degree. Thus, some students' programs of study will include more than 36 hours in order to satisfy this requirement.

While there is no general thesis requirement for this degree, a candidate may elect to prepare a thesis. Candidates who elect to prepare a thesis should refer to the thesis section in Chapter 1 of this publication and consult with appropriate advisers regarding adjustments in the final examination process. In lieu of a thesis many candidates choose to prepare an action research project that directly relates to their school and/or classroom.

Candidates who choose this option will be provided specific information regarding their action research project.

## EXIT REQUIREMENTS

Candidates must pass both written and oral final examinations based on the content of courses taken in the program. For candidates who prepare a thesis, the final oral examination will include a defense of the thesis.

## MASTER OF SCIENCE IN EDUCATION

## SECONDARY EDUCATION/ART <br> SECONDARY EDUCATION/BIOLOGY <br> SECONDARY EDUCATION/CHEMISTRY <br> SECONDARY EDUCATION/EARTH AND SPACE SCIENCES <br> SECONDARY EDUCATION/ENGLISH LANGUAGE ARTS <br> SECONDARY EDUCATION/FOREIGN LANGUAGES <br> SECONDARY EDUCATION/HISTORY <br> SECONDARY EDUCATION/MATHEMATICS <br> SECONDARY EDUCATION/PHYSICS

For a complete description of the programs of study in these nine teaching fields, please see the corresponding program descriptions. Earth and Space Sciences is housed in the Physics Department.

## SECONDARY EDUCATION

## MASTER OF ARTS IN TEACHING

The Master of Arts in Teaching (MAT) program is intended for persons who have successfully completed an undergraduate degree in the liberal arts or sciences at an NCATE-approved or otherwise appropriately accredited college or university, and desire to pursue licensure for teaching in a certifiable field at the middle school or high school levels. Those enrolled engage in a fourteen-month field-based program in a public school setting while also completing university-based studies culminating in a Master's Degree. The MAT is designed as a high-quality, technology-rich, accelerated certification program that takes one full academic year and two adjacent or contiguous summer sessions. Those holding undergraduate degrees in teacher education are ineligible for this program.

Upon graduating from the program, candidates will be eligible for certification to teach in their respective discipline in a school system in Illinois or in a state offering reciprocity. They will be broadly prepared in their content areas, and will possess leadership experience pertinent to the public school setting. Students progress through the program
as members of an interdisciplinary cohort and are required to work collaboratively within that cohort to investigate and make recommendations about school-based problems and issues.

## ADMISSION

As part of the admission process, candidates must submit the following: a transcript from all institutions of higher education attended in pursuit of the bachelor's degree or any additional course work beyond the bachelor's degree; a completed application form, a resume that includes appropriate references, an application fee of $\$ 100$; two letters of reference from content area faculty members or professionals who have knowledge of the candidate's undergraduate performance; passing scores from the Illinois Certification Testing System Test of Basic Skills Test (September or December test dates are recommended) and the Illinois Certification Testing System Subject Matter Knowledge Test for the relevant content area. Candidates for admission need to successfully pass both test no later than December of the year preceding the desired admission date to ensure scores will be reported to SIUE in time for the annual Admission Committee meeting.

In addition, candidates must meet all requirements for admission to the Graduate School as outlined in the most recent SIUE Graduate Catalog, and must attend MAT admission sessions as scheduled. Candidates submitting application materials after February 1 cannot be guaranteed, but may be permitted, enrollment with that summer's MAT cohort at the discretion of the MAT Admissions Committee. Applications for the program are processed once a year beginning in February.

In reviewing applications for the MAT program, the following factors are taken into consideration: recommendations from respective content area adviser; overall undergraduate grade point average (a 2.75 minimum is required, $\mathrm{A}=4.0$ ); likelihood for successful completion of the program, as reflected through information submitted with the application, e.g., evidence of success in academic and/or work experience directly related to teaching and learning; scores for the on-site essay; scores from the Illinois Certification Testing System; availability of appropriate local public school placements for field experience and an internship in the candidate's specific content area; and the balance of admissions decisions by content area.

## PROGRAM OF STUDY

Candidates must successfully complete each block of the program. The blocks integrate six strands of pedagogical knowledge through the program. Students are expected to complete their degree in two summer blocks and one academic year as members of a cohort group. To complete requirements for the degree within the specified 14 months, candidates enroll in the following blocks to earn a minimum of 36 semester hours.

Block One: Introduction to MAT (6 hours, summer)

Includes pedagogy, classroom management, educational psychology, special education, teaching literacy in the content areas, professional portfolio/AAMtechnology, foundations of education.
Block Two: Seminar in Pedagogical Development (9 hours, fall)
Includes 100 hours of observation, plus subjects listed above.
Block Three: Seminar in Pedagogical Development (12 hours, spring)
Includes 10 weeks of clinical student teaching, plus subjects listed above.
Block Four: Culminating MAT Seminar (9 hours, summer) Includes the culminating project/product, portfolio, and the AAM unit or lesson plan.

All MAT students will be required to take the Methods of Teaching course offered in their respective discipline. Additional content area courses may be required contingent upon transcript and document assessment by faculty advisers in the College of Arts and Sciences. As required by the State of Illinois all candidates must pass the Basic Skills Test prior to enrollment in the MAT program; pass the content test in their respective discipline prior to student teaching; and pass the Assessment of Professional Teaching test prior to entitlement for certification as a "highly qualified" teacher.

In addition, students must maintain a minimum overall GPA of 3.0 or better; attend summative conferences at the completion of each semester with university approved professors and public school personnel; obtain successful field experience evaluations at the end of each semester; and apply for and receive an Illinois substitute teaching license for the fall semester of enrollment.

## EXIT REQUIREMENTS

To graduate the student must prepare and share publicly a professional exhibit to demonstrate professional growth over the 14-month degree program; publicly present results and recommendations from an action research collaborative project to a university and school faculty review committee; prepare a professional portfolio that contains evidence of growth towards competency for each of the Illinois Professional Teaching, Illinois Technology, and Illinois Language Arts Standards for all teaching; and successfully implement an instructional unit or lesson plan employing Library of Congress Adventure of the American Mind digital resources.

## SPECIAL EDUCATION

## MASTER OF SCIENCE IN EDUCATION

The Department of Special Education and Communication Disorders offers a program of studies leading to the Master of Science in Education (MSEd) degree in special education. This graduate program offers three options. The first option is designed to provide advanced training for certified elementary, secondary, or special education teachers who want additional expertise in the area of special education. Individuals
choosing this option are prepared in the areas of characteristics, methodology, assessment, consultation, collaboration, and supervision. They may function in roles such as general education teaching partner with the special education teacher, special class teacher, resource room teacher, consulting teacher, supervisory, or inclusion consultant. The second option is designed to provide advanced training in the area of curriculum adaptation for certified special education teachers and leads to preparation for an advanced certificate, Learning Behavior Specialist II, in curriculum adaptation. Individuals choosing this option are prepared in the areas of collaboration, consultation, assessment, supervision, and curriculum adaptation and modification. They may function in roles such as special class teacher, resource room teacher, consulting teacher, supervisor, or inclusion consultant. The third option provides specialized training for certified elementary or secondary teachers who want to obtain a second teaching certificate in special education. Individuals choosing this option are prepared in the areas of characteristics, assessment, methods of teaching, collaboration, and assistive technology. They may function in roles such as special class teacher, resource teacher, or consulting teacher.

## ADMISSION

In addition to the requirements of the Graduate School, the Department of Special Education and Communication Disorders requires applicants to present a raw score of 32 or higher on the Miller Analogies Test (MAT). Those who fail to achieve the minimum score on the test may be considered for admission on the basis of grade point average and professional experience. Applicants must also hold a current initial teaching certificate in special, elementary, or secondary education to be admitted.

Applicants complete an application for admission which is available in the Special Education and Communication Disorders Department office, Founders Hall 1101 or online at: www.siue.edu/GRADUATE. Candidates seeking a second teaching certificate must also complete an application through the Office of Clinical Experience, Certification, and Advisement, Founders Hall 1110. Each candidate is required to meet with his/her assigned adviser as soon as possible after notification of admission to determine which option is appropriate and to discuss the candidate's official program of study.

## PROGRAM OF STUDY

The minimum number of semester hours required to complete the degree program for the Master of Science in Education in special education is 36, not to include any courses at the 400 level. In some instances, additional hours may be required; these hours are determined in a conference between the student and the assigned graduate adviser. Requirements for completing the degree are as follows:

General professional core (9 hours): EPFR 501, 506a or 506b, 515.
Special education core (9 hours): SPE 514, 575, 595.

Final Project: Preliminary planning of a final project is initiated in SPE 501. SPE 595 includes completion of the final project and oral presentation.

Professional Development option (18 hours*): SPE 515 and electives in special education at the 500 level (two courses at the 500 level from another department may be included if prior approval is granted by the candidate’s adviser).

Learning Behavior Specialist II preparation option (18 hours*): SPE 506, 512, 515, 520, 524, 540.

Second Certificate option (18 hours*): SPE 502, 506, 511, 516, 522, 540.

* If the candidate is not currently teaching, he/she must enroll in SPE 578, Field Study, for a degree total of 39 hours. For candidates choosing the Learning Behavior Specialist II option, the candidate must enroll in SPE 578 concurrently with SPE 524. For candidates choosing the Professional Development option, enrollment in SPE 578 can be concurrent with any special education 500 elective. For candidates choosing the Second Certificate option, enrollment in SPE 578 must be concurrent with SPE 522.


## EXIT REQUIREMENTS

The final examination, which covers the content of special education courses, is taken while enrolled in SPE 595. Students must attain a grade of at least B to pass the examination. Students may take the examination twice. For candidates seeking the second certificate, the Illinois Learning Behavior Specialist I Exam and the Assessment of Professional Teaching must be passed prior to certificate entitlement. For candidates seeking the advanced certificate, the Learning Behavior Specialist II Exam must be passed prior to certificate entitlement.

## SPEECH-LANGUAGE PATHOLOGY

## MASTER OF SCIENCE

The Department of Special Education and Communication Disorders offers a program leading to the Master of Science degree in speech-language pathology. The graduate program in speech-language pathology is accredited by the Council of Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA).

Students who complete the program are prepared to accept professional opportunities in health care facilities, community clinics, private practice, and public schools. The program combines classroom instruction and research and provides opportunities for graduate internships in a variety of settings. Students completing the prescribed
program are eligible for eventual certification by ASHA, an Illinois license in SpeechLanguage Pathology, and Type 73 certificate to work in the public schools. Students seeking a Type 73 certificate must pass the Illinois Test of Basic Skills and the Illinois Specialty Content Area Test for Speech-Language Pathologists: Nonteaching. Students must pass the Illinois Test of Basic Skills before completing their program.

## ADMISSION

To be considered for admission to the graduate program students must submit copies of the application for graduate study, copies of undergraduate and graduate transcripts and scores from the Graduate Record Examination (GRE) to the Graduate School. The student must also submit three letters of recommendation, with one being from outside the student's academic program to the program director of the Speech-Language Pathology program in the Department of Special Education and Communication Disorders. Recommendation forms may be obtained from the program's website. Students must document a 3.0 grade point average ( $\mathrm{A}=4.0$ ) to apply. Admission is a competitive process. Not all qualified applicants will be admitted to the program.

The majority of students have completed a bachelor's degree in speech-language pathology with specific undergraduate course work. Some provision is made for students with degrees in related fields following the completion of undergraduate course work in speech-language pathology and audiology.

## PROGRAM OF STUDY

Thirty-six (36) semester hours of acceptable graduate credit are required to complete the Master of Science degree in speech-language pathology. These hours include eleven (11) core courses, two electives, and a culminating comprehensive examination or eight core courses, three electives, and a culminating thesis.

Students in the program must maintain a grade point average of 3.0 in all graduate courses. No credit is allowed toward a graduate degree in courses in which a grade below C is earned. The program has two plans through which the program requirements are fulfilled.

Thesis Plan

Required courses (16 hours): SPPA 503, 520, 544, 545, 548, 560
(5 - 6 hours from the following): SPPA 540, 541, 542, 543, 555, 547, 551
Electives (8-9 hours) within the specialization or in related areas.
Thesis (6 hours): SPPA 599.
Non-thesis Plan

Required courses (30 hours): SPPA 503, 520, 540, 541, 542, 544, 545, 555, 547, 548, 560 Electives: (minimum of 6 hours) within the specialization or in related areas.

## EXIT REQUIREMENTS

All students must pass either a written or an oral comprehensive examination administered by the graduate faculty in speech-language pathology. The examination covers the broad areas of speech and hearing sciences, speech-language pathology, and audiology. Students may choose the thesis option in lieu of a written examination. In addition students must pass the Illinois Test of Basic Skills before completing their program.

## SCHOOL OF ENGINEERING

Dean: Paul A. Seaburg
The School of Engineering offers Master of Science degree programs in civil engineering, computer science, electrical engineering, and mechanical engineering. These programs are designed to meet the needs of both traditional and non-traditional graduate students, in particular the needs of people who are employed in the region served by the University and who wish to pursue a master's degree by taking courses in the evening. Part-time students who take advantage of summer term offerings can complete a degree program in two to four years. Full-time students can complete a degree program in approximately one and one-half years.

## COOPERATIVE DOCTORAL PROGRAM

Faculty in the School of Engineering participate with the College of Engineering faculty at Southern Illinois University Carbondale in offering a cooperative program leading to the Doctor of Philosophy degree in Engineering Science. The student may concentrate study in one of three areas including mechanics, electrical systems, and fossil energy. Prospective students may initiate application procedures at either campus and may enroll in courses at either or both campuses concurrently. The doctoral degree is conferred by Southern Illinois University Carbondale. For application procedures, refer to the section on admission to cooperative doctoral programs in Chapter 1 of this catalog. For more detailed information, contact the department directly at either Carbondale or Edwardsville.

CIVIL ENGINEERING

MASTER OF SCIENCE

For the Master of Science degree in civil engineering, courses are offered under general civil engineering topics in the specialized sub areas of environmental, structural, and transportation engineering. Courses are generally offered in the evenings and late afternoons annually or biennially. Full-time and part-time study options are available.

## ADMISSION

In addition to meeting all Graduate School admission requirements, applicants must have a cumulative grade point average in all undergraduate engineering, mathematics, and science courses of at least 2.75 on a 4.0 scale or $70 \%$ on other scales. For those not meeting this requirement and having at least four years of work experience, supporting evidence (such as a letter of explanation from the applicant, high GRE scores, letters of recommendation from employers, and PE licensure) will also be considered.
International students are encouraged to submit TOEFL and GRE scores along with other required graduate admission documentation.

If admitted, those who do not have a BS degree in civil engineering will be required to complete prerequisite courses that are not for graduate credit. Note that an MS degree will not typically qualify a candidate to take the PE licensure examination.

Further information on the Department's policies can be found on the Department's web page (http://www.ce.siue.edu/CIVIL/grad).

## PROGRAM OF STUDY

After admission and before enrolling in any courses, students are required to meet with the graduate program director, who appoints (in consultation with the student) an advisory committee suited to the student's background and interests. The advisory committee assists the student in planning a program of study; this plan is to be completed by the end of the first semester.

Because of the importance of communication to the engineering profession and the need for excellent writing skills to complete degree requirements, all students are required to complete satisfactorily a technical writing course. Students with good writing skills may elect to submit an essay to be evaluated for conditional exemption from the English course requirement. If conditional exemption is granted, the student will substitute another approved course in the plan of study.

Thesis and non-thesis options are available. Students electing the thesis option must complete a minimum of 30 semester hours. At least 20 semester hours must be in courses taught in civil engineering and at least 15 semester hours must be at the 500 level. Students electing the non-thesis option must complete a minimum of 31 semester hours.

Thesis option

Students will be guided in thesis work by a thesis adviser with the assistance and concurrence of the advisory committee. The number of hours to be awarded for thesis credit (CE 599) is to be specified by the advisory committee prior to approval of the thesis proposal. Thesis credit counts as part of the 30 credits required for the degree. Writing a thesis involves an intensive research effort and may require about six months to complete. The thesis must be formally accepted by Graduate Records.

Non-thesis option
Students prepare a research paper, the topic of which is mutually agreed upon by the student and the advisory committee. One credit hour is awarded for non-thesis credit (CE 593) which counts as part of the 31 credits required for the degree. Guidelines are available on the program web site.

## EXIT REQUIREMENTS

When all other program requirements are satisfied, the student schedules an oral final examination with the advisory committee. The final examination is primarily based on the thesis or research paper, depending on the option the student has chosen. A majority vote of the advisory committee is required for passing. All examinations are open to interested parties.

## COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE /

## MASTER OF SCIENCE DEGREES IN CIVIL ENGINEERING (3+2 PROGRAM)

The Department of Civil Engineering offers a five-year program leading to the Bachelor of Science (BS) and the Master of Science (MS) degrees. Students with senior level status in Civil Engineering (at least 90 semester hours) and an overall grade point average of $3.0(\mathrm{~A}=4.0)$ in engineering, mathematics, and physical science courses may be admitted to the BS/MS program that allows them to earn 30 hours of graduate-level credit ( $400-$ and 500 -level) during their combined fourth and fifth years. These students are eligible to apply for assistantships in the department. An application for degree-seeking status as a graduate student must be approved by Graduate Admissions and the Graduate Admissions Committee in Civil Engineering. A program outline must be submitted for approval by Graduate Records and the director of the graduate program in civil engineering prior to enrollment in any courses to be included as a part of the master's program. Official admission to the graduate program with status as a classified graduate student is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## COMPUTER SCIENCE

## MASTER OF SCIENCE

The Department of Computer Science in the School of Engineering offers a Master of Science degree in Computer Science. The CS program embodies both applied and theoretical components, but focuses solidly on applied areas of computer science such as software engineering, computer system architectures, data communications, computer networks, and artificial intelligence. The program is designed to meet the needs of both full-time and part-time students. In order to accommodate those students that work full time, all core courses and the majority of elective courses are offered in the evening.

Students who complete the degree program will be prepared for positions such as software developer, consultant, systems programmer, project leader, or application software specialist or for advanced graduate work.

In addition to the master's degree, the CS program offers specialized course sequences for those who are not pursing an advanced degree, but wish to update their knowledge of computing in specific areas.

## ADMISSION

The requirements for admission to the graduate major in computer science are:

1. A bachelor's degree from an accredited college or university. An undergraduate major in science, engineering, mathematics, or computing is desirable, but individuals with other backgrounds who are interested in the program are invited to discuss their career objectives with the program director.
2. An undergraduate grade point average of $2.75(\mathrm{~A}=4.0)$ or above.
3. An international applicant whose native language is not English is required to demonstrate proficiency in English. A minimum score of 600 on the TOEFL, taken within two years prior to the term for which admission is sought, is required.
4. GRE scores of the applicant. Normally, an applicant is required to take the Graduate Record Exam (GRE) and submit the scores as part of the application. However, under some circumstances this requirement may be waived in lieu of extensive work experience in the computer science field. To apply for a GRE waiver, an applicant should submit letters of recommendation and evidence of work experience in the field. Completion of prerequisite and required courses with grades of B or better, within two years prior to the term for which admission is sought, may also be considered in place of the GRE scores as supporting eligibility to enter the program.
5. Submission of a statement detailing the applicant's background and career plans. Forward your statement detailing your background and career plans to the CS Graduate Program Director, Campus Box 1656, Southern Illinois University Edwardsville (SIUE), Edwardsville, IL 62026.

## PREREQUISITE COURSES

Students entering the program will need the specific background detailed below. Normally a grade of B or above is required in each of the prerequisite courses. For those students who do not have all of the necessary background, some of the prerequisite courses may be completed after enrolling in the program. Please note that none of the prerequisite courses actually count toward the MS in CS.

## Proficiency in:

CS Courses

C++ Language
Algorithms and Data Structures
Computer Organization
Operating Systems

## Math Courses

Calculus I
Discrete Mathematics
Two Additional Math Courses

CS 140, CS 150, and CS 240
CS 340
CS 312
CS 414

MATH 150
MATH 223
Selected from: Calculus II (MATH 152), Linear Algebra (MATH 321), Statistics (STAT 244), Graph Theory (MATH 422), or other approved courses

## PROGRAM OF STUDY

The program requires 34 semester hours and consists of three core courses and completion of either a Thesis option or Topic Paper option. The Thesis option requires six elective courses with 6 semester hours of thesis. The Topic Paper option requires eight elective courses and a one-semester topic paper. At least 19 of the 34 hours must be 500-level courses or above. For the purposes of assessment, students are also expected to develop a Project Portfolio: a collection of the more significant software projects that the student created, either individually or as part of a team, in the courses that constituted the student's program.

Students in the program must maintain a grade point average of at least 3.0 in all graduate courses. Any course in which a grade below C has been earned will not count toward the graduate degree.

Core Courses (10 hours)
CS 456 Advanced Algorithms
CS 514 Operating Systems
CS 516 Computer Architecture
CS 598 Topic Paper

## Elective Courses

Twenty-four (24) hours required by the Topic paper option; 18 hours together with 6 hours of CS 599 required by the Thesis option. Up to 6 hours of courses not listed below may be taken for graduate credit with the approval of the CS Program Director.

CS 423-3 Compiler Construction
CS 434-3 Database Management Systems
CS 438-3 Artificial Intelligence
CS 447-3 Networks and Data Communications
CS 454-3 Theory of Computation
CS 456-3 Advanced Algorithms
CS 482-3 Computer Graphics
CS 516-3 Computer Architecture
CS 525-3 Principles of Simulation
CS 530-3 Software and Systems Management
CS 535-3 Software Engineering
CS 547-3 Network Programming
CS 550-3 Object Oriented Design and Programming
CS 565-3 Numerical Computation
CS 582-3 Topics in Computer Graphics
CS 583-3 Topics in Programming Languages
CS 584-3 Topics in Artificial Intelligence
CS 587-3 Topics in Computer Networking
CS 590-3 Topics in Computer Science
CS 595-3 Independent Study

## Non-Thesis Option

Students taking this option will be required to
1 take a total of 33 hours of graduate course work;
2. complete at least one three-course sequence in an area of concentration that is approved by the program's graduate committee; and
3. complete CS 598-1, a Topic Paper in the student's area of concentration.

An advisory committee consisting of a chairperson and two additional graduate faculty will be responsible for reviewing the student's Project Portfolio, supervising the student's Topic Paper, and conducting the student's oral examination. Prior to registering for CS 598, the student should obtain the approval of the advisory committee for the Topic paper.

Thesis Option
The culminating thesis is a research project that must build on existing knowledge or include some novel elements. The project may include major software implementation, software development as part of a research effort or may be purely research oriented and primarily theoretical or empirical in nature. A project is expected to contain some novel
element, which could include a new algorithmic technique, an empirical study of existing techniques, or a unique application of some existing techniques. Students may participate in individual or group projects, but the final report and presentation must be the work of a single student. An advisory committee consisting of a chairperson and two additional committee members will be responsible for reviewing the student's Project Portfolio and overseeing the thesis project. When this option is selected, the Topic Paper may serve as the proposal for the thesis. When the advisory committee determines that CS 598 has been completed, the student may register for CS 599. CS 599 will be taken for a total of 6 hours of credit.

## EXIT REQUIREMENTS

## Thesis Option

The project will normally be completed during the last semester or two in the program, but selection of the advisory committee and of the CS 598 Topic Paper must be completed before the final semester. The final examination will include an oral presentation of the thesis and an oral examination on the thesis conducted by the advisory committee.

Non-thesis Option
The final examination will include a presentation by the student and an oral exam conducted by his or her Committee. The oral exam will consist of questions related to the student's Topic Paper and the student's area of concentration.

## COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE / MASTER OF SCIENCE DEGREE IN COMPUTER SCIENCE (3 + 2 program)

The Department of Computer Science offers a five-year program leading to the Bachelor of Science (BS) and the Master of Science (MS) degrees. Undergraduates with senior level status (at least 90 semester hours) and a grade point average of at least 3.0 ( $\mathrm{A}=4.0$ ) overall may be admitted to the BS-MS program. They may then take 34 semester hours of graduate level courses (400- and 500-level) during their combined senior and graduate years. An application for degree-seeking status as a graduate student must be approved by the Graduate School and the Graduate Committee in Computer Science following the procedures described under "Admission." A program outline must also be submitted for approval by Graduate Records and the director of the graduate program in computer science prior to enrollment in any courses to be included as a part of the master's program. Official admission to the program and to status as a classified graduate student is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## ELECTRICAL ENGINEERING

## MASTER OF SCIENCE

For the Master of Science degree in electrical engineering, courses are offered primarily in the areas of communication systems, computer systems, computer vision and image processing, control systems, and signal processing. Course work in power systems is also available. Most 500-level courses are offered at least once every year in the evening. The 400-level courses may also be scheduled during the day.

## ADMISSION

In addition to meeting the requirements for admission to the Graduate School, applicants must have an undergraduate grade point average of at least $2.75(\mathrm{~A}=4.0)$ in engineering, mathematics, and physical science courses.

Applicants should normally have a baccalaureate degree in electrical engineering from an ABET-accredited program. Applicants whose undergraduate studies were completed at institutions in countries other than the United States must have a baccalaureate degree in electrical engineering comparable to the United States bachelor's degree. Applicants with degrees other than a baccalaureate degree in electrical engineering will be considered on an individual basis. Those with baccalaureate degrees in science and engineering, other than electrical engineering, may be admitted, subject to completion of appropriate undergraduate electrical engineering courses.

In exceptional cases, the graduate admissions committee may consider applicants who meet all Graduate School admission standards but who do not meet certain specified program admission requirements. The committee may consider other evidence that indicates high promise of the applicant's success in the program. Such supportive evidence may include extensive professional experience, published research, patents, or outstanding graduate-level work at another institution.

After admission and before enrolling in any courses, students are required to meet with the graduate program director who appoints, in consultation with the student, an advisory committee suited to each student's background and interests. The chair of the advisory committee serves as the student's academic adviser. Students are urged to file an approved plan of study with their academic adviser by the end of the first term of enrollment in the program.

## PROGRAM OF STUDY

The program of study requires a minimum of 33 semester hours of graduate credit, at least 18 of which must be at the 500-level. Program core requirement specifies a minimum of three courses as follows:
a. ECE 552 Advanced Stochastic Processes
b. At least one course from two of the three categories listed below:

Category 1: Computer Systems ECE 577, 581, 582, 584
Category 2: Communications ECE 570, 572, 574, 575

Category 3: Signals and Systems ECE 532, 538, 539, 563
Out of the 33 required hours, at least 27 must be in electrical engineering. Beyond that, courses may be taken from other departments, if approved by the graduate adviser. No special approval is necessary for the following out-of-department courses:

CS 438 Artificial Intelligence
CS 447 Networks and Data Communications
CS 482 Computer Graphics
CS 514 Operating Systems
CS 547 Network Programming
CS 582 Advanced Computer Graphics
MATH 421 Linear Algebra II
MATH 451 Introduction to Complex Analysis
MATH 462 Engineering Numerical Analysis
MATH 464 Differential Equations II
MATH 466 Numerical Linear Algebra with Applications
MATH 501 Differential Equations and the Fourier Analysis
MATH 502 Advanced Calculus for Engineers
MATH 552 Theory of Ordinary Differential Equations
MATH 565 Advanced Numerical Analysis
ME $550 \quad$ Modern Control
PHYS 415a Wave Mechanics and Atomic Physics
PHYS 415b Wave Mechanics and Atomic Physics
PHYS 417 Nuclear Physics
PHYS 450 Solid State Physics
PHYS 503 Experimental Methods in Optical Spectroscopy
Thesis and non-thesis options of study are available:
Thesis option
The program consists of the core courses, elective courses, and thesis work in the amount of 6 credit hours. Student will be guided by the adviser with the assistance and concurrence of the advisory committee. Thesis work involves an intensive research effort and generally requires about six months to complete.

Non-thesis option
The program consists of the core courses, elective courses, and a research project. The research project is selected in consultation with the chairperson of the advisory
committee. The project typically involves analysis, design, and possible implementation of a system based on methodologies established in the electrical engineering course work.

## EXIT REQUIREMENTS

When all other program requirements are satisfied, the advisory committee will schedule an exit oral presentation or examination, depending on the option chosen by the student. The examination is based on the course work and the thesis or research project.

## COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE /

## MASTER OF SCIENCE DEGREES IN ELECTRICAL ENGINEERING (3+2 PROGRAM)

The Department of Electrical Engineering offers a five-year program leading to the Bachelor of Science (BS) and Master of Science (MS) degrees. Students with senior level status (at least 90 semester hours) and a grade point average of 3.0 ( $\mathrm{A}=4.0$ ) overall may be admitted to the BS/MS program that allows them to earn 33 hours of graduate level credit (400-and 500-level) during their combined fourth and fifth years. An application for degree-seeking status as a graduate student must be approved by the Graduate School and the Graduate Committee in Electrical Engineering. A program outline must also be submitted for approval by the Graduate Dean and director of the graduate program in electrical engineering prior to enrollment in any courses to be included as part of the master's program. Official admission to the graduate program and to status as a classified graduate student is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## MECHANICAL ENGINEERING

## MASTER OF SCIENCE

For the Master of Science Degree in mechanical engineering, courses are offered in the area of fluid mechanics and thermal sciences and the area of mechanics and system dynamics. The core courses are offered annually; other courses are generally offered once every two years.

## ADMISSION

In addition to meeting the Graduate School requirements for admission, applicants must have an undergraduate grade-point average of at least 2.75 ( $\mathrm{A}=4.0$ ) in engineering, mathematics, and physical science courses. Applicants should have a baccalaureate degree in mechanical engineering from an ABET-accredited program. Applicants who completed a non-ABET accredited program or whose undergraduate studies were in a country other than the United States must have a baccalaureate degree in mechanical
engineering which is comparable to the United States' bachelor's degree and are encouraged to take the Graduate Record Examination (GRE) (verbal, quantitative, and analytical portions) to support their applications. Applicants from selected areas of mathematical and physical science or whose undergraduate engineering degrees are not in mechanical engineering will be considered for admission on an individual basis. Entry into graduate studies without the complete baccalaureate preparation in mechanical engineering may result in the student being required to remove the deficiencies prior to initiating graduate study or concurrently with their graduate programs.

In exceptional cases, the graduate admissions committee may consider applicants who meet all of the Graduate School admission standards but who do not meet certain specified program admission requirements. The committee may consider other evidence that indicates high promise of the applicant's success in the program. Such supportive evidence may include high scores on the GRE, professional registration, extensive professional experience, professional publications, or satisfactory graduate level work.

## PROGRAM OF STUDY

The department offers both thesis and non-thesis options of program of study. Both options require 30 credit hours. To take full advantage of the academic experience available, however, students are encouraged to take the thesis option. Of the 30 credit hours required, at least 15 credit hours must be at the ME 500 level (which may include ME 599 (thesis) up to 6 credit hours). At least 21 credit hours must be in mechanical engineering courses and 6 hours must be in mathematics. The discipline of mechanical engineering has a close interface with civil engineering in the areas of stress analysis and elasticity and with electrical engineering in the areas of system dynamics and control theory. Whenever possible, courses in these areas will be cross-listed so as to enrich the variety of course offerings for students in all programs. The specific program of study is selected by the student and approved by the student's adviser. The program allows one elective course that may be selected from any of the courses listed in the current Graduate Catalog if they meet the prerequisites. All students are required to complete either ME 530, Advanced Dynamics, or ME 575, Advanced Fluid Mechanics.

Students will be guided in thesis work by a thesis adviser with the assistance and concurrence of an advisory committee. The thesis topic will be selected from an area in mechanical engineering and approved by the student's adviser. When possible, part-time students will be encouraged to select topics complementing their professional responsibilities. Writing a thesis involves an intensive research effort and students are encouraged to initiate their thesis work early in the program, even before registering for any thesis credit.

In the non-thesis option, students are required to prepare a research paper, the topic of which is mutually agreed upon by the student and the advisory committee. No credit is awarded for completion of this research paper.

## EXIT REQUIREMENTS

When all other program requirements are satisfied, a final examination on the course work and related material on the thesis or research paper will be given. This examination is conducted by the advisory committee. In the thesis option, the final examination is an oral examination directed primarily at the material in the thesis. In the non-thesis option, the final examination may include written elements as well as an oral examination including questions on the research paper.

## COMBINED PROGRAM LEADING TO BACHELOR OF SCIENCE/MASTER OF SCIENCE DEGREES IN MECHANICAL ENGINEERING (3+2 PROGRAM)

Mechanical Engineering offers a five-year program leading to the Bachelor of Science (BS) and Master of Science (MS) Degrees. Students with senior level status (at least 90 semester hours) and a grade point average of 3.0 ( $\mathrm{A}=4.0$ ) overall may be admitted to the BS/MS program that allows them to earn 30 hours of graduate level credit (400- and 500level) during their combined fourth and fifth years. An application for degree-seeking status as a graduate student must be approved by Graduate Admissions and the Director of the mechanical engineering graduate program. A program outline must also be submitted for approval by Graduate Records and the Director of the mechanical engineering graduate program prior to enrollment in any courses to be included as part of the master's program. Official admission to the graduate program and to status as a classified graduate student is made only after the award of the baccalaureate degree. In no case will a graduate degree be conferred before all requirements for both degrees have been completed.

## SCHOOL OF NURSING

Dean: Marcia Maurer

The Graduate Program in Nursing, accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120. (202) 887-6791, www.aacn.nche.edu/accreditation, prepares nurses for advanced practice and healthcare systems management in six areas: Health Care and Nursing Administration, Nurse Anesthesia, Nurse Educator, Family Nurse Practitioner, Public Health Nursing, and Clinical Nurse Leader. The Nurse Anesthesia specialization is also accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs.

We believe that nursing is a scientific and humanistic profession. Graduate nursing education emphasizes development of leadership skills and the expertise necessary to assume complex, specialized roles while providing direct and indirect nursing care to individuals, groups, and families. We focus on knowledge of community resources and the aspects of primary, secondary, and tertiary modalities in health care. Clinical
experience in community agencies and hospitals is an integral part of the program. Knowledge and experience related to advanced practice in nursing are incorporated into the program. Clinical practicum experiences are required and are individualized according to the student's professional experience, interest, and academic needs. Faculty act as facilitators while creating a supportive learning community.

Each student's program is designed to meet the general requirements of the Graduate School and the requirements of the School of Nursing. Full-time and part-time progressions are possible in all specializations except Nurse Anesthesia. The student may choose to complete a thesis or a project to demonstrate competence in scholarship.

Graduates of some of the specializations in the master's program in nursing are eligible for certification examinations and for appointment to advanced practice nursing positions.

## ADMISSION

In addition to the University requirements for admission (which include application to the Graduate Admissions Office, submission of official transcripts, and an application fee), the School of Nursing admission requirements must be met. Applicants to any currently offered specialization in the graduate program in nursing, in which there are openings available, with the exception of the Nurse Anesthesia specialization, will be guaranteed admission if all of the following requirements are met:

1. Completion of the School of Nursing Self-Managed Application Process. Three positive references are required, with at least one from a person with a graduate degree in nursing or a related field.
2. Bachelor of Science in Nursing from a CCNE or NLNAC accredited program. (Graduates from non-NLNAC or CCNE accredited programs and from other countries will be considered under certain circumstances. Please contact the School of Nursing for more information.)
3. RN licensure in good standing.
4. Undergraduate Nursing GPA of 3.0 or better on a 4.0 scale.
5. Evidence of completion of an undergraduate statistics course with a grade of C or better.
6. A written statement of "Goals and Objectives" related to the reasons for pursuing a graduate degree.
7. Completion of a minimum of 1 year of professional nursing practice experience prior to enrollment in the first specialization clinical course.
8. Successful completion of a drug screen and a criminal background check, as specified by the School of Nursing, to be performed after initial acceptance to the program.

NOTE: APPLICANTS TO THE NURSE ANESTHESIA SPECIALIZATION
In addition to the above requirements, applicants to the Nurse Anesthesia specialization must also provide evidence of the following:

1. Completion of an undergraduate course in organic or biochemistry no more than 6 years prior to entering the program of study.
2. Completion of an undergraduate course in physics no more than 6 years prior to entering the program of study.
3. Grade point average of 3.0 or better on a 4.0 scale for the cumulative, basic sciences, and nursing courses.
4. At least one year of experience as a Registered Nurse in which the individual has had the opportunity to develop as an independent decision maker, and demonstrate psychomotor skills and the ability to use and interpret advanced monitoring techniques based on a knowledge of physiologic and pharmacological principles.
5. An interview with the Nurse Anesthesia Specialization Admissions subcommittee may be required.

In order to progress through the program, students will be required to provide evidence of current ACLS certification and PALS certification (through the American Heart Association).

## NOTE: APPLICANTS TO THE CLINICAL NURSE LEADER SPECIALIZATION

In addition to the University requirements for admission (which include application to the Graduate Admissions Office, submission of official transcripts, and an application fee), the following are required by the School of Nursing:

1. For those applicants with a Bachelor of Science Degree in Nursing, completion of items \# 1,2,3,4,5,6 and 8 listed under "ADMISSION" to the School of Nursing Graduate Program.
2. For those applicants with an Associate Degree in Nursing, completion of items \# 1, 3, 4, 6 and 8 listed under "ADMISSION" to the School of Nursing Graduate Program, and
successful completion of Phase I Coursework (total of 109 credit hours) in the CNL, RNMS Curriculum.
3. All applicants must have a minimum of 4 years of nursing practice as a Registered Nurse.

## ADMISSION REQUIREMENTS - POST-MASTER’S CERTIFICATE

In addition to the University requirements for admission (which include application to the Graduate Admissions Office, submission of official transcripts, and an application fee), the following are required by the School of Nursing:

1. Completion of items \# 1, 3, 6, 7, and 8 listed under "ADMISSION" to the School of Nursing Graduate Program.

2 Evidence of having graduated from a National League for Nursing Accrediting Commission (NLNAC) or Commission on Collegiate Nursing Education (CCNE) accredited master's program in nursing. Graduates from non-NLNAC accredited programs and from other countries will be considered under certain circumstances. Please contact the School of Nursing for more information.

In order to progress through the program, students will be required to provide a completed physical assessment/immunization form, proof of a current unencumbered Illinois license as an RN (Nurse Anesthesia majors and some of the Family Nurse Practitioner majors will be required to possess both Illinois and Missouri RN licenses), and evidence of current CPR certification (through the American Heart Association "Health Care Provider" course or the American Red Cross "CPR for the Professional Rescuer" course). All students must be trained on the use of the automatic and semiautomatic defibrillators.

All required verifications listed above must be kept up-to-date throughout enrollment in the program, with evidence in the student's file. Immunization requirements are reviewed annually and may change.

The academic retention requirements are consistent with those for all master's degree students according to the SIUE Graduate Catalog. Furthermore, Associate Degree Registered Nurses admitted to the Phase II graduate Clinical Nurse Leader coursework, who are unable to maintain retention standards in the graduate program, will be allowed to re-enter the RN-BS Option in Nursing in order to complete the requirements for the baccalaureate degree in nursing.

## PROGRAM OF STUDY FOR NURSING SPECIALIZATIONS

The program for the Master of Science degree in nursing consists of 34 semester hours for Health Care and Nursing Administration, 70 semester hours for Nurse Anesthesia, 41 semester hours for Nurse Educator, 34 semester hours for Public Health Nursing, 47 semester hours for the Clinical Nurse Leader, and 49 semester hours for the Family Nurse Practitioner Specialization.

The graduate nursing curriculum consists of graduate core curriculum content courses, advanced practice nursing core courses, specialization courses, and the successful completion of a thesis or terminal project. The purpose of the graduate core curriculum is to provide a strong foundation for all graduate nursing specializations. These courses include content in the conceptual basis of nursing, health policy, research, and professional role development. The advanced practice nursing core courses include content in advanced health and physical assessment, advanced physiology and pathophysiology, and advanced pharmacology. These courses are designed to provide the advanced practice student with knowledge and skills applicable to direct client care.

In each specialization, students enroll in advanced practice nursing courses that support the specialized practice areas. The specialization courses include practicum experiences designed to prepare an advanced practice nurse with knowledge and skills in public health nursing, anesthesia nursing, family nurse practitioner, nurse educator, or in health care and nursing administration.

Health Care and Nursing Administration (34 semester hours)
Core courses (9 hours): NURS 500, 504, 505.
Specialization courses (19 hours): NURS 590, 591, 592, 593, 594a, 594b, and an elective from the MBA, Business or PAPA programs.

Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Post-Master's Certificate: Health Care and Nursing Administration (25 semester hours*): NURS 590, 591, 592, 593, 594a, 594b, and nine hours of electives.

Nurse Anesthesia (70 semester hours.)
Core courses (12 hours): NURS 500, 504, 505, 507.
Advanced Practice Nursing Core Courses (15 hours): NURS 513a, 513b, 514, 515, 516.
Specialization courses (37 hours): NURS 529, 563, 564, 565a, 565b, 566a, 566b, 567a, 567b, 568a, 568b, 569a, 569b.

Thesis or project (6 hours): NURS 599 or 595 and one elective course.

Course work in this specialization prepares the student to take the certification examination

Post-Master's Certificate: Nurse Anesthesia (55 semester hours*) NURS 507, 513a, 513b, 514, 515, 516, 529, 563, 564, 565a, 565b, 566a, 566b, 567a, 567b, 568a, 568b, 569a, 569b.

Course work in this specialization prepares the student to take the certification examination

Nurse Educator with Clinical Focus Areas in Medical-Surgical Nursing, Pediatrics, Obstetrics, or Gerontology (41 semester hours)

Core courses (9 hours): NURS 500, 504, 505.
Advanced Practice core courses (11 hours): NURS 513a, 513b, 515, 516.
Specialization courses (11 hours): NURS 581, 582, 584, 585a, 585b.
Clinical focus area courses (4 hours): NURS 586a, 586b (Medical-Surgical) or 587a, 587b (Pediatrics) or 588a, 588b (Obstetrics) or 589a, 589b (Gerontology).

Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Nurse Educator With the Clinical Focus Area in Public Health (41 Semester hours)
Core courses (9 hours): NURS 500, 504, 505.
Advanced Practice core courses (3 hours): NURS 517.
Specialization courses (11 hours): NURS 581, 582, 584, 585a, 585b.
Clinical focus area courses (12 hours): NURS 551a, 551b, 552a, 552b.
Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Post-Master's Certificate: Nurse Educator with the Clinical Focus Area in MedicalSurgical, Pediatrics, Obstetrics, or Gerontology (26 semester hours*) , NURS 513a, 513b, 515, 516, 581, 582, 584, 585a, 585b, and 586a, 586b (Medical-Surgical) or 587a, 587b (Pediatrics) or 588a, 588b (Obstetrics) or 589a, 589b (Gerontology).

Post-Master's Certificate: Nurse Educator with the Clinical Focus Area in Public Health (26 semester hours*): , NURS 517, 581, 582, 584, 585a, 585b, 551a, 551b, 552a, 552b

Family Nurse Practitioner (49 semester hours).

Core courses (12 hours): NURS 500, 504, 505, 507.
Advanced Practice Nursing Core courses (14 hours): NURS 513a, 513b, 515, 516, 517.
Specialization courses (17 hours): NURS 571a, 571b, 572a, 572b, 573a, 573b, 576a, 576b, and 577.

Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Course work in this specialization prepares the student to take the certification examination.

Post-Master's Certificate: Family Nurse Practitioner (34 semester hours*): NURS 507, 513a, 513b, 515, 516, 517, 571a, 571b, 572a, 572b, 573a, 573b, 576a, 576b, and 577.

Course work in this specialization prepares the student to take the certification examination.

Public Health Nursing (34 semester hours)
Core courses (12 hours): NURS 500, 504, 505, 507.
Advanced Practice Nursing Core courses (3 hours): NURS 517.
Specialization courses (13 hours): NURS 551a, 551b, 552a, 552b.
Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Post-Master's Certificate: Public Health Nursing (19 semester hours*): NURS 507, 517, 551a, 551b, 552a, 552b.

* Credit hour requirements may be reduced if students have completed courses equivalent to those listed.

Clinical Nurse Leader: (For RN to MS progression—154 semester hours)
Transfer credits $=65$ credit hours

General Education hours required by SIUE = 21 credit hours
Undergraduate Nursing = 21 credit hours
Core graduate courses (9 hours): NURS 500, 504, 505.
Advanced Practice Nursing Core courses (14 hours): NURS 513a, 513b, 515, 516, 517.
Specialization courses (18 hours): NURS 416, 526a, 526b, 527a, 527b, 528b.
Thesis or project (6 hours): NURS 599 or 595 and one elective course.
Clinical Nurse Leader: (For BS to MS progression: 47 semester hours)
Core courses (9 hours): NURS 500, 504, 505.
Advanced Practice Nursing Core courses (14 hours): NURS 513a, 513b, 515, 516, 517.
Specialization courses (18 hours): NURS 416, 526a, 526b, 527a, 527b, 528b.
Thesis or project (6 hours): NURS 599 or 595 and one elective course.

## Thesis or Project

For any of the specializations, a student may choose to complete a thesis or a project and thereby demonstrate basic competence in nursing scholarship. The thesis or project is completed with the guidance of a thesis committee composed of three graduate faculty members, or project advisory committee composed of two graduate faculty members. Each committee must have one faculty member who represents the nursing specialization in which the student is enrolled. Each student's thesis or project plan is designed to meet the requirements of the Graduate School and those of the School of Nursing.

## EXIT REQUIREMENTS

## Master's

Each candidate for the Master of Science degree in nursing is required to participate in a final exit interview. The interview, administered by the student's advisory committee, includes questions concerning the following: the thesis or project, the student's development in the advanced practice nursing role, and recommendations for improvement in the program. Outcome characteristics of graduate nursing student are assessed by both the committee members and the student.

Near the end of each semester, all graduating students are required to participate in the Thesis/Project Presentation Day, during which they formally present their work to faculty and students and respond to any questions from the attendees.

## Post-Master's

Each candidate for the Post-Master's Certificate is required to participate in a final exit interview conducted by a selected committee of faculty. The interview includes questions concerning the student's development in the advanced practice nursing role and recommendations for the improvement of the program. Outcome characteristics of graduate nursing student are assessed by both the committee members and the student.

## PROFESSIONAL DEVELOPMENT SEQUENCES IN NURSING

The Professional Development Sequence (PDS) in Nursing Education (NURS 581, 582, 583, and 584) will provide a foundation in nursing education theory and skills for those employed as nurse educators in schools of nursing, hospitals, community agencies, and other organizations where nurses are employed in educator roles. Three of the courses (NURS 581, 582 and 584) may also satisfy a portion of the requirements for the Master’s Degree in Nurse Educator.

The Professional Development Sequence in Nursing Management will provide a foundation in management skills for nurses who function as nurse managers in acute care, primary care, long-term care and community agencies or for nurses interested in pursuing a career in nursing management. Two of the courses (NURS 591 and 592) may also satisfy a portion of the requirements for the Master’s Degree in Health Care and Nursing Administration.

## ADMISSION

Nurses with a minimum of a baccalaureate degree may take the PDS upon admission to the Graduate School as an unclassified student (if not concurrently in a related master's program) and approval of the program coordinator.

## PROGRAM OF STUDY

PDS in Nursing Education (11 hours): NURS 581, 582, 583, 584.
PDS in Nursing Management (12 hours): NURS 491, 493, 591, 592.

## EXIT REQUIREMENTS

Students must maintain a grade of "C" or higher to earn a certificate. Students receiving a grade below a " C " in any course may continue with the sequence but will not receive a certificate of completion from the School of Nursing.

