



Duluth Campus

Applied and Computational Mathematics M.S.

Mathematics & Statistics

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Mathematics and Statistics, 140 Solon Campus Center, 1117 University Drive, Duluth, MN 55812 (218-726-8747; fax: 218-726-8399)

Email: math.dgs@d.umn.edu

Website: <http://www.d.umn.edu/math/index>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 35
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This program is for those wishing to pursue careers that use applied mathematics and statistics in science, industry, business, and teaching, and for those wishing to go on for doctoral degrees in mathematics or statistics. It emphasizes the use of modern modeling techniques and computational methods with areas of concentration available in continuous modeling, probability/statistics, and discrete mathematics. The faculty is drawn largely from the Department of Mathematics and Statistics, but also includes members from other departments.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An undergraduate degree in mathematics or statistics is preferred. Students with degrees in any major and with a substantial background in mathematics or statistics are also encouraged to apply.

Other requirements to be completed before admission:

Other requirements include the following:

- Scores from the General Test of the Graduate Record Examination, which must be uploaded to the online application (unofficial scores are permissible for application).
- Letters of recommendation from three people who are familiar with the applicant's educational/professional background (Request forms for these letters are part of the online application.)
- Statement on career objectives and motivation (also a part of the online application)

Students applying for financial aid should have all application materials submitted by February 15; late applications will be considered if resources are available. Applicants seeking to enroll during the fall semester must submit all materials by May 20. For initial enrollment in the spring semester, the deadline is November 1. Students can be admitted any term. Students whose native language is not English must submit TOEFL scores.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS



- Total Score: 6.5
- MELAB
- Final score: 80

Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 15 to 19 major credits, 6 to 10 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 25 to 29 major credits and 6 to 10 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project must be presented to the department in a seminar or colloquium, and prepared for publication as a departmental technical report. A PDF file of the final version must be submitted to the department.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 1 semester must be completed before filing a Degree Program Form.

The Master of Science degree is offered under both Plan A (with thesis) and Plan B (without thesis). All students must complete at least 35 credits with a combined grade point average for these credits of 2.8 or higher. At least 25 of these credits must be under MATH or STAT designator (including Thesis credits or Directed Research credits). At least 14 of these (not including Thesis credits or Directed Research credits) must be under the MATH designation. At least 6 credits must be from a minor or related field (statistics is a related field). The remaining 4 credits may be either major credits or from a related field. Every student must attend at least 16 Graduate Colloquium presentations.

Plan A requires 35 total credits, of which at least 25 are major credits (15 major course credits and 10 thesis credits) and at least 6 credits are in a related field. The final exam is oral.

Plan B requires 35 total credits, of which at least 25 are major credits (including 4 capstone project credits) and at least 6 are in a related field. The final exam is oral. Students must register for 2 credits of MATH 8994 - Directed Research every semester since their third semester until they defend their project.



Duluth Campus

Applied and Computational Mathematics Minor

Mathematics & Statistics

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Mathematics and Statistics, 140 Solon Campus Center, 1117 University Drive, Duluth, MN 55812 (218-726-8747; fax: 218-726-8399)

Email: math.dgs@d.umn.edu

Website: <http://www.d.umn.edu/math/index>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This program is for those wishing to pursue careers that use applied mathematics and statistics in science, industry, business, and teaching; and for those wishing to go on for doctoral degrees in mathematics or statistics. It emphasizes the use of modern modeling techniques and computational methods with areas of concentration available in continuous modeling, probability/statistics, and discrete mathematics. The faculty is drawn largely from the Department of Mathematics and Statistics, but also includes members from the Departments of Computer Science, Chemical Engineering, and Biology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Enrollment in any MS or MA program at UMD and sufficiently strong background in mathematics and/or statistics.

Other requirements to be completed before admission:

Other requirements include the following:

- Scores from the General Test of the Graduate Record Examination, which must be mailed to the Department of Mathematics and Statistics directly
- Letters of recommendation from three people who are familiar with the applicant's educational/professional background (Request forms for these letters are part of the online application.)
- Statement on career objectives and motivation (also a part of the online application)

Students applying for financial aid should have all application materials submitted by February 15; late applications will be considered if resources are available. Applicants seeking to enroll during the fall semester must submit all materials by July 15. For initial enrollment in the spring semester, the deadline is November 1. Students can be admitted any term. Students whose native language is not English must submit TOEFL scores.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minor for the master's degree requires 6 credits in approved MATH or STAT courses.



Duluth Campus

Art Minor

UMD Art and Design, Dept of

School of Fine Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Art and Design, University of Minnesota Duluth, 317 Humanities Building, 1201 Ordean Court, Duluth, MN 55812 (218-726-8225; fax: 218-726-6532)

Email: art@d.umn.edu

Website: <http://www.d.umn.edu/art/grad>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

A graduate minor in art is available, with an emphasis in graphic design.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.



Duluth Campus

Autism Spectrum Disorders Postbaccalaureate Certificate

Education

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Continuing Education, University of Minnesota Duluth, 403 Darland Administration Building, 1049 University Drive, Duluth, MN 55812 (218-726-8113; 800-627-3529; fax: 218-726-7888)

Email: educ@d.umn.edu

Website: <http://www.d.umn.edu/educ>

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2014
- Length of program in credits: 12
- This program requires summer semesters for timely completion.
- Degree: Autism Spectrum Disorder Certificate

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This certificate program is intended for students who are interested in training in autism spectrum disorders (ASD). The program is designed for special education teachers, prospective teachers, paraprofessionals, and other related professionals who work with children and youth with autism spectrum disorders.

The three-course, online series offers the opportunity for students to expand their knowledge and expertise in the area of ASD. Participants in the 12-credit certificate will learn research-based best practices in the field of ASD, consistent with Minnesota Department of Education competencies. The certificate is designed to be completed in one year.

Program Delivery

This program is available:

- completely online (all program coursework can be completed online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 2.50.

Applicants must have completed a bachelor's degree and have a preferred undergraduate GPA of at least 2.50 or a graduate GPA of at least 2.70.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.50 is required for students to remain in good standing.

Required Coursework

[SPED 4250](#) - Foundations of Autism Spectrum Disorders (4.0 cr)

[SPED 5250](#) - Foundations of Autism Spectrum Disorders (4.0 cr)

[SPED 4270](#) - Methods for Teaching Children and Youth with Autism Spectrum Disorders (4.0 cr)

[SPED 5270](#) - Methods for Teaching Children and Youth with Autism Spectrum Disorders (4.0 cr)

[SPED 4260](#) - Language and Social Skills for Children and Youth with Autism Spectrum Disorders (4.0 cr)

[SPED 5260](#) - Language and Social Skills for Children and Youth with Autism Spectrum Disorders (4.0 cr)



Duluth Campus

Business Administration M.B.A.

Labovitz School of Business & Economics - Adm

Labovitz School of Business and Economics

Link to a [list of faculty](#) for this program.

Contact Information:

Labovitz School of Business and Economics, 385 LSBE, 1318 Kirby Drive, Duluth, MN 55812 (218-726-7757; fax: 218-726-7578)

Email: umdmba@d.umn.edu

Website: <https://lsbe.d.umn.edu/mba/mba.php>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 32
- This program requires summer semesters for timely completion.
- Degree: Master of Business Administration

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of business administration program meets the needs of those who are currently employed full-time in professional managerial careers and who would like to pursue a graduate management education while continuing to work full time. The program offers courses in both Duluth and Rochester. Most courses offered in Duluth meet one evening per week from 6 to 9 p.m. during the 15 weeks of the semester. Most courses offered in Rochester meet from 3 to 9:30 p.m. on Fridays, and 8 a.m. to 12:30 p.m. on Saturdays every other week over a period of 7 weeks. It is possible to enroll in the program on a full-time basis by registering for 6 or more credits per semester.

Accreditation

This program is accredited by the Association to Advance Collegiate Schools of Business International (AACSB).

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Recent business coursework may be used to waive foundation courses. GMAT is waived for CPA's or applicants with a graduate degree from an accredited institution see college for specific details.

Other requirements to be completed before admission:

Students need to demonstrate competency in the business foundation areas of Accounting, Economics, Operations Management, Organizational Management, Statistics, Financial Management, and Marketing through BUS or PMBA courses, other undergraduate coursework, or competency tests. Students must consult with the MBA Director to determine competency fulfillment.

Applicants must submit their test score(s) from the following:

- GRE
- GMAT
 - Total score: 540
- PCAT

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Listening Score: 19
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Internet Based - Speaking Score: 20
 - Paper Based - Total Score: 550



- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(GRE, GMAT, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 32 major credits and up to null credits outside the major. The final exam is oral. A capstone project is required.
Capstone Project: Thesis

Plan C: Plan C requires 32 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

The MBA program requires completion of 32 MBA credits. The curriculum is structured to be a general MBA program. The graduate-level coursework consists of 21 semester credits in the functional areas of business and its supporting areas, plus a 3-credit capstone policy/strategy course. In addition, all students must complete 8 credits of MBA-level electives, with a minimum of 2 of the elective credits to be cross-functional courses. Up to 6 credits of a field research project leading to a thesis may substitute for 6 credits of the elective requirement. The MBA program expects students to maintain a 2.8 GPA through completion of the program. A cumulative GPA of 2.8 is required for graduation.

MBA Core Coursework (21 cr)

- MBA 8111 - Business Ethics (2.0 cr)
- MBA 8211 - Data Analysis and Statistics for Managers (2.0 cr)
- MBA 8311 - Operations Management (3.0 cr)
- MBA 8501 - Management Accounting (3.0 cr)
- MBA 8512 - Managerial Economics (2.0 cr)
- MBA 8611 - Financial Management (3.0 cr)
- MBA 8711 - Marketing Management (3.0 cr)
- MBA 8811 - Human Resource Challenges (3.0 cr)

MBA Capstone Requirement (3 cr)

- Can only be taken after MBA 8311, 8501, 8611, 8711 and 8811 are taken.
- MBA 8411 - Policy Formulation and Implementation (3.0 cr)

MBA Electives (8 cr)

At least two credits must be of a cross-functional nature. These are normally fulfilled by taking designated 1 credit cross-functional electives offered regularly. Student can choose to complete a 6 credit field research project that is written as a thesis and presented before a thesis committee instead of elective coursework.

Take 8 or more credit(s) from the following:

- MBA 8994 - Directed Research (1.0 - 6.0 cr)
- MBA 8995 - Special Topics: (Various Titles to be Assigned) (1.0 - 3.0 cr)
- Additional course work must be at the 4xxx, 5xxx or 8xxx level.

Program Sub-plans

A sub-plan is not required for this program.

Students may not complete the program with more than one sub-plan.

Rochester



Duluth Campus

Chemistry M.S.

Chemistry and Biochemistry

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Chemistry and Biochemistry, 246 Chemistry Building, 1039 University Drive, Duluth MN 55812 (218-726-7212; fax: 218-726-7394)

Email: chem.@d.umn.edu

Website: <http://www.d.umn.edu/chem/grad>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 31
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of science program offers a broad-based education in chemistry that is well suited for students going on to doctoral programs, careers in industry, or professional schools. Both Plan A (with thesis) and Plan B (without thesis) are available. For Plan A, emphases include analytical, biological, inorganic, organic, and physical chemistry. The faculty includes members from the Departments of Chemistry and Chemical Engineering in the Swenson College of Science and Engineering; the Departments of Biochemistry and Molecular Biology and Medical Microbiology and Immunology in the Medical School; as well as members from the Natural Resources Research Institute, and the College of Pharmacy.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have completed an undergraduate chemistry or biochemistry major. Coursework should include inorganic chemistry, physical chemistry, calculus, and physics.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 24 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B requires writing three papers.



This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

All students must complete 31 credits, including a seminar and four core courses. All students must complete at least 14 credits in the major and at least 6 credits in a related field or minor. In addition, Plan A students must register for 10 thesis credits; Plan B students must complete an additional 10 course credits and write three papers. Attendance and presentation at the chemistry seminar are required. Individual programs are designed to best serve the interests of the student. 4xxx courses must be approved by the director of graduate studies.



Duluth Campus

Chemistry Minor

Chemistry and Biochemistry

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Chemistry and Biochemistry, 246 Chemistry Building, 1039 University Drive, Duluth, MN 55812 (218-726-7212; fax: 218-726-7394)

Email: chem@d.umn.edu

Website: <http://www.d.umn.edu/chem/grad>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The graduate chemistry program offers a broad-based education in chemistry that is well suited for students going on to doctoral programs, careers in industry, or professional schools. The faculty includes members from the Departments of Chemistry and Chemical Engineering in the Swenson College of Science and Engineering; the Departments of Biochemistry and Molecular Biology and Medical Microbiology and Immunology in the Medical School; as well as members from the Natural Resources Research Institute, and the College of Pharmacy.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.



Duluth Campus

Civil Engineering M.S.

UMD-Civil Engineering, Dept of

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

221 Swenson Civil Engineering, 1405 University Drive, Duluth, Minnesota, MN 55812 (218-726-6444; fax: 218-726-6445)

Email: smsheid@d.umn.edu

Website: <http://www.d.umn.edu/civileng/grad/index.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Civil Engineering Department offers graduate degrees in civil engineering. The master of science (M.S.) in civil engineering is intended for students pursuing a research emphasis and seeking in-depth knowledge in an area within civil engineering. Undergraduate students who are planning to go to graduate school may apply for the Master of Science in Civil Engineering Integrated Undergraduate (MS IUG) Program for double count.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have earned a B.S. degree in engineering (e.g., civil, mechanical, chemical, environmental) or the sciences (e.g., chemistry, physics, mathematics).

Other requirements to be completed before admission:

For students from disciplines other than civil engineering, some remedial coursework may be needed. Students requiring a substantial amount of remedial coursework (e.g., more than 3 courses) may be recommended to complete a few courses prior to entry into the program, but for most students the additional coursework could be completed while a graduate student in the program. Students should consult with the CE director of graduate studies or a faculty member in their area of interest for a review and assessment of their academic background and coursework needs.

Special Application Requirements:

Applicants should submit the following supplemental materials with their application:

- Applicant Statement Number 1 (Educational and Career Goals, limit one page)
- Applicant Statement Number 2 (Statement of Purpose, limit one page)
- Program form for Civil Engineering
- CV or resume (list technical publications and conference presentations)
- Unofficial transcripts

-Two letters of recommendation (waived for current UMD CE undergraduate students)

-Letters should be requested from persons familiar with the student's performance in an academic or non-academic (i.e. work) setting and who can comment on potential for success in graduate school. Preference is for recommenders from academia.

-Recommenders should address the following points: (i) the capacity in which they know the student--as a teacher, research adviser, work supervisor, etc., and for how long; (ii) academic (or work) record and accomplishments; and (iii) their assessment of the student's ability to succeed in graduate-level coursework and research.

-Letters of recommendation should be submitted online through the existing application. When recommenders use the online process, there is an optional student rating form. It is important that each recommender submit a narrative letter, regardless of whether or not they use the optional rating form.

-While online recommendations are preferred, paper copies are acceptable. Paper copies should be directly mailed to the department in sealed envelopes.



Applications are due December 15 for consideration for the following fall semester and March 31 for consideration for the following spring semester. Domestic applicants applying for a part-time study who do not require financial support are able to apply as late as March 15 for fall and September 12 for spring semester respectively, but are still encouraged to apply by the above mentioned CE deadlines.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 21 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: Courses and a project are arranged by the student and department adviser.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

The M.S. Plan A is intended for students pursuing a research emphasis and seeking in-depth knowledge in an area within civil engineering. The M.S. requires completion of an original body of work resulting from research conducted by the student under the supervision of an advisory committee of graduate faculty members. The M.S. requires 20 credits of coursework and 10 thesis credits (approximately 375 hours of work including writing of the report), usually completed within two years.

The M.S. Plan B is designed to provide additional training in civil engineering to prepare students for a higher level of engineering design work. The M.S. Plan B requires 24 credits of coursework and 6 credits for a project (approximately 225 hours of work, including writing of the report), usually completed within one to two years.



Duluth Campus

Communication Sciences and Disorders M.A.

Communication Sciences & Disorders

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Communication Sciences and Disorders, 174 Chester Park, 31 W. College Street, Duluth, MN, 55812 (218-726-7974; fax: 218-726-8693)

Email: cd@d.umn.edu

Website: <http://www.d.umn.edu/csd>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 43
- This program requires summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The graduate program in communication sciences and disorders (CSD) effectively combines academic and clinical endeavors to prepare students to become speech-language pathologists. The program places a major emphasis on the development of clinical skills, although students have the opportunity to engage in a wide variety of academic and research activities as well. The curriculum, which is based on five semesters of study, is accredited by the Council of Academic Accreditation (CAA) in speech-language pathology and also by the American Speech-Language Hearing Association (ASHA).

Accreditation

This program is accredited by the Council on Academic Accreditation of the American Speech Language Hearing Association.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have the equivalent of a four-year American university baccalaureate degree in communication disorders with a cumulative undergraduate GPA of 3.00 or higher.

Other requirements to be completed before admission:

Applicants must have a bachelor's degree in communication sciences and disorders.

Special Application Requirements:

Applicants must provide at least three letters of recommendation, two of which should be from academic staff familiar with the applicant and a personal statement is also required.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).



For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 43 major credits and up to null credits outside the major. The final exam is oral.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

The M.A. is offered only under Plan B. At least 43 credits are required. All Plan B projects must be pre-approved by the student's examining committee, which also must give final approval.

Required Courses (37 cr)

- CSD 5010 - Portfolio Development I (0.5 cr)
- CSD 5011 - Portfolio Development II (0.5 cr)
- CSD 5100 - Research Methods in Communication Disorders (3.0 cr)
- CSD 5142 - Introduction to Diagnosis of Communication Disorders (3.0 cr)
- CSD 5200 - Dysphagia (3.0 cr)
- CSD 5230 - Advanced Applications in Communication Modalities (4.0 cr)
- CSD 5301 - Language Disorders in Infants, Toddlers, and Preschoolers (2.0 cr)
- CSD 5302 - Language Disorders in School-Age Children (2.0 cr)
- CSD 8099 - Projects in Communication Disorders (2.0 cr)
- CSD 8205 - Advanced Fluency Disorders (3.0 cr)
- CSD 8210 - Professional Issues in Speech-Language Pathology (1.0 cr)
- CSD 8230 - Neurogenic Language Disorders (4.0 cr)
- CSD 8231 - Neurogenic Speech Disorders (3.0 cr)
- CSD 8235 - Counseling Applications in Communication Disorders (2.0 cr)
- CSD 8497 - On-Campus Graduate Internship in Communication Disorders II (4.0 cr)

CSD Electives (6 cr)

Courses may be taken for ASHA accreditation requirements. All courses are chosen in consultation with student's adviser, subject to approval by the director of graduate studies.



Duluth Campus

Communication Sciences and Disorders Minor

Communication Sciences & Disorders

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Communication Sciences and Disorders, 174 Chester Park, 31 W. College Street, Duluth, MN, 55812 (218-726-7974; fax: 218-726-8693)

Email: cd@d.umn.edu

Website: <http://www.d.umn.edu/csd>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The graduate minor in communication sciences and disorders introduces students to the field of speech-language pathology.

Accreditation

This program is accredited by the Council on Academic Accreditation of the American Speech Language Hearing Association.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's minor requires 6 credits of courses in communication sciences and disorders.



Duluth Campus

Community College Teaching Postbaccalaureate Certificate

Education

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

UMD Education
150 EduE
412 Library Dr
Duluth, MN 55812
218-726-7233

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2014
- Length of program in credits: 14 to 16
- This program does not require summer semesters for timely completion.
- Degree: Community College Teaching PBacc Certificate

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Community College Teaching Certificate program will provide opportunity for science related discipline students to learn how to be an effective teacher in a college setting and provide the foundation for those who wish to pursue a Minnesota teaching licensure.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Required Courses

- [EDSE 4204](#) - Designing Learning Environments and Lessons (3.0 cr)
or [EDSE 5204](#) - Designing Learning Environments (3.0 cr)
- [EDSE 4501](#) - Adolescent/Adult Development and Learning Theory (3.0 cr)
or [EDSE 5501](#) - Adolescent/Adult Development and Learning Theory (3.0 cr)
- [EDSE 4525](#) - Assessment for Secondary Education (3.0 cr)
or [EDSE 5525](#) - Assessment for Secondary Education (3.0 cr)
- [EDSE 5000](#) - Introduction to Post-Secondary Teaching (2.0 cr)
- EDSE 5xxx - 3 - 5 credits, adviser prior approval required.



Duluth Campus

Computer Science M.S.

Computer Science

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Computer Science, University of Minnesota Duluth, 1114 Kirby Drive, 320 Heller Hall, Duluth, MN 55812 (218-726-7607; fax: 218-726-8240)

Email: cs@d.umn.edu

Website: <http://www.d.umn.edu/cs/degrees/grad/>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 33
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Computer science is a discipline that involves understanding the design of computers and computational processes. Study in the field ranges from the theoretical study of algorithms to the design and implementation of software at the systems and applications levels.

The master of science is a two-year program that provides the necessary foundational studies for graduates planning to pursue either a doctorate in computer science or a career as a computer scientist in business or industry. It is designed for students with undergraduate degrees in computer science or computer engineering. These students should be able to enroll immediately in 8xxx computer science courses.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

The program is designed for students with undergraduate degrees in computer science or computer engineering.

Other requirements to be completed before admission:

Students with undergraduate degrees in fields other than computer science or computer engineering may be considered for admittance if they have completed the following courses or their equivalents: CS 1511-1521 - Computer Science I-II; CS 2511 - Software Analysis and Design; CS 2521 - Computer Organization and Architecture; CS 3511 - Computer Science Theory; CS 5621 - Computer Architecture or CS 5651 - Computer Networks; and CS 5631 - Operating Systems. The appropriate math prerequisites, namely MATH 1296-1297 - Calculus I-II and STAT 3611 - Introduction to Probability and Statistics, are also required.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language



Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 17 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 27 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

The master of science degree is offered under Plan A (thesis) and Plan B (non-thesis). At least 33 credits are required, including 16 credits from 8xxx courses in computer science, 1 credit of CS 8993 - Seminar, and 6 credits from a specified set of courses outside of computer science (minor or related field). Plan A also requires 10 thesis credits; Plan B requires at least 10 credits in additional courses, 5xxx or above. Except in very rare instances, these must be computer science courses. All courses are chosen in consultation with the student's adviser, subject to approval by the director of graduate studies. Normally 4xxx computer science courses may not be included in degree programs for the master of science in computer science.



Duluth Campus

Computer Science Minor

Computer Science

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Computer Science, 1114 Kirby Drive, 320 Heller Hall, Duluth, MN 55812 (218-726-7607; fax: 218-726-8240)

Email: cs@d.umn.edu

Website: <http://www.d.umn.edu/cs/degr/grad>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 8
- Length of program in credits (Doctorate): 8
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Computer science is a discipline that involves understanding the design of computers and computational processes. Study in the field ranges from the theoretical study of algorithms to the design and implementation of software at the systems and applications levels.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

At least 8 credits in computer science are required for a master's or doctoral minor.



Duluth Campus

Criminology M.A.

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Sociology-Anthropology, University of Minnesota Duluth, 228 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-7801; fax: 218-726-7759)

Email: crimma@d.umn.edu

Website: http://www.d.umn.edu/socanth/criminology/macrim_graduateprogram.php

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Note: This program is not currently accepting new students. Please contact the Department of Sociology/Anthropology for more information about the status of the criminology M.A.

The core courses for the master of arts (M.A.) in criminology feature relevant theoretical perspectives in understanding criminal behavior, methods of research and data analysis, and critical analysis of the criminal justice system. The curriculum is based on the premise that a liberal education in the social sciences includes the development of a student's ability to 1) define problems effectively by asking appropriate questions; 2) understand and respect people with diverse opinions, backgrounds, characteristics, and lifestyles; 3) respect the right to freedom of inquiry, willingly challenge conventional wisdom, and be intellectually flexible when challenged by factual information; and 4) understand the significance of inequality in the way that criminal justice is administered. The theme of inequality is incorporated into the graduate program as it is in the undergraduate program. In particular, structural forms of oppression are examined, and emphasis is placed on issues of social justice, human rights, and treatment rehabilitation.

The framework of the program provides students with opportunities to develop a knowledge base that enhances understanding of criminal behavior and the workings of the criminal justice system. Core requirements give students experience in using various methods of research, analyzing and interpreting data, understanding and critiquing the main theoretical traditions in the field, and examining the organization of the criminal justice system. Furthermore, course electives enable students to focus on more specific interests (e.g., policing, courts, youth justice, etc.).

The M.A. in criminology provides an opportunity for both intellectual and professional development. The program serves those students with undergraduate degrees in criminology (or a related social science) who are interested in pursuing the advanced study of crime and justice. The program also serves those who have been employed in organizations and agencies and who wish to expand their knowledge and understanding in ways that may enhance their professional careers.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree or foreign equivalent in a related field is required. Preference is given to applicants with undergraduate degrees in criminology, criminal justice, corrections, or sociology.

Other requirements to be completed before admission:

Admission to the program is competitive. Applicants must have successfully completed an introduction to criminology or criminal justice course, the equivalent of one semester of research methods and/or statistics beyond the introductory level, and a course devoted primarily to social/behavioral theory.

Special Application Requirements:

Applicants must supply three letters of recommendation evaluating their scholarship and potential for graduate study (at least two



letters should be from academic faculty familiar with the applicant); an essay explaining why an advanced degree in criminology is of interest; why the applicant merits serious consideration; and a personal statement of the applicant's short- and long-term professional goals, and commitment to and preparation for graduate study in criminology.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

Key to [test abbreviations](#)(TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 22 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 32 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The M.A. is offered under both Plan A and Plan B; each requires 38 credits. The Plan A option involves thesis work; the Plan B option involves a special project based upon a student's practicum work. The Plan B project combines theories, concepts, principles, and/or best practices from at least one course in the student's program of study with work being done in a practicum. All students must take CRIM 8100 (3 cr), CRIM 8200 (3 cr), CRIM 8201 (3 cr), CRIM 8140 (1 cr), and CRIM 8300 (3 cr). Plan A students must enroll in CRIM 8777 - Master's Thesis Credits (minimum of 10 credits required). Plan B students must enroll in CRIM 8600 - Criminology Practicum (minimum of 10 credits required). In addition to the credits listed above, all students must choose at least 9 additional credits in criminology courses, 5xxx or above.

Students are expected to include additional elective courses (6 cr) outside the major (in a minor or related field) as part of their program of study. The related field courses must be chosen in consultation with, and approved by, the student's advising/examining committee. Upon the advice and approval of the director of graduate studies, students may use 4xxx courses in related fields as appropriate. Sociology 4xxx courses may be included in either the Plan A or Plan B options for the M.A. in criminology.



Duluth Campus

Criminology Minor

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Sociology-Anthropology, University of Minnesota Duluth, 228 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-7801; fax: 218-726-7759)

Email: crimma@d.umn.edu

Website: http://www.d.umn.edu/socanth/criminology/macrim_graduateprogram.php

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 10
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Note: This program is not currently accepting new students. Please contact the Department of Sociology/Anthropology for more information about the status of the Criminology M.A.

The core courses in the criminology program feature relevant theoretical perspectives in understanding criminal behavior, methods of research and data analysis, and critical analysis of the criminal justice system. The curriculum is based on the premise that a liberal education in the social sciences includes the development of a student's ability to 1) define problems effectively by asking appropriate questions; 2) understand and respect people with diverse opinions, backgrounds, characteristics, and lifestyles; 3) respect the right to freedom of inquiry, willingly challenge conventional wisdom, and be intellectually flexible when challenged by factual information; and 4) understand the significance of inequality in the way that criminal justice is administered. The theme of inequality is incorporated into the graduate program as it is in the undergraduate program. In particular, structural forms of oppression are examined, and emphasis is placed on issues of social justice, human rights, and treatment rehabilitation.

The framework of the program provides students with opportunities to develop a knowledge base that enhances understanding of criminal behavior and the workings of the criminal justice system. Core requirements give students experience in using various methods of research, analyzing and interpreting data, understanding and critiquing the main theoretical traditions in the field, and examining the organization of the criminal justice system. Furthermore, course electives enable students to focus on more specific interests (e.g., policing, courts, youth justice, etc.).

The criminology program provides an opportunity for both intellectual and professional development, and serves those students with undergraduate degrees in criminology (or a related social science) who are interested in pursuing the advanced study of crime and justice. The program also serves those who have been employed in organizations and agencies and who wish to expand their knowledge and understanding in ways that may enhance their professional careers.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 4 credits in methods/statistics, 3 credits in theory, and 3 credits of electives.



Duluth Campus

Education M.Ed.

Education

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

College of Education and Human Service Professions, 125 Bohannon Hall, 1207 Ordean Court, Duluth, MN 55812 (218-726-7156; fax: 218-726-7073)

Email: cehsp@d.umn.edu

Website: <http://www.d.umn.edu/cehsp/gradprograms/cohort>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Education

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of education (M.Ed.) is a professional development degree for educational scholars, including teachers and professionals with leadership or training roles in the health sciences, social services, community education, and business or industry. Professional development is achieved through critical reflection, theoretical investigation, and application of theory and research to practice in communities. The curriculum is based on the roles that educational scholars play as teachers, leaders, and change agents in formal, non-formal, and community-based settings.

Learners will develop skills in:

- Critical reflection
- Investigation and application of educational theory to practice
- Evaluation, execution, and effective communication of educational research
- Intercultural competence
- The creation of, and participation in, communities of learners as professionals
- Leadership for educational reform

Core courses are delivered primarily online with one face-to-face weekend session during the first month of each semester. The required core courses are delivered over two years for professionals who wish to earn the graduate degree while maintaining full-time employment. Students are admitted to an identified cohort and register for two years of core curriculum with the same cohort.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 2.80.

A bachelor's degree is required for admission.

Other requirements to be completed before admission:

Preferred candidates will have a GPA of 3.00 or higher and two years professional experience or demonstrated experience working with learners.

Special Application Requirements:

Please submit the following materials to: Department of Education, University of Minnesota Duluth, Attn: Karen Mehle, 150 EduE, 412 Library Drive, Duluth, MN 55812

- Application form
- \$31 non-refundable application fee
- Official transcripts sent directly from the undergraduate institution to the Collegiate Graduate Program Office at the address immediately above
- Two letters of recommendation, to the attention of the Collegiate Graduate Programs Committee, also at the address immediately above



- A resume documenting education and work experience
- A two- to three-page goal statement

Email Karen Mehle (kmehle@d.umn.edu) in the Graduate Programs Office with specific questions about admission.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

Key to [test abbreviations](#)(TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 24 major credits and 6 credits outside the major. There is no final exam. A capstone project is required.

Capstone Project: Students work throughout the program to develop and carry out a research project, producing a completed thesis by the end of the program.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

The M.Ed. cohort program has a 24-credit core curriculum; remaining credits are electives. The sequence of core courses is designed so that they build and rely on each other in a way that integrates content from one semester to the next. The research component of the program builds through the two years and is structured to help cohort members complete the final project in that time. Specific products at the end of each term lead to a completed project.

Each semester, students will be expected to complete the following.

By the end of:

Semester 1: Select a topic and complete a "mini" literature review

Semester 2: Write the question to be researched and complete literature review

Semester 3: Determine research method and write a proposal and submit IRB application

Semester 4: Gather and analyze data, complete research thesis

Coursework:

Semester 1:

EDUC 7001 - Introduction to Graduate Study (2 cr)

EDUC 7008 - Foundations of Teaching and Learning: Curriculum Theory and Design (4 cr)

Semester 2:

EDUC 7004 - Educational Action Research and Inquiry (4 cr)

EDUC 7002 - Human Diversity and Exceptionality (2 cr)

Semester 3:

EDUC 7009 - Assessment of Student Learning (3 cr)

EDUC 7011 - Integrated Research in Practice (3 cr)

Semester 4:

EDUC 7006 - Ethics and Professionalism in Education (2 cr)

EDUC 5990 - Research Project (4 cr)

Electives are determined in consultation with the director of graduate studies (first year) and the graduate adviser (second year). All policies relating to degree requirements are detailed in the Student Handbook



Duluth Campus

Educational Computing and Technology Postbaccalaureate Certificate

Education

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Email: educ@d.umn.edu

Website: <http://www.d.umn.edu/educ>

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2014
- Length of program in credits: 16
- This program does not require summer semesters for timely completion.
- Degree: Certificate in Educational Computing/Technology

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This certificate is designed for students who are interested in expanding their knowledge and skills in educational computing and technology. The certificate provides basic through advanced training in computer and related technologies. The hands-on program builds upon basic computer literacy skills such as micro computing, word processing, spreadsheets, databases, graphics, desktop publishing, and the use of peripherals such as CD-ROM, scanners, digital cameras, digital video cameras, and web cams. Students will expand their knowledge and skills in additional technologies including Power Point, Hyper Studio, the Internet/World Wide Web, electronic mail, web quests, video conferencing, digital video editing, and a variety of teacher administrative software focusing on the further development of technology skills and their infusion into the P-12 classrooms.

The program is designed for professionals, paraprofessionals, and others who wish to concentrate in educational computing and technology. Student projects are tailored to personal interests and emphasize practical application for use in school classroom settings. Students can earn the certificate at one of three levels: undergraduate, graduate, or noncredit.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 2.50.

Applicants must have completed a bachelor's degree and have a preferred undergraduate GPA of at least 2.50 or a graduate GPA of at least 2.70.

Other requirements to be completed before admission:

Students should submit a Certificate Application before completing the required certificate coursework. However, students have one year from the time they complete the required coursework to submit the Certificate Application.

After one year, students are no longer eligible for admission to the certificate program without the consent of the certificate faculty liaison. In some cases, additional coursework may be required. Admission to the certificate program after one year is not guaranteed, but is granted on a case-by-case basis. Instructions for the Certificate Application can be found at: <http://www.d.umn.edu/ce/learningopportunities/certificates/applprocess.html>.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

Key to [test abbreviations](#)(TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.00 is required for students to remain in good standing.

Required Coursework

[EDUC 5412](#) - The Computer in Education (4.0 cr)

[EDUC 5413](#) - Teaching With Technology (4.0 cr)

[EDUC 5414](#) - Using Technology for the Administrative Tasks of Teaching (4.0 cr)

[EDUC 5415](#) - Teaching Online and Hybrid Courses (4.0 cr)



Duluth Campus

Electrical And Computer Engineering Minor

Electrical Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

ECE Graduate Program, 271 MWAH, 1023 University Drive, Duluth, MN 55812 (218-726-6830; fax: 218-726-7267)

Email: ece@d.umn.edu

Website: <http://www.d.umn.edu/ece/gradProgram/index.html>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The graduate program in electrical and computer engineering is oriented towards students and engineering practitioners in the private and public sectors who are interested in advanced coursework and applied research. The minor allows students to focus on one of the core departmental strengths of communications and signal processing, VLSI and nanoscale optoelectronics, medical instrumentation and control systems, and intelligent transportation systems.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 6 credits in electrical and computer engineering courses. Individual programs must be approved by the director of graduate studies of electrical and computer engineering program.



Duluth Campus

Electrical Engineering M.S.E.E.

Electrical Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

ECE Graduate Program, 271 MWAH, 1023 University Drive, Duluth, MN 55812 (218-726-6830; fax: 218-726-7267)

Email: ece@d.umn.edu

Website: <http://www.d.umn.edu/ece/gradProgram/index>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 31
- This program does not require summer semesters for timely completion.
- Degree: Master of Science in Electrical Engineering

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of science in electrical engineering (M.S.E.E.) combines scholarship and research in a program oriented toward students and engineering practitioners in the private and public sectors who are interested in advanced coursework and applied research. The program requires 31 credits of graduate coursework and research, and focuses on core departmental strengths of communications and signal processing, VLSI and nanoscale optoelectronics, medical instrumentation and control systems, and intelligent transportation systems.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An undergraduate degree in electrical engineering, computer engineering, or computer science. Applicants from related majors may apply but may be required to take additional undergraduate courses.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 25 major credits, 6 credits outside the major, and 31 thesis credits. The final exam is oral.

Plan B: Plan B requires 25 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project is for those students or practicing engineers who wish to have a hands-on learning experience



solving technical problems, preferably by teaming up with an industrial counterpart. Plan B students are required to take a minimum of 1 and a maximum of 3 project credits.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The master's degree requires at least 31 credits. It is offered under two plans. Plan A involves writing a thesis and Plan B involves additional course work and a project in lieu of the thesis.

Plan A: Thesis Option Students must complete a minimum of 31 semester credits in graduate courses, including thesis credits. At least 15 credits must be electrical and computer engineering courses with at least 6 credits in courses numbered 4xxx or higher, 6 credits in courses numbered 5xxx or higher, and at least 3 credits in courses at 8xxx. An additional 6 credits must be taken in a minor or related field outside of ECE. The remaining 10 credits should be thesis credits.

Plan B: Project Option Students must complete a minimum of 31 credits in graduate courses, including project credits. The project credits should be at least 1 and at most 3. A total of 6 credits must be taken in a minor or related field outside of ECE. The remaining 23 or 24 credits must be ECE courses with at least 6 credits in courses numbered 4xxx or higher, 6 credits in courses numbered 5xxx or higher, and at least 3 credits in 8xxx courses.



Duluth Campus

Engineering Management M.S.E.M.

UMD Mechanical/Industrial Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

MSEM Director of Graduate Studies, University of Minnesota Duluth, 105 Voss-Kovach Hall, 1305 Ordean Court, Duluth, MN 55812 (218-726-6161; fax: 218-726-8596)

Email: msem@d.umn.edu

Website: <http://www.d.umn.edu/mie/MSEM>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30 to 31
- This program does not require summer semesters for timely completion.
- Delivered to remote sites in Virginia, Hibbing, and Grand Rapids (MN).
- Degree: Master of Science in Engineering Management

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Science in Engineering Management (M.S.E.M.) program provides technical professionals with the tools and skills to manage technical organizations and resources to promote economic growth, competitiveness, ethical decision-making, and environmental responsibility and sustainability. The program is designed to help advance the career path of engineers and address the urgent needs of engineering managers to effectively manage people, projects, technology, and information of varying size and complexity. It also prepares those who want to continue their studies in the field of engineering management in other academic institutions or research based organization. To meet the needs of working professions, courses are offered in the evening and are available for remote sites by interactive television (ITV) or online sessions. Full-time enrollment is possible and the course structure allows for unique research opportunities.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants should have an undergraduate degree in engineering, or another technical major and a substantial background in engineering.

Other requirements to be completed before admission:

Applicants must provide two letters of recommendation concerning their academic ability and readiness for graduate education.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Plan A: Plan A requires 18 to 21 major credits, 0 to 3 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 21 to 30 major credits and 0 to 9 credits outside the major. The final exam is written and oral. A capstone project is required.

Capstone Project: The Plan B project is a capstone project in which each student should utilize their acquired engineering management skills and to demonstrate their mastery of engineering management concepts by completing a well-defined project on time and documenting the project with a formal paper and an oral presentation.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The master's degree is offered under two plans. Plan A involves writing a thesis and Plan B involves additional course work and a project in lieu of the thesis.

Plan A students must complete at least 31 credits, including 12 credits in the major core sequence, a minimum of 6 credits of major electives, 3 credits of electives from major or related fields, and 10 thesis credits. The final exam is oral. Individual course plans are designed to best serve the interests of the student. The director of graduate studies must approve all course plans.

Plan B students must complete at least 30 credits, including the 12-credit major core sequence, 15 credits of electives (at least 9 in engineering management) and a 3-credit capstone project course, Project Methodology and Practice. The capstone project, in which each student should utilize their acquired engineering management skills and demonstrate their mastery of engineering management concepts by completing a well-defined project on time, requires a formal report and oral presentation. Individual course plans are designed to best serve the interests of the student. The director of graduate studies must approve all course plans.

Students upon the advice and approval of the director of graduate studies, may use a maximum of 9 credits of 4xxx courses in related fields as appropriate for both Plan A and Plan B.



Duluth Campus

Engineering Management Minor

UMD Mechanical/Industrial Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Director of Graduate Studies (MSEM), University of Minnesota Duluth, 105 Voss-Kovach Hall, 1305 Ordean Court, Duluth, MN 55812 (218-726-6161; fax: 218-726-8596)

Email: msem@d.umn.edu

Website: <http://www.d.umn.edu/mie/MSEM>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The minor in engineering management provides engineering and science graduate students with knowledge and tools to more effectively manage people, projects, technology, and information in their careers in order to promote economic growth, competitiveness, ethical decision-making, and environmental responsibility and sustainability. To meet the needs of working professionals, courses are offered in the evening and are available to remote sites by interactive television (ITV) or online sessions.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 6 credits in engineering management courses. Individual programs must be approved by the director of graduate studies in engineering management.



Duluth Campus

English M.A.

English

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of English, 410 Humanities, 1201 Ordean Court, University of Minnesota Duluth, Duluth, MN 55812 (218-726-8228; fax: 218-726-7457)

Email: enql@d.umn.edu

Website: <http://www.d.umn.edu/enql/englishgrad/index.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 32 to 33
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Arts program offers courses in English, Irish, and American literature; creative writing; linguistics; composition and rhetorical theory; book history; publishing; and English education. The program has four master's emphases: literary studies, for concentrated study of literature; interdisciplinary study in Literature, Language, and Culture; Publishing and Print Culture; and Writing Studies.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An undergraduate degree including at least 30 credits in English or a related humanities field.

Other requirements to be completed before admission:

Entering students should have completed 30 credits in English (these may include credits in literature, language, advanced composition and other humanities fields), including 20 upper-division English courses that offer broad coverage of English and American literature. Any deficiencies will be determined and considered by the director of graduate studies in consultation with the graduate committee. Certain course prerequisites may be taken concurrently with graduate work and may be applied toward degree requirements.

Special Application Requirements:

GRE scores are on Verbal and Analytical Writing portions.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 100
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 600
- IELTS
 - Total Score: 7
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language



Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 25 to 27 major credits and 6 credits outside the major. The final exam is written and oral. A capstone project is required.

Capstone Project: This degree requires two Plan B Projects totaling 120 hours of effort before taking the final exam. The projects normally are completed in connection with courses in English or in a related field. A completed project must be approved by a graduate faculty member.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Language Requirement: Proficiency in an approved language.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

Courses at the 4000-level in English, writing studies and linguistics may not be included in degree in English. Some 4xxx courses are permitted in the related field.

Emphases Options

Literary Studies

Requires certification of a reading knowledge of Latin, Greek, French, Italian, Spanish, Russian, American Sign Language, or other approved language. This Emphasis requires a minimum of 32 credits, including at least 26 credits in the major and 2 Plan B projects.

-OR-

Language, Literature & Culture

Requires certification of a reading knowledge of a foreign language appropriate to the candidate's area of study and approved by the English graduate committee, or completion of at least 6 course credits beyond the 32 required credits. This Emphasis requires a minimum of 32 credits, including at least 25 credits in the major, distributed in literature, linguistics, information design, or composition/rhetoric; 6 to 8 credits in a related field; and 2 Plan B projects.

-OR-

Publishing & Print

Requires certification of a reading knowledge of Latin, Greek, French, Italian, Spanish, Russian, American Sign Language, or other approved language. This Emphasis requires a minimum of 33 credits, including at least 27 credits within the major; distributed in literature, publishing information design, and print culture; 6 to 8 in a related field; and 2 Plan B projects.

-OR-

Writing Studies

Requires certification of a reading knowledge of a foreign language appropriate to the candidate's area of study and approved by the English graduate committee, or completion of at least 6 course credits beyond the 32 required credits. This Emphasis requires a minimum of 32 credits, including at least 26 credits in the major, distributed in literature, linguistics, composition/rhetoric, information design and writing and 2 Plan B projects.



Duluth Campus

English Minor

English

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of English, 410 Humanities, 1201 Ordean Court, University of Minnesota Duluth, Duluth, MN 55812 (218-726-8228; fax: 218-726-7457)

Email: enql@d.umn.edu

Website: <http://www.d.umn.edu/enql>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 8
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master's minor program offers courses in English, Irish, and American literature; creative writing; linguistics; composition and rhetorical theory; book history; publishing; and English education. The program has three emphases: a literary studies emphasis for concentrated study of literature, an interdisciplinary emphasis in English studies, and an emphasis in publishing and print culture.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.



Duluth Campus

Environmental Education M.E.Ed.

Education, Health, Physical Education & Recreation

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Center for Environmental Education, 122 Sports and Health Center, 1216 Ordean Court, Duluth, Minnesota 55812-3032 (218-726-7554 or 218-726-8677)

Email: immcgraw@d.umn.edu or ceed@d.umn.edu

Website: <http://www.d.umn.edu/ceed/mastersdegree-overview.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 34
- This program does not require summer semesters for timely completion.
- The program is delivered primarily on the UMD campus. Portions of some courses are delivered at the Wolf Ridge Environmental Learning Center (Finland, MN).
- Degree: Master of Environmental Education

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The purpose of the master of environmental education is to develop advanced practitioners in environmental education (EE) who will take on leadership roles through positions such as EE specialists and directors at nature centers, outdoor and EE centers, natural resource agencies, conservation groups, park and recreation programs, and in P-16 school settings. A minimum of 34 credits is required for the degree. Core requirements include teaching methodology in formal and non-formal settings; program development, management, and evaluation; theory; and research. Elective courses are used for supporting final project and/or specific areas of interest. Final project options include a research-based thesis, research-based journal article, field project, or curriculum project.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree from an accredited U.S. college or university or an equivalent degree from a recognized college or university in another country.

Special Application Requirements:

Applications are due February 1, with admission for the following fall semester. (Under extenuating circumstances, applications may be considered past the deadline for admission.)

All application materials should be submitted directly into the ApplyYourself application system. Your application will not be reviewed until all of the required materials are submitted successfully. Incomplete applications cannot be considered for admission.

Required materials include the following:

- Transcripts
- Writing sample that demonstrates suitability for graduate-level study and/or formal academic writing ability
- Resume
- Two work samples that communicate suitability for graduate-level study in EE, such as a lesson plan, grant proposal, article, capstone project, etc.
- Three letters of recommendation that speak to the applicant's potential as a graduate student and EE professional.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19



- Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 34 major credits and 0 to 6 credits outside the major. The final exam is oral. A capstone project is required.
Capstone Project: Final project options include a research-based thesis, research-based journal article, field project, or curriculum project.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The degree is intended to be completed in two years, and a minimum of 34 credits is required. Coursework is offered primarily on-campus (in person); some electives are available online. Summer coursework is limited, and most students spend summers away from campus gaining relevant experience.

Electives must be at the 4000-level or higher; 4000-level electives must be approved for graduate credit.

Foundations

[ENED 5165](#) - Theories and Models in Outdoor Education (2.0 cr)

Instruction

[ENED 4163](#) - Outdoor Education Methods (3.0 cr)

[ENED 5850](#) - Classroom Applications (2.0 cr)

Program Development, Implementation, and Evaluation

[ENED 5855](#) - Programming for School Systems (3.0 cr)

[ENED 4315](#) - Operations and Management (4.0 cr)

[ENED 5625](#) - Program Development and Evaluation (3.0 cr)

Research

[ENED 5100](#) - Research Design and Methods in the Social Sciences (3.0 cr)

[ENED 5998](#) - Outdoor Education Seminar (1.0 cr)

[EDUC 5560](#) - Current Research and Issues in Science Education (2.0 - 3.0 cr)

or [ENED 5560](#) - Current Research and Issues (3.0 cr)

Research Project

Must be taken for 6 credits.

[EDUC 5990](#) - Research Project (1.0 - 6.0 cr)

or [ENED 5990](#) - Research Project (1.0 - 6.0 cr)

Electives

Courses supporting research area or career goals (4-6 cr)



Duluth Campus

Environmental Education Postbaccalaureate Certificate

Education, Health, Physical Education & Recreation

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Email: ceed@d.umn.edu

Website: <http://www.d.umn.edu/ceed/ee-certificate-overview.html>

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2014
- Length of program in credits: 12
- This program requires summer semesters for timely completion.
- Wolf Ridge Environmental Learning Center
- Degree: Certificate in Environmental Education

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This program is designed primarily for teachers and interpretive naturalists, but is open to anyone with a bachelor's degree and an interest in pursuing a career as an environmental educator.

The program emphasizes interpretive skills in the natural sciences, education on environmental issues, and helping people recognize and solve potential environmental problems. Three main areas of concentration are education, social sciences, and natural sciences.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 2.50.

Admission to the program is generally approved for students who have successfully completed a bachelor's degree and have satisfactorily completed at least 70 percent of college courses attempted.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.70 is required for students to remain in good standing.

Required Coursework (12 cr)

- [ENED 5163](#) - Outdoor Education Methods (3.0 cr)
- [ENED 5165](#) - Theories and Models in Outdoor Education (2.0 cr)
- [ENED 5325](#) - Sustainability Issues Investigation (2.0 cr)
- [ENED 5850](#) - Classroom Applications (2.0 cr)
- [ENED 5343](#) - Advanced Field Interpretive Techniques (3.0 cr)



Duluth Campus

Environmental Health and Safety M.Env.Hlth.Sa.

UMD Mechanical/Industrial Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Swenson College of Science and Engineering, 229 Voss-Kovach Hall, 1305 Ordean Court, Duluth, MN 55812 (218-726-8117)

Email: mehs@d.umn.edu

Website: <http://www.d.umn.edu/mehs>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 36
- This program does not require summer semesters for timely completion.
- Degree: Master of Environmental Health and Safety

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of environmental health and safety (M.E.H.S.) program prepares its graduates for professional careers in environmental health and safety--encompassing occupational safety, industrial hygiene, ergonomics, risk management, and environmental health. However, the program strives not only to provide academic-based knowledge, but also the technical and practical skills necessary to be a successful EHS professional. While coursework covers a broad range of EHS topics, students may also choose areas in which they would like to explore more in-depth.

Ultimately, the mission of the M.E.H.S. program is to produce highly-regarded and sought-after graduates who have the requisite skills and knowledge to practice environmental health and safety effectively in a diverse range of occupations and will do so in a competent, professional, and ethical manner.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants preferably will have a baccalaureate degree in a science, engineering, or other E.H.S.-related field. All degrees, however, must have been earned at an accredited college or university.

Other requirements to be completed before admission:

Applicants must have earned a grade of C or better at the collegiate level in the following introductory coursework: chemistry with a lab component, calculus, and statistics. A combined Verbal and Quantitative GRE score of 1,000 or better is preferred.

In addition, preferred applicants will have work experience related to E.H.S. and have completed collegiate-level coursework in introductory physics, human biology and/or physiology, and psychology.

Special Application Requirements:

At present, the M.E.H.S. program does NOT accept applications through the University of Minnesota's Apply Yourself system. Instead, an application package must be completed and received by the M.E.H.S. program office no less than one month prior to the term in which the student wishes to enroll. Packages that are incomplete or received less than one month prior to the start of a term will be reviewed for admission effective the following term. Applicants are also responsible for obtaining information on and following any University-level admission deadlines and requirements.

Applicants must submit the following items:

- Application form (see website at <http://www.d.umn.edu/mehs>)
- Official transcript(s) indicating completion of a baccalaureate degree program and grades obtained in the prerequisite courses
- Resume or CV
- Three letters of recommendation
- GRE General Test scores
- TOEFL score (international students only)



- Answers to essay question on the E.H.S. related scenarios (download from program website)

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 30 major credits and 6 credits outside the major. The final exam is written and oral. A capstone project is required.

Capstone Project: The Plan B capstone project requires a student to apply knowledge and skills acquired from the M.E.H.S. coursework and demonstrate their mastery of E.H.S.-related material and concepts in identifying and addressing a particular concern. The project is part of a minimum six-week cooperative internship conducted in an industrial, governmental, or other organization having an established safety program or in the process of implementing a safety program. A report on the project must be prepared following the guidelines for an article to be submitted to a relevant journal in E.H.S. (e.g., professional safety) and an oral presentation is required.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

Other requirements include:

- 18 core courses in the M.E.H.S. program
- 9 elective course credits as approved by the M.E.H.S. program
- 3 cooperative internship credits, obtained only once an approved Plan B Master's report is submitted to the program office within 12 months of completing the 27 course credits (unless a formal extension is granted)
- a minimum of two semesters for the residence requirement



Duluth Campus

Geological Sciences M.S.

D Earth & Environmental Sci

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Geological Sciences, University of Minnesota Duluth, 229 Heller Hall, 1114 Kirby Drive, Duluth, MN 55812 (218-726-7239; fax: 218-726-7218)

Email: geol@d.umn.edu

Website: <http://www.d.umn.edu/geology>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 31
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of science program in geological sciences includes areas of economic geology, geophysics, glacial geology and geomorphology, hydrogeology, igneous and metamorphic petrology, isotope and aqueous geochemistry, limnogeology, paleoclimatology, planetary geology, sedimentology and stratigraphy, surface processes, and structure-tectonics. Several of these areas are strengthened by collaboration with the Large Lakes Observatory, the Natural Resources Research Institute, and the Precambrian Research Center.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A four-year B.S. degree in geology or a related field in engineering, basic science, or mathematics is required.

Other requirements to be completed before admission:

Most candidates will have completed a bachelor's degree in geology, geophysics, or a related field. However, students with degrees in fields such as chemistry, physics, or biology are encouraged to apply. At least one year of study in calculus, chemistry, and physics is required. Field camp and/or undergraduate research experience is recommended.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 14 major credits and 6 credits outside the major. The final exam is written.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 1 semester must be completed before filing a Degree Program Form.

The master of science degree is offered under Plan A (thesis) and Plan B (non-thesis). Courses are selected with approval of the student's adviser and the director of graduate studies. All courses must be at the 4xxx, 5xxx, or 8xxx level.

For Plan A, a candidacy exam that involves the oral defense of a written thesis research proposal during the second semester of residency is required. Plan A requires 31 credits, including 14 course credits in the major, 6 course credits in a minor or related field, a 1-credit course (GEOL 8200), and 10 thesis credits.

For Plan B, a written candidacy exam during the second semester is required. Plan B requires 31 credits in approved courses, including three Plan B papers.



Duluth Campus

Geological Sciences Minor

D Earth & Environmental Sci

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Geological Sciences, University of Minnesota Duluth, 229 Heller Hall, 1114 Kirby Drive, Duluth, MN 55812 (218-726-7239; fax: 218-726-7218)

Email: geol@d.umn.edu

Website: <http://www.d.umn.edu/geology>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The geological sciences graduate program includes areas of economic geology, geophysics, glacial geology and geomorphology, hydrogeology, igneous and metamorphic petrology, isotope and aqueous geochemistry, limnogeology, paleoclimatology, planetary geology, sedimentology and stratigraphy, surface processes, and structure-tectonics. Several of these areas are strengthened by collaboration with the Large Lakes Observatory, the Natural Resources Research Institute, and the Precambrian Research Center.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's minor requires at least 6 credits. Coursework is chosen in consultation with the student's adviser and the director of graduate studies in geological sciences.



Duluth Campus

Integrated Biosciences M.S.

Swenson College of Science & Engineering

University of Minnesota Duluth

Link to a [list of faculty](#) for this program.

Contact Information:

Integrated Biosciences Graduate Program, University of Minnesota, 251 Swenson Science Building, 1035 Kirby Drive, Duluth, MN 55812 (218-726-6898; fax: 218-726-8152)

Email: ibs@d.umn.edu

Website: <http://www.d.umn.edu/ibs>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The all-University integrated biosciences graduate program offers study toward the master of science (M.S.) degree under Plan A (coursework and original thesis). The program has two areas of emphasis: cell, molecular, and physiological (CMP) biology and ecology, organismal, and population (EOP) biology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree or equivalent from an accredited college or university in the biological or physical sciences or a related field.

Other requirements to be completed before admission:

Recommended undergraduate courses for applicants pursuing the M.S. degree include one year each of chemistry, biology, and physics. One semester of calculus is also recommended. Applicants are strongly encouraged to have taken other advanced courses in chemistry, biology, additional calculus, and introductory statistics.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Required Coursework

- [IBS 8011](#) - Integrated Biological Systems I (2.0 cr)
- [IBS 8012](#) - Integrated Evolutionary Processes (2.0 cr)
- [IBS 8013](#) - Integrated Biological Systems II (2.0 cr)
- [IBS 8020](#) - Integrated Biosciences Colloquia (1.0 cr)
- [IBS 8030](#) - IBS Research Club (1.0 cr)
- [IBS 8099](#) - The Biological Practitioner (1.0 cr)
- [STAT 5411](#) - Analysis of Variance (3.0 cr)



Duluth Campus

Integrated Biosciences Minor

Swenson College of Science & Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Integrated Biosciences Graduate Program, University of Minnesota, 251 Swenson Science Building, 1035 Kirby Drive, Duluth, MN 55812 (218-726-6898; fax: 218-726-8152)

Email: ibs@d.umn.edu

Website: <http://www.d.umn.edu/ibs>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The all-University integrated biosciences graduate program offers students an opportunity to study in one of two areas of emphasis: cell, molecular, and physiological (CMP) biology and ecology, organismal, and population (EOP) biology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's minor in integrated biosciences requires 6 credits. The doctoral minor requires 12 credits.



Duluth Campus

Integrated Biosciences Ph.D.

Swenson College of Science & Engineering

University of Minnesota Duluth

Link to a [list of faculty](#) for this program.

Contact Information:

Integrated Biosciences Graduate Program, University of Minnesota, 251 Swenson Science Building, 1035 Kirby Drive, Duluth, MN 55812 (218-726-6898; fax: 218-726-8152)

Email: ibs@d.umn.edu

Website: <http://www.d.umn.edu/ibs>

- Program Type: Doctorate
- Requirements for this program are current for Fall 2014
- Length of program in credits: 56
- This program requires summer semesters for timely completion.
- The Integrated Biosciences Ph.D. is an All-University program delivered on the Twin Cities and Duluth Campuses. The University of Minnesota Twin Cities is the degree granting authority for the Integrated Biosciences Ph.D. program in Duluth.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The all-university integrated biosciences graduate program offers study toward the doctor of philosophy (Ph.D.) degree. The program has two areas of emphasis: cell, molecular, and physiological (CMP) biology and ecology, organismal, and population (EOP) biology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree or equivalent from an accredited college or university in the biological or physical sciences or a related field.

Other requirements to be completed before admission:

Recommended undergraduate courses for applicants pursuing the Ph.D. degree include one year each of chemistry, biology, physics, calculus, and advanced chemistry. One semester (minimum) of statistics is also recommended.

Additional recommended courses for students in the ecology, organismal, and population (EOP) emphasis include one year of calculus, one semester each of ecology and evolutionary biology, along with one course in two of the following subjects: genetics, cell biology, biochemistry.

Additional recommended courses for students in the cell, molecular, and physiological (CMP) emphasis include one year of organic chemistry plus one course in each of the following: genetics, cell biology and biochemistry.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language



Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

20 credits are required in the major.

12 credits are required outside the major.

24 thesis credits are required.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Ph.D. Written Preliminary Examination-In addition to completing the curriculum for the major and internal related fields, students will be required to pass both a written and oral preliminary examination prior to completing the Ph.D. program. The preliminary written examination will be administered once the student has completed the majority of the required coursework. This will typically occur in the summer of the second year. The written examination will consist of a completed NIH or NSF grant application for the student's proposed research project. The project will be evaluated by the Thesis Examining Committee, which will also serve as the student's Final Oral Examining Committee to provide continuity of advice during the length of the student's research program.

Ph.D. Oral Preliminary Examination-The oral preliminary examination will be administered within two months of the successful completion of the preliminary written examination. The examination will be administered by the graduate faculty according to Graduate School regulations and all students will be required to pass the oral examination to continue in the Ph.D. program. Within one semester of passing the preliminary oral examination, each Ph.D. student must file a Thesis Proposal Form with the Graduate School.

Ph.D. Final Oral Defense-It is anticipated that most students will complete the requirements for the Ph.D. degree within five years. The final oral defense will be conducted by the graduate faculty according to Graduate School regulations. It will consist of a public seminar presented by the student.

Required Coursework

[IBS 8011](#) - Integrated Biological Systems I (2.0 cr)

[IBS 8012](#) - Integrated Evolutionary Processes (2.0 cr)

[IBS 8099](#) - The Biological Practitioner (1.0 cr)

[STAT 5411](#) - Analysis of Variance (3.0 cr)

[IBS 8020](#) - Integrated Biosciences Colloquia (1.0 cr)

[IBS 8030](#) - IBS Research Club (1.0 cr)



Duluth Campus

Liberal Studies M.Lib.Stu.

Women, Gender & Sexuality Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

College of Liberal Arts, M.L.S. Program, University of Minnesota Duluth, 494 Humanities, 1201 Ordean Court, Duluth, MN 55812 (218-726-8437)

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Liberal Studies

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The interdisciplinary master of liberal studies (M.L.S.) offers students an opportunity to engage in advanced studies in the social sciences, the humanities, or a blend of these two. This program prioritizes degree programs that adopt multiple disciplinary approaches to their subject matter and fosters cross-disciplinary skills at the service of a focused research question. To complete the M.L.S. degree, at least one to three papers or alternative projects with an in-depth exploration of an interdisciplinary topic are required.

Program Delivery

This program is available:

- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Entering M.L.S. students should have a bachelor's degree or equivalent.

Other requirements to be completed before admission:

For information about the application process, refer to www.d.umn.edu/grad/applicationinstructions.php.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 30 major credits and 0 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project is an expansion of work done in a course or another topic of special interest. Plan B papers and projects are submitted to the examining committee before the student's final oral presentation and examination and represent 120 hours of independent research.



This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.8 is required for students to remain in good standing.

The M.L.S. is offered only under Plan B. Students must complete 30 credits, including 4 credits of MLS 8001 - Theories, Methods and Applications of Graduate Study, 4 credits of MLS 8501 - Seminar in Community Engagement, and 4 credits of MLS - Seminar in Global Perspectives. One to three Plan B papers or creative projects are required. Inclusion of 4xxx courses on degree program forms is subject to adviser and director of graduate studies approval.



Duluth Campus

Liberal Studies Minor

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

College of Liberal Arts, M.L.S. Program, University of Minnesota Duluth, 104 Darland Administration Building, 1049 University Drive, Duluth, MN 55812 (218-726-8437)

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

A minor in liberal studies allows current graduates to broaden their intellectual horizons through in depth exploration of a variety of interdisciplinary topics.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's-level minor in liberal studies requires 6 credits of courses approved by the director of graduate studies.



Duluth Campus

Linguistics Minor

Writing Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Program in Linguistics, University of Minnesota Duluth, 435 Humanities Building, 1201 Ordean Court, Duluth, MN 55812 (218-726-8131; fax 218-726-6882)

Email: mlinn@d.umn.edu

Website: <http://www.d.umn.edu/writ>

- Program Type: Graduate free-standing minor
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Graduate students may elect linguistics--which is offered interdepartmentally and through the Program in Linguistics--as a related field, or, with approval of the director of graduate studies of the major, as a designated minor.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

The minor in linguistics requires a minimum of 6 credits selected from ANTH 4628 - Language and Culture (3 cr), ENGL 5811 - Introduction to Modern English (4 cr), ENGL 5821 - History of the English Language (4 cr), LING 5195 - Special Topics (3 cr), LING 5802 - Applied Linguistics (4 cr), LING 5852 - Practicum in Teaching Linguistics (3 cr), LING 8500 - Graduate Seminar (3 cr), and LING 8591 - Independent Study in Linguistics (1-3 cr).



Duluth Campus

Master of Advocacy and Political Leadership

College of Liberal Arts - Adm

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

112 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-6711; fax: 218-726-6780)

Email: maplapps@d.umn.edu

Website: <http://www.umdmapl.org>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 32
- This program does not require summer semesters for timely completion.
- Degree: Master of Advocacy and Political Leadership

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This applied degree is designed for residents of Minnesota and western Wisconsin with experience or interest in having an impact on and changing public policy. Graduates of this program generally go on to positions as local community leaders, labor leaders, government relations specialists in businesses, nonprofit sector policy advocates, inter-governmental relations specialists, political operatives, lobbyists, elected and appointed officials, staff to policy makers, and citizens. The program seeks to create a professional group of ethically grounded advocates and organizers. Students come from throughout the region with many already working in one of the above interest areas.

Cohorts of up to 15 students will form at the beginning of each semester and progress together through the four semesters required to complete the program. The program is 32 credits composed of 12 cohort course credits, 15 elective course credits, and 5 advocacy internship course credits. Classes meet 11 weekends each semester, and are scheduled in 3-hour time periods on Friday evening, Saturday morning, and Saturday afternoon. Students may choose to concentrate in one of three fields: community leadership (advocacy in the public sector), nonprofit advocacy, or labor organizing and leadership.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:

Admission to the master of advocacy and political leadership program is based on the following criteria:

- Applicant must hold a bachelor's degree with transcripts demonstrating the ability to handle graduate-level work.
- Prospective students must complete the program application.
- Two letters of recommendation and a short statement of interest must be submitted along with the application.
- Applicant must demonstrate experience in public service, which includes activities such as volunteering with nonprofits, involvement in student government, or activity in political/civic life.
- There is no entrance exam required for admittance to the program.

Applications are accepted on a rolling basis. New cohorts are admitted each semester.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 14 major credits and up to null credits outside the major. There is no final exam.



This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.75 is required for students to remain in good standing.

Elective course credits - 15 credits, to be selected from the following:

- MAPL 5110 - Ethics in Politics (3 cr)
- MAPL 5111 - Labor Organizing (3 cr)
- MAPL 5113 - Labor and Political Economy (3 cr)
- MAPL 5200 - Advocacy and Lobbying: Strategies and Tactics (3 cr)
- MAPL 5202 - Nonprofits and Government (3 cr)
- MAPL 5301 - Campaigns and Elections (3 cr)
- MAPL 5311 - Advocacy in the Public Sector: Service in the Elected Branch (3 cr)
- MAPL 5312 - Advocacy in the Public Sector: Service in the Executive Branch (3 cr)
- MAPL 5308 - Impact of Art and Social Change (3 cr)
- MAPL 5309 - Legal System and Public Policy (3 cr)
- MAPL 5315 - Sustainable Development Policy and Advocacy (3 cr)
- MAPL 5400 - Political Organizing and Advocacy in the Digital Age (3 cr)
- MAPL 5405 - Impact of Group Identity on the Policymaking Process (3 cr)

Advocacy Internship course credits: 5 credits

- MAPL 6009 - Advocacy Internship I (2 cr)
- MAPL 6008 - Advocacy Internship II (3 cr)

If they wish, students can complete nine electives in one of three fields of concentration: labor organizing and leadership, nonprofit advocacy, or community leadership (public sector), as described below. Concentration classes are open to all students and count toward the general elective requirements. It is not necessary for students to declare a concentration.

Required Coursework

- [MAPL 6001](#) - Political Process and Public Policy (3.0 cr)
- [MAPL 6005](#) - Political and Advocacy Leadership (3.0 cr)
- [MAPL 6004](#) - Political Organizing and Communication (3.0 cr)
- [MAPL 6002](#) - Policy Evaluation (3.0 cr)

Program Sub-plans

A sub-plan is not required for this program.

Students may not complete the program with more than one sub-plan.

Labor Organizing and Leadership

Students concentrating in labor organizing and leadership will learn to:

- value and promote the dignity of work and the dignity of all workers;
- understand the strategies and tactics of collective action and organizing and movement building;
- understand the role of labor in the political economy;
- understand the fundamental human and legal rights of workers and the challenges they face in the US and around the world;
- know what labor unions are and what they do in the workplace, in local communities, in the political arena and internationally;
- be acquainted with the defining events and major themes of U.S. and Minnesota Labor History;
- identify information sources for research on unions and labor issues.

Required Coursework

- [MAPL 5111](#) - Labor Organizing (3.0 cr)
- [MAPL 5113](#) - Labor and Political Economy (3.0 cr)
- MAPL 5405 *{Inactive}*(3.0 cr)

Non-Profit Advocacy

Students concentrating in nonprofit advocacy will learn to:

- understand the role and potential of the nonprofit sector in advancing public policies that strengthen communities and build a more just society;
- build their knowledge and skills in advocacy and organizing for change;
- lead their organizations and allies in collective action to advance social change movements;
- strengthen the nonprofit sector's role in engaging people in democracy supporting activities, including legislative and electoral processes;
- leverage nonprofits' ongoing and trusted relationships with people in the communities they serve to increase grassroots activism;



- know the nonprofit sector's history, characteristics, standards of practice, defining events, key issues, and accomplishments;
- secure and use resources available to support nonprofit research and advocacy.

Required Coursework

- [MAPL 5200](#) - Advocacy and Lobbying: Strategies and Tactics (3.0 cr)
- [MAPL 5202](#) - Nonprofits and Government: The Public and Private Partnership (3.0 cr)
- [MAPL 5308](#) - The Impact of Art on Social Change (Additional option under this concentration.)

Public Sector

Students concentrating in community leadership (public sector) will learn to:

- understand the duties and responsibilities of people serving as either staff or elected officials in the elected or administrative branches of government;
- become familiar with the organization and practices of the Minnesota Legislature, the U.S. Congress, and federal and state administrative offices;
- assess the structure of legislative and administrative public organizations in terms of their ability to make policy changes;
- analyze and plan both the passage and implementation of policy in which they are interested;
- appreciate the high ethical standards which must and usually do govern service in the public sector;
- gain an appreciation for the importance of constituent service and engagement while working in the public sector;
- understand both the theoretical and practical underpinnings of American legislative and administrative practice.

Required Coursework

- [MAPL 5113](#) - Labor and Political Economy (3.0 cr)
- [MAPL 5112](#) - Advocacy in the Public Sector: Service in the Elected Branch
- [MAPL 5110](#) - Ethics in Politics (Additional option under this concentration)
- [MAPL 5301](#) - Campaigns and Elections (Additional option under this concentration.)
- [MAPL 5315](#) - Sustainable Development Policy and Advocacy (Additional option under this concentration.)



Duluth Campus

Master of Engineering M.Eng.

Swenson College of Science & Engineering

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Director of Graduate Studies, M.Eng. Program, Engineering Building 176, 1303 Ordean Court, Duluth, MN 55812 (218-726-7126; fax: 218-726-6907).

Email: rdavis@d.umn.edu

Website: <http://www.d.umn.edu/scse/degrees/MEng/index.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Engineering

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The professional master of engineering emphasizes the practice of engineering in either the private or public sector. The program focuses on developing competencies in the areas of engineering design, problem solving, and practice beyond what can be achieved in earning a bachelor of science degree in a given engineering discipline.

An M.Eng. graduate student is expected to have a focus and degree designation in one of the UMD disciplines of Civil Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering or Mining and Minerals Processing.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:

1. Completed an undergraduate degree in an engineering program, or upon approval by the SCSE MEng Director of Graduate Studies, in a related discipline, e.g. computer science, geology, physics etc.
2. The MEng prefers an undergraduate grade point average (GPA) of 3.00 (on a 4.0 scale) for admission. This preferred performance minimum of 3.0/4.0 must be from an ABET accredited program or equivalent. Industrial experience and professional licensure will be considered for applicants with a grade point less than the preferred minimum.
3. Two letters of recommendation: academic and/or professional references.
4. For international applicants whose native language is not English, a TOEFL score preferred performance minimum is 79 on the internet based test.
5. The GRE score is recommended but not required.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550



Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 15 to 27 major credits and 3 to 15 credits outside the major. There is no final exam. A capstone project is required.

Capstone Project: All students take 3-6 credits of project courses within their major. As part of these credits, a project report or presentation may be required by the departmental adviser and department.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The M.Eng. degree program is primarily a coursework degree program with a minimum of 3 credits and a maximum of 6 credits allocated to a design project to be arranged between the departmental adviser and student. The 30 credits require a minimum of 14 credits at 5XXX or higher, and a cap of 6 credits on 4XXX courses. There is no requirement for a final exam above and beyond what is required in individual courses.



Duluth Campus

Music M.M.

Music

School of Fine Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Music, University of Minnesota Duluth, 1201 Ordean Court, Duluth, MN, 55812 (218-728-8208; fax: 218-726-8210)

Email: mu@d.umn.edu

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30 to 31
- This program does not require summer semesters for timely completion.
- Degree: Master of Music

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of music programs offers students an opportunity to acquire advanced understanding and skills in music education, theory, and practice or in musical performance. Students in music education and performance undertake essential core courses in musicianship, theory, history, research, and education/pedagogy. Additional courses in the area of specialization are tailored relative to the interests and objectives of the student.

Accreditation

This program is accredited by the National Association of Schools of Music.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have an undergraduate degree in music.

Other requirements to be completed before admission:

In addition, the following must be submitted for review by the music graduate committee: a completed Department of Music Graduate Study Application available from www.d.umn.edu/music, which includes a sample of professional writing (a three- to five-page paper addressing current issues in music education or music performance), and a CD or DVD of recent performances, teaching demonstrations, or rehearsals. An entrance performance audition on the major instrument is required for those seeking admission to the M.M. in Music Performance. Candidates seeking admission as vocal performers, choral conductors, and collaborative pianists must demonstrate foreign language proficiency or enroll in remedial courses upon acceptance.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



Program Requirements

Plan B: Plan B requires 30 to 31 major credits and up to null credits outside the major. The final exam is written and oral. A capstone project is required.

Capstone Project: For the M.M. in music education, the Plan B Project is a directed paper. This paper is a comprehensive research analysis and study in the field of music education in the standard five-chapter thesis format. This Plan B Project Paper constitutes 3 credits of the degree program and is generally begun in the third semester of study. A comprehensive oral examination covers the research methodology and content of the Directed Project paper. For the M.M. in music performance, the student's Graduate Recital fulfills the Directed Project requirements.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Core Courses (10 cr)

[MU 5201](#) - Advanced Music History (2.0 cr)

[MU 8101](#) - Graduate Music Theory (2.0 cr)

[MU 8222](#) - Music Bibliography and Research (3.0 cr)

[MU 8900](#) - Psychology of Music (3.0 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans.

Students may not complete the program with more than one sub-plan.

Applied Conducting

Applied Conducting (20 cr)

Applied Music

Take 8 or more credit(s) from the following:

- [MU 8701](#) - Graduate Applied Conducting (1.0 - 2.0 cr)

Ensembles

Take 2 or more credit(s) from the following courses:

MU 4xxx Performance Ensembles

[MU 5510](#) - Opera Studio (1.0 cr)

Graduate Recital

[MU 8300](#) - Graduate Recital (1.0 cr)

Literature Courses

Instrumental

Students must take MU 5204 twice for a total of 4 credits, or MU 5207 twice plus MU 5204 for a total of 4 credits.

[MU 5204](#) - Instrumental Ensemble Literature (2.0 cr)

[MU 5207](#) - Instrumental Chamber Music Literature (1.0 cr)

Take 4 or more credit(s) from the following:

- [MU 5203](#) - Advanced Choral Literature (2.0 cr)
- [MU 5206](#) - Vocal Solo Literature (1.0 - 2.0 cr)
- [MU 5208](#) - Vocal Chamber Literature (1.0 cr)

Pedagogy

[MU 8401](#) - Graduate Music Pedagogy (1.0 cr)

Electives

MU 8302 may be repeated for a maximum of 4 credits, MU 8991 may be repeated for a maximum of 2 credits

Take 4 or more credit(s) from the following:

- [MU 8302](#) - Graduate Applied Music: Secondary Instrument (1.0 cr)
- [MU 8991](#) - Independent Study (1.0 - 2.0 cr)

Collaborative Piano

Collaborative Piano (20 cr)

Language prerequisites must be met either through diagnostic screening or remedial coursework. Students without 2 semesters of diction on their transcript are required to complete the undergraduate diction sequence MU 1411 and MU 1412/13.

**Applied Music**

Take for 8 credits

[MU 8301](#) - Graduate Applied Music: Major Instrument (2.0 cr)

Collaborative Literature

[MU 5627](#) - Art of Accompanying: Vocal Music (2.0 cr)

[MU 5628](#) - Art of Accompanying: Instrumental Music (2.0 cr)

Graduate Recital

[MU 8300](#) - Graduate Recital (1.0 cr)

Pedagogy

[MU 8401](#) - Graduate Music Pedagogy (1.0 cr)

Ensembles

Take 2 or more credit(s) from the following:

MU 4xxx Performance Ensembles

[MU 5510](#) - Opera Studio (1.0 cr)

Take 4 or more credit(s) from the following:

- [MU 4541](#) - Chamber Music (1.0 cr)
- [MU 4621](#) - Piano Pedagogy and Practicum I (2.0 cr)
- [MU 4622](#) - Piano Pedagogy and Practicum II (2.0 cr)
- [MU 5205](#) - Instrumental Solo Literature (1.0 cr)
- [MU 5206](#) - Vocal Solo Literature (1.0 - 2.0 cr)
- [MU 5207](#) - Instrumental Chamber Music Literature (1.0 cr)
- [MU 8302](#) - Graduate Applied Music: Secondary Instrument (1.0 cr)
- [MU 8991](#) - Independent Study (1.0 - 2.0 cr)

Music Education**Music Education (21)****Applied Music**

[MU 8302](#) - Graduate Applied Music: Secondary Instrument (1.0 cr)

Education Electives

Take 3 or more credit(s) from the following:

- [EDAD 5911](#) - Leadership and Personal Growth (3.0 cr)
- [EDAD 5913](#) - Communication and Community Relations (3.0 cr)
- [EDAD 5914](#) - Education Policy (3.0 cr)
- [EDAD 5918](#) - Continuous Improvement Processes for Schools (3.0 cr)
- [EDUC 7008](#) - Foundations of Teaching and Learning: Curriculum Theory and Design (4.0 cr)
- [EDUC 7009](#) - Assessment of Learning (3.0 cr)

Ensembles

Take 2 or more credit(s) from the following courses:

MU 4xxx Performance Ensembles

[MU 5510](#) - Opera Studio (1.0 cr)

Music Education

[MU 8601](#) - Foundations of Music Education (3.0 cr)

[MU 8600](#) - Methods of Research in Music Education (3.0 cr)

[MU 8605](#) - Curricular Trends in Music Education (3.0 cr)

Music Electives

Take 3 or more credit(s) from the following:

- [MU 5203](#) - Advanced Choral Literature (2.0 cr)
- [MU 5204](#) - Instrumental Ensemble Literature (2.0 cr)
- [MU 5205](#) - Instrumental Solo Literature (1.0 cr)
- [MU 5206](#) - Vocal Solo Literature (1.0 - 2.0 cr)
- [MU 5207](#) - Instrumental Chamber Music Literature (1.0 cr)
- [MU 5208](#) - Vocal Chamber Literature (1.0 cr)
- [MU 8302](#) - Graduate Applied Music: Secondary Instrument (1.0 cr)
- [MU 8701](#) - Graduate Applied Conducting (1.0 - 2.0 cr)
- [MU 8991](#) - Independent Study (1.0 - 2.0 cr)

Plan B Project

Take 3 or more credit(s) from the following:

- [MU 8899](#) - Directed Project in Music Education (1.0 - 12.0 cr)

Performance**Performance (20 cr)**

Student must complete a minimum of 20 credits; additional ensemble or electives may be taken to reach 20 credits.

Applied Music

[MU 8301](#) - Graduate Applied Music: Major Instrument (2.0 cr)

Ensemble



Take 2 or more credit(s) from the following:

MU 4xxx Performance Ensembles

MU 5510 - Opera Studio (1.0 cr)

Graduate Recital

MU 8300 - Graduate Recital (1.0 cr)

Literature Courses

Instrumental

MU 5204 - Instrumental Ensemble Literature (2.0 cr)

MU 5207 - Instrumental Chamber Music Literature (1.0 cr)

MU 5205 - Instrumental Solo Literature (1.0 cr)

or **Vocal**

MU 5203 - Advanced Choral Literature (2.0 cr)

MU 5208 - Vocal Chamber Literature (1.0 cr)

MU 5206 - Vocal Solo Literature (1.0 - 2.0 cr)

Pedagogy

MU 8401 - Graduate Music Pedagogy (1.0 cr)

Electives

MU 8302 may be repeated for a maximum of 4 credits, MU 8991 may be repeated for a maximum of 2 credits

Take 4 or more credit(s) from the following:

•MU 8302 - Graduate Applied Music: Secondary Instrument (1.0 cr)

•MU 8701 - Graduate Applied Conducting (1.0 - 2.0 cr)

•MU 8991 - Independent Study (1.0 - 2.0 cr)



Duluth Campus

Music Minor

Music

School of Fine Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Music, University of Minnesota Duluth, 1201 Ordean Court, Duluth, MN, 55812 (218-728-8208; fax: 218-726-8210)

Email: mu@d.umn.edu

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The music program offers students an opportunity to acquire advanced understandings and skills in music education, theory, and practice; or in musical performance. Through a comprehensive curriculum, students may take courses in musicianship, theory, history, research, and education/pedagogy.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.



Duluth Campus

Physics M.S.

Physics

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Physics, University of Minnesota Duluth, 371 Marshall W. Alworth Hall, 1023 University Drive, Duluth, MN 55812 (218-726-7124; fax: 218-726-6942)

Email: phys@d.umn.edu

Website: <http://www.d.umn.edu/~jmaps/gradpgm>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 31
- This program requires summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of science program provides a grounding in the fundamentals of physics, combined with significant research involvement. The primary areas of research are computational physics, high-energy neutrino physics, experimental work in condensed-matter physics, and observational and theoretical work in physical limnology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An undergraduate degree in physics or the equivalent is required.

Other requirements to be completed before admission:

Three letters of recommendation are required for assistantship support.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 14 major credits and 6 credits outside the major. The final exam is oral.



This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The master of science degree is offered under both Plan A and Plan B. All students take 11 credits in a common core of courses (including PHYS 5501, 5511, 5521, and 2 credits in 5090), 3 credits in a methods course (PHYS 5052 or 5053 or 5061), and 6 credits in a minor or related field. Plan A also requires 10 thesis credits. Plan B requires one or more projects for a total of 120 hours of work, preparation of a written report for each project, and 10 additional course credits in physics. These courses may include 4xxx courses if appropriate and if approved for graduate credit; for distinctly interdisciplinary programs, the courses may be outside physics. In all cases, the overall plan of study and selection of elective courses must form a coherent program and be approved by the director of graduate studies.



Duluth Campus

Physics Minor

Physics

Swenson College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Physics, University of Minnesota Duluth, 371 Marshall W. Alworth Hall, 1023 University Drive, Duluth, MN 55812 (218-726-7124; fax: 218-726-6942)

Email: phys@d.umn.edu

Website: <http://www.d.umn.edu/~jmaps/gradpgm>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of science program provides a grounding in the fundamentals of physics, combined with significant research involvement. The primary areas of research are computational physics, high-energy neutrino physics, experimental work in condensed-matter physics, and observational and theoretical work in physical limnology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 6 credits, of which no more than 1 credit can be from PHYS 5090.



Duluth Campus

Psychological Science M.A.

Psychology

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

UMD Psychology
320 BohH D147A
1207 Ordean Court
Duluth, MN 55812
218/726-7808
Email: umdpsy@d.umn.edu
Website: https://psy.wp.d.umn.edu/?page_id=18

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 36 to 50
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Arts in Psychological Science program prepares graduate students with research-based knowledge and skills essential to successful careers in organizational, educational, clinical, and counseling settings. The program has three integrated tracks: 1) Clinical-Counseling Psychology; 2) Industrial-Organizational Psychology; and 3) General-Experimental Psychology. All three tracks include the same basic core courses in Statistics, Research Methodology, and Introduction to Graduate Studies. All three tracks have a 6-credit Plan B requirement (Clinical-Counseling track also has Plan C as an option). In addition, a number of courses in main topics of psychology are required of every student enrolled in the program.

For all three tracks, the degree and research-based preparation should also facilitate graduates' admission into Ph.D. and PsyD. programs in psychology.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A psychology baccalaureate degree from an accredited U.S. institution/foreign equivalent; other majors will be considered if comparable coursework in statistics and research methods has been completed

Other requirements to be completed before admission:

In addition to the general admission requirements for all applicants to our program, those applying to the Clinical-Counseling track will be invited to an on-campus or technology-assisted interview before the admission decision. Students applying to this track should also know, per university policy, criminal background checks will be required before enrolling in internships. We recommend applicants to this track have passed a college-level abnormal psychology class prior to entrance into MAPS. We recommend students applying to the I/O track have passed an introductory I/O psychology or similar course prior to their entrance to the program.

Special Application Requirements:

Applicants must supply:

1. Official transcripts from all colleges and universities attended
2. A brief personal statement indicating why an advanced degree in Psychology is of interest and their track.
3. Three letters of recommendation
4. Graduate Record Examination verbal and quantitative test scores.
5. Scores from the TOEFL examination (for international students whose native language is not English)
6. Work sample



Departmental deadline for admission will be March 1 of the year of admission, pending available space, applications submitted after the deadline may be considered. Admission to the program will be for fall semester only.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 36 to 50 major credits and up to null credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: Students completing Plan B are expected to conduct an original empirical study or meta-analysis under the direction of a faculty adviser. The project must be designed and conducted by the individual student; the topic, however, may be based upon the research program of the faculty adviser.

Plan C: Plan C requires 36 to 50 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

All 3 tracks have a 6 credit Plan B Research Project in Psychology requirement; the Clinical/Counseling track students may choose to do a Plan C and complete 6 additional credits instead of the research project. Students must maintain a GPA of 3.0 or better and must earn a grade of B or better for each course. Furthermore, students must not have more than 8 credits or 2 courses with an incomplete for longer than 2 semesters. The Director of the MAPS Program will advise newly admitted students during their first semester in the program. Before mid-term of the second semester in which the student is enrolled in the program, the DGS will be responsible for assuring that all students select a faculty adviser and establish an examination committee and will also be the instructor of record for the Introduction to Graduate studies course. A final oral examination covering the Plan B project will be given at the end of the student's academic program. The oral examination will be conducted by the student's advising/examining committee. The examination will require the student to demonstrate an understanding of the theories, methods, and analyses employed in his or her research project.



Duluth Campus

Social Work M.S.W.

Social Work

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Social Work, 220 Bohannon Hall, 1207 Ordean Court, Duluth, MN 55812 (218-726-7245; fax: 218-726-7185)

Email: umdswh@d.umn.edu

Website: <http://www.d.umn.edu/sw>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 49
- This program does not require summer semesters for timely completion.
- Degree: Master of Social Work

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of social work (M.S.W.) program offers a concentration in advanced generalist practice that prepares students to practice in a variety of human service settings. Graduates undertake a variety of professional social work roles ranging from counselor and case manager to community organizer and administrator. The curriculum has a special focus on services to American Indians and their communities. Coursework is also available in the area of child welfare practice.

Accreditation

This program is accredited by Council of Social Work Education (CSWE).

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants should have a bachelor's degree with a solid background in the liberal arts, including courses in cultural studies, and behavioral and social sciences.

Other requirements to be completed before admission:

Completion of at least 15 semester credits in two or more social science disciplines, such as sociology, psychology, economics, anthropology, or political science is required. Admitted applicants must complete a college-level biology course with content on human anatomical and physiological development and a college-level statistics course. The biology course must be completed before registering for the first semester in the M.S.W. program, and the statistics course must be completed before registering for the first research course. Interested persons can apply and be admitted before completing the enrollment prerequisites.

Special Application Requirements:

Applicants should be knowledgeable about diverse cultures; social problems; social conditions; and the social, psychological, and biological determinants of human behavior. Applicants with undergraduate degree majors in social work or a related field or discipline are given preference over applicants with other majors. Applicants should show potential to contribute to the social work profession. Preference is given to applicants with professional experience in human service settings, particularly when this experience involves working with underrepresented and protected classes. Course credits are not awarded for non-academic or professional "life experience."

Applicants with a bachelor of social work degree from a program accredited by the Council of Social Work Education may apply for the Advanced Standing Program.

The following may be submitted through the online application or be sent directly to the department: the Department's Supplemental Application form, a personal statement, a writing sample, and a resume. Three letters of recommendations must be accompanied by the department's recommendation form. Standard Program students are admitted in the fall semester only. Advanced Standing Program students have the option of starting either in the summer or fall semester.



International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 49 major credits and up to null credits outside the major. The final exam is oral. A capstone project is required.
Capstone Project: The capstone project is an M.S.W. Portfolio. The UMD Department of Social Work Portfolio was designed to help students meaningfully integrate, on an ongoing basis, the knowledge and skills they acquire throughout the master's curriculum. It will also help ensure that all M.S.W. graduates demonstrate competence in those learning areas that we believe are key to quality masters-level social work practice.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The Standard Program requires 51 credits and the Advanced Standing Program requires 34 credits, a capstone project, and final examination. The program requires two field placements in human service agencies (one field placement for students with advanced standing). A level of personal and professional competence, as indicated by social work course and field placement evaluations, is required.



Duluth Campus

Social Work Minor

Social Work

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Social Work, 220 Bohannon Hall, 1207 Ordean Court, Duluth, MN 55812 (218-726-7245; fax: 218-726-7185)

Email: sw@d.umn.edu

Website: <http://www.d.umn.edu/sw>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of social work (M.S.W.) program offers a concentration in advanced generalist practice that prepares students to practice in a variety of human service settings. Graduates undertake a variety of professional social work roles ranging from counselor and case manager to community organizer and administrator. The curriculum has a special focus on services to American Indians and their communities. Coursework is also available in the area of child welfare practice.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.



Duluth Campus

Teaching and Learning Ed.D.

Education

College of Education and Human Service Professions

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Education, 412 Library Drive, 150 EduE, Duluth, MN 55812 (218-726-6525; fax: 218-726-7008)

Website: <http://www.d.umn.edu/educ/programs/edd/index.html>

- Program Type: Doctorate
- Requirements for this program are current for Fall 2014
- Length of program in credits: 76
- This program requires summer semesters for timely completion.
- Degree: Doctor of Education

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The doctor of education degree (Ed.D.) with a major in teaching and learning is an applied degree for the professional development of P-12, community college, and university faculty and administrators; professionals in other human service professions such as coaching, athletic training, criminal justice, social work, extension, community agency administration, university student personnel; as well as business professionals involved in education and training activities. The mission of the program is to produce scholarly practitioners. The goals of doctoral study in this program are to help students 1) acquire greater content knowledge in teaching and learning; 2) develop abilities for research in the field of teaching and learning; 3) evolve a broadened professional background in areas related to teaching and learning, such as systems and system interactions, and methods for program improvement; and 4) increase levels of cultural competence. Students will be immersed in research on best practices in teaching and learning, and will acquire the skills needed to apply best practices in their own schools and organizations.

Program Delivery

This program is available:

- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A master's or comparable foreign degree in education or a related field (special education, curriculum and instruction, human development, psychology, social work, management science, criminology)

Other requirements to be completed before admission:

The application must also include three letters of recommendation, a minimum of three work samples (e.g., written reports, articles, presentations, curricula, or other professional artifacts), a personal statement of career objectives, and a personal interview with the Ed.D. teaching and learning admissions committee. The statement of career objectives will be used to 1) evaluate how well this program will meet the needs of the applicant, 2) determine if appropriate concentration courses are available, and 3) conduct an initial evaluation of writing skills. GRE scores will be considered as part of a holistic evaluation of the application. Students will also be required to complete an assessment designed to determine an individual's fit with the hybrid online delivery model. Results of the survey will also be used as part of a holistic evaluation of the application.

Applicants must submit their test score(s) from the following:

- GRE
 - General Test - Verbal Reasoning: 500
 - General Test - Quantitative Reasoning: 500

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

The preferred English language test is Test of English as Foreign Language



Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

37 credits are required in the major.

15 credits are required outside the major.

24 thesis credits are required.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 4 semesters must be completed before filing a Degree Program Form.

Preliminary Written and Oral Exam--Preliminary written and oral examinations are required and will be administered after completion of all research and major coursework.

Project--A project designed to build a knowledge base relevant to problems in schools and organizations.

Final Exam--An oral defense of the project is required.

Required Coursework

[EDUC 8015](#) - Research Design (3.0 cr)

[EDUC 8016](#) - Theory and Practice of Qualitative Research Methods (3.0 cr)

[EDUC 8017](#) - Theory and Practice of Quantitative Research Methods (3.0 cr)

[EDUC 8018](#) - Statistical Analysis in Educational Research (3.0 cr)

[EDUC 8020](#) - Doctoral Seminar (1.0 cr)

[EDUC 8001](#) - Historical, Social, and Philosophical Foundations of Education (3.0 cr)

[EDUC 8003](#) - Educational Policy (3.0 cr)

[EDUC 8005](#) - Curriculum: Theory into Practice (3.0 cr)

[EDUC 8007](#) - Research on Knowledge and Learning in Education (3.0 cr)

[EDUC 7005](#) - Teaching and Learning in a Systems Context (3.0 cr)

[EDUC 8009](#) - Distance Education: From Theory to Practice (3.0 cr)

[EDUC 8021](#) - Theories, Principles, and Methodology of Assessment in Organizational Systems (3.0 cr)

[EDUC 8888](#) - Thesis Credit: Doctoral (1.0 - 24.0 cr)



Duluth Campus

Tribal Administration and Governance M.T.A.G.

American Indian Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of American Indian Studies, University of Minnesota Duluth, Cina Hall 116, 1123 University Drive, Duluth, MN 55812 (218-726-7332)

Email: umdmtag@d.umn.edu

Website: <http://www.umdmtag.org>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Tribal Admin and Governance

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Tribal Administration and Governance (MTAG) is an applied professional development degree designed to develop the knowledge and skills needed to work as an administrator in a tribal government. Students in the program may already serve as tribal administrators, council members, or tribal leaders. Students who currently work or aspire to work professionally in tribal governments or management positions will benefit from this program, which emphasizes both the acquisition of academic knowledge and the application of practical skills.

The curriculum is based on the roles that tribal administrators, leaders, and professionals play in formal and informal situations that support tribal sovereignty and self-determination. Traditional language and culture is an important thread throughout the program. Program delivery is designed to accommodate working professionals and support existing commitments to families and home communities. A combination of online delivery and several weekend meetings per semester provides face-to-face interaction with experts in each area of the curriculum including faculty, staff, special guests, and students. The entire program is designed to accommodate working adults offering weekend and online classes. Weekend sessions meet four times per semester on Friday evenings and all day Saturday, or students may choose to participate entirely by remote connection.

Program Delivery

This program is available:

- completely online (all program coursework can be completed online)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree is required.

Special Application Requirements:

Applications are accepted for fall entry on a rolling basis. Unofficial transcripts or academic records, two letters of recommendation, and a personal statement must be uploaded directly to the online application. The personal statement should include what the student intends to get out of the MTAG program and accomplish in tribal administration and governance. Official transcripts or academic records will be required only if the applicant is admitted to the program.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB



- Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 38 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

Semester One (Fall, Year One)

[MTAG 5110](#) - Principles of Tribal Sovereignty I (3.0 cr)

[MTAG 5210](#) - Administration Governance I (Strategic) (3.0 cr)

[MTAG 5310](#) - Foundations of Leadership and Ethics in Indigenous Community Life and Organizations (3.0 cr)

Semester Two (Spring, Year One)

[MTAG 5120](#) - Principles of Tribal Sovereignty II (3.0 cr)

[MTAG 5220](#) - Administration and Governance II (Operations) (3.0 cr)

[MTAG 5320](#) - Applied Leadership and Ethics in an Indigenous Organizational Context (3.0 cr)

Semester Three (Fall, Year Two)

[MTAG 5230](#) - Advanced Tribal Administration and Governance I (Human Resources) (3.0 cr)

[MTAG 5430](#) - Tribal Finance, Accounting and Budgets I (3.0 cr)

[MTAG 5530](#) - Federal Indian Law I (3.0 cr)

[MTAG 5997](#) - Tribal Administration and Governance Directed Project (2.0 cr)

Semester Four (Spring, Year Two)

[MTAG 5240](#) - Advanced Tribal Administration and Governance II (Project) (3.0 cr)

[MTAG 5440](#) - Tribal Finance, Accounting and Budgets II (3.0 cr)

[MTAG 5540](#) - Federal Indian Law II (3.0 cr)



Duluth Campus

Water Resources Science M.S.

Swenson College of Science & Engineering

University of Minnesota Duluth

Link to a [list of faculty](#) for this program.

Contact Information:

Water Resources Science, University of Minnesota, 173 McNeal Hall, 1985 Buford Avenue, St. Paul MN 55108 (612-624-7456; fax: 612-625-1263)

Email: wrs@umn.edu

Website: <http://wrs.umn.edu>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- University of Minnesota, Twin Cities
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This cross-campus interdisciplinary program provides comprehensive training in water resources science, with integration across scientific disciplines. A structured interdisciplinary graduate curriculum is offered. The program includes a set of core courses plus electives in the following areas of emphasis at the M.S. level: aquatic biology, environmental chemistry, hydrologic science, limnology, water management technology, water policy, water quality, and watershed science and management. Approximately 80 courses offered within 15 other graduate programs are available to students majoring in water resources science.

The goal of the program is to produce scientists with strong technical skills in disciplines relevant to water resources and a broad understanding of 1) the hydrologic cycle and associated ecosystems, 2) the interconnectedness of the sciences involved in managing aquatic resources, and 3) the interplay between the biophysical sciences and social sciences in developing and implementing public policies related to water.

Students in the program develop the breadth of scientific knowledge appropriate to understand the complicated aquatic ecosystems and watersheds on which they will work, as well as social dimensions of the topic, including the public policy and legal frameworks in which water resources are protected and managed.

The program involves faculty from the following departments on the Twin Cities campus: Applied Economics; Bioproducts and Biosystems Engineering; Civil Engineering; Earth Sciences; Ecology, Evolution, and Behavior; Entomology; Environmental and Occupational Health; Fisheries, Wildlife, and Conservation Biology; Forest Resources; Geography; Horticultural Science; Microbiology, Plant Biology; Soil, Water, and Climate; and the Humphrey Institute of Public Affairs. It also involves faculty from the following departments on the Duluth campus: Biology; Chemical Engineering; Chemistry; Civil Engineering; Geography; Geological Sciences; Physics; and Political Science; as well as the Large Lakes Observatory and the Natural Resources Research Institute in Duluth.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

The program is flexible enough to accommodate students from a variety of backgrounds. Normally students have a bachelor's degree in physical or biological science or engineering.

Other requirements to be completed before admission:

Recommended academic preparation includes one year (or two semesters) each of calculus, physics, and chemistry, and one biology course.

Availability of funding and willingness of a member of the graduate faculty to serve as an adviser are important criteria for admission to the program.



Special Application Requirements:

Applicants must submit three letters of recommendation via the Graduate School ApplyYourself website. These letters should be from professors qualified to estimate applicant's class rank and evaluate their ability to complete a program of graduate study, or from persons who can assess their professional or research potential.

Applicants must also submit a résumé of their academic history and professional experience and a statement of purpose, including the proposed area of emphasis. Applicants should submit results of the GRE General Test. Students may be admitted any semester but are strongly encouraged to submit their application by December 15 for fall semester admission. More specific application instruction can be found on the program website: wrs.umn.edu/prospectivestudents/apply/index.htm.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#) (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 14 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project is defined by the faculty adviser. The Plan B option is well suited to students who have little undergraduate coursework in water resources science and thus need more coursework to gain the combination of depth and breadth needed in this field. Plan B projects involve field, laboratory, or computer work and the analysis, synthesis, or interpretation of data.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

Students may choose Plan A, which requires a thesis, or Plan B, which requires additional coursework and a major project. Both plans incorporate courses offered on the Twin Cities and Duluth campuses.

Students must complete courses in four core areas: 1) hydrology (surface and/or hydrogeology); 2) environmental/water chemistry; 3) limnology; and 4) water resources policy, economics, and management, and two electives in such areas of emphasis as aquatic biology, hydrologic science, watershed science and management, and water management technology. One elective must be from an approved list of technical courses dealing with water quality science/management. A minimum of two related field courses (at least 6 credits) outside of aquatic science are required. Registration for the WRS Seminar during the first semester in residence and training in responsible conduct of research and ethics are also required.

Approved core and area of emphasis courses as well as a list of faculty are listed on the program website: wrs.umn.edu/degreesandcourses/index.htm.

Program Sub-plans



A sub-plan is not required for this program.
Students may not complete the program with more than one sub-plan.

Limnology and Oceanography

The science of inland waters, or "limnology," includes the study of streams, lakes, ponds, and wetlands. While Lake Superior falls into this category, the style of research, particularly the nature of sampling and the scale of the processes investigated, makes study of Lake Superior and other Great Lakes more akin to oceanography than to classical limnology. A program that focuses on the study of both limnology and oceanography strengthens understanding of both systems, through comparative studies and by fostering interaction between groups that focus more strongly on one or the other system. Limnology and oceanography are by necessity interdisciplinary fields, with major components contributed by biological, geological, physical, and chemical sciences. Such interdisciplinary fields in the modern research university require mechanisms to insure cross-fertilization of ideas, approaches, methods, techniques, and knowledge. The limnology and oceanography track in WRS provides just such a much-needed mechanism.

The goal of the program is to produce scientists with strong technical skills in aquatic science and a broad understanding of limnology and oceanography.

Students may choose Plan A, which requires a thesis, or Plan B, which requires additional coursework and a major project. Specific curriculum for the limnology and oceanography track follows WRS course requirements. Both plans incorporate courses offered on the Twin Cities and Duluth campuses.

Students must complete courses in four limnology and oceanography track core areas: 1) hydrology (surface and/or hydrogeology); 2) environmental/water chemistry; 3) limnology; and 4) water resources policy, economics, and management; and one elective must be from an approved list of technical courses dealing with water quality science/management. An additional one or two electives in limnology and oceanography are also required. A minimum of two related field courses (at least 6 credits) outside of aquatic science are required. Registration for the WRS Seminar during the first semester in residence and training in responsible conduct of research and ethics are also required.

A minimum of 20 course credits (plus 10 thesis credits) are required for Plan A and a minimum of 30 credits are required for Plan B (up to 3 credits may be used for the Plan B project). Students who had classes equivalent to those in the WRS core as undergraduates may substitute other classes to meet minimum credit requirements.

The faculty adviser must be a member of the limnology and oceanography track faculty.

Approved limnology and oceanography track core and elective courses as well as a list of faculty are listed on the program website: wrs.umn.edu/degreesandcourses/landotrack/index.htm.



Duluth Campus

Water Resources Science Minor

Swenson College of Science & Engineering

University of Minnesota Duluth

Link to a [list of faculty](#) for this program.

Contact Information:

Water Resources Science, 173 McNeal Hall, 1985 Buford Avenue, St. Paul MN 55108 (612-624-7456; fax: 612-625-1263)

Email: wrs@umn.edu

Website: <http://wrs.umn.edu>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 9
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This cross-campus interdisciplinary program provides comprehensive training in water resources science, with integration across scientific disciplines. A structured interdisciplinary graduate curriculum is offered. The program includes a set of core courses plus electives in the following areas of emphasis at the M.S. and Ph.D. levels: aquatic biology, environmental chemistry, hydrologic science, limnology, water management technology, water policy, water quality, and watershed science and management. Approximately 80 courses offered within 15 other graduate programs are available to students majoring in water resources science.

The goal of the program is to produce scientists with strong technical skills in disciplines relevant to water resources and a broad understanding of 1) the hydrologic cycle and associated ecosystems, 2) the interconnectedness of the sciences involved in managing aquatic resources, and 3) the interplay between the biophysical sciences and social sciences in developing and implementing public policies related to water.

Students in the program develop the breadth of scientific knowledge appropriate to understand the complicated aquatic ecosystems and watersheds on which they will work, as well as social dimensions of the topic, including the public policy and legal frameworks in which water resources are protected and managed.

The program involves faculty from the following departments on the Twin Cities campus: Applied Economics; Bioproducts and Biosystems Engineering; Civil Engineering; Earth Sciences; Ecology, Evolution, and Behavior; Entomology; Environmental and Occupational Health; Fisheries, Wildlife, and Conservation Biology; Forest Resources; Geography; Horticultural Science; Microbiology, Plant Biology; Soil, Water, and Climate; and the Humphrey Institute of Public Affairs. It also involves faculty from the following departments on the Duluth campus: Biology; Chemical Engineering; Chemistry; Civil Engineering; Geography; Geological Sciences; Physics; and Political Science; as well as the Large Lakes Observatory and the Natural Resources Research Institute in Duluth.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's minor requires 9 credits, including WRS 5101 (3 credits) and two of the other core courses described under M.S. degree requirements. Doctoral students must complete 12 credits, including WRS 5101 (3 credits), a core courses described under the M.S. degree requirements, and two electives from one of the areas of emphasis.





Duluth Campus

Water Resources Science Ph.D.

Swenson College of Science & Engineering

University of Minnesota Duluth

Link to a [list of faculty](#) for this program.

Contact Information:

Water Resources Science, 173 McNeal Hall, 1985 Buford Avenue, St. Paul MN 55108 (612-624-7456; fax: 612-625-1263)

Email: wrs@umn.edu

Website: <http://wrs.umn.edu>

- Program Type: Doctorate
- Requirements for this program are current for Fall 2014
- Length of program in credits: 64
- This program does not require summer semesters for timely completion.
- The Water Resource Science Ph.D. is an All-University program delivered on the Twin Cities and Duluth Campuses. The University of Minnesota Twin Cities is the degree granting authority for the Water Resources Science Ph.D. program in Duluth.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This cross-campus interdisciplinary program provides comprehensive training in water resources science, with integration across scientific disciplines. A structured interdisciplinary graduate curriculum is offered. The program includes a set of core courses plus electives in the following areas of emphasis at the Ph.D. level: aquatic biology, environmental chemistry, hydrologic science, limnology, water management technology, water policy, water quality, and watershed science and management. Approximately 80 courses offered within 15 other graduate programs are available to students majoring in water resources science.

The goal of the program is to produce scientists with strong technical skills in disciplines relevant to water resources and a broad understanding of 1) the hydrologic cycle and associated ecosystems, 2) the interconnectedness of the sciences involved in managing aquatic resources, and 3) the interplay between the biophysical sciences and social sciences in developing and implementing public policies related to water.

Students in the program develop the breadth of scientific knowledge appropriate to understand the complicated aquatic ecosystems and watersheds on which they will work, as well as social dimensions of the topic, including the public policy and legal frameworks in which water resources are protected and managed.

The program involves faculty from the following departments on the Twin Cities campus: Applied Economics; Bioproducts and Biosystems Engineering; Civil Engineering; Earth Sciences; Ecology, Evolution, and Behavior; Entomology; Environmental and Occupational Health; Fisheries, Wildlife, and Conservation Biology; Forest Resources; Geography; Horticultural Science; Microbiology, Plant Biology; Soil, Water, and Climate; and the Humphrey Institute of Public Affairs. It also involves faculty from the following departments on the Duluth campus: Biology; Chemical Engineering; Chemistry; Civil Engineering Geography; Geological Sciences; Physics; Political Science; as well as the Large Lakes Observatory and the Natural Resources Research Institute in Duluth.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

The program is flexible enough to accommodate students from a variety of backgrounds. Normally students have a bachelor's or master's degree in physical or biological science or engineering.

Other requirements to be completed before admission:

Recommended academic preparation includes one year (or two semesters) each of calculus, physics, and chemistry, and one biology course at the undergraduate level.

Availability of funding and willingness of a member of the graduate faculty to serve as an adviser are important criteria for admission to the Ph.D. program.



Special Application Requirements:

Applicants must submit three letters of recommendation via the Graduate School ApplyYourself website. These letters should be from professors qualified to estimate applicant's class rank and evaluate their ability to complete a program of graduate study, or from persons who can assess their professional or research potential.

Applicants must also submit a résumé of their academic history and professional experience and a statement of purpose, including the proposed area of emphasis. Applicants should submit results of the GRE. Students may be admitted any semester but are strongly encouraged to submit their application by December 15 for fall semester admission. More specific application instruction can be found on the program website: wrs.umn.edu/prospectivestudents/apply/index.htm.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

28 credits are required in the major.

12 credits are required outside the major.

24 thesis credits are required.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Coursework is tailored to student interests, and many areas of emphasis are possible. Core courses are offered on both the Twin Cities and Duluth campuses.

Students complete coursework equivalent to that of an M.S. in water resources science, with additional coursework in an area of emphasis. There are no specific credit requirements in the major, but Ph.D. programs normally include at least 40 course credits beyond the B.S. level, including relevant coursework taken for a master's degree and a required minimum of 12 credits in a supporting or minor program.

Approved core and area of emphasis courses as well as a list of faculty are listed on the program website: wrs.umn.edu/degreesandcourses/index.htm.

Program Sub-plans

A sub-plan is not required for this program.

Students may not complete the program with more than one sub-plan.

Limnology and Oceanography

The science of inland waters, or "limnology," includes the study of streams, lakes, ponds, and wetlands. While Lake Superior falls into this category, the style of research, particularly the nature of sampling and the scale of the processes investigated, makes study of Lake Superior and other Great Lakes more akin to oceanography than to classical limnology. A program that focuses on the study of both



limnology and oceanography strengthens understanding of both systems, through comparative studies and by fostering interaction between groups that focus more strongly on one or the other system. Limnology and oceanography are by necessity interdisciplinary fields, with major components contributed by biological, geological, physical, and chemical sciences.

This track within the cross-campus interdisciplinary WRS program provides comprehensive training in limnology and oceanography. As is the case for the WRS graduate program as a whole, the limnology and oceanography program includes a set of core courses plus electives in the subfield of limnology and oceanography.

The goal of the program is to produce scientists with strong technical skills in aquatic science and a broad understanding of limnology and oceanography. Faculty on both Twin Cities and Duluth campuses participate in the limnology and oceanography track. WRS limnology and oceanography faculty list: <http://wrs.umn.edu/faculty/landotracklist/index.htm>.

Specific to this sub-plan:

Specific curriculum for the limnology and oceanography track follows WRS course requirements. Core courses are offered on both the Twin Cities and Duluth campuses.

Ph.D. students pursuing this track must have at least two members of the limnology and oceanography track faculty on their committee including the adviser.

Approved limnology and oceanography track core and elective courses as well as a list of faculty are listed on the program website: wrs.umn.edu/degreesandcourses/landotrack/index.htm.



Duluth Campus

Criminology M.A.

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Sociology-Anthropology, University of Minnesota Duluth, 228 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-7801; fax: 218-726-7759)

Email: crimma@d.umn.edu

Website: http://www.d.umn.edu/socanth/criminology/macrim_graduateprogram.php

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Note: This program is not currently accepting new students. Please contact the Department of Sociology/Anthropology for more information about the status of the criminology M.A.

The core courses for the master of arts (M.A.) in criminology feature relevant theoretical perspectives in understanding criminal behavior, methods of research and data analysis, and critical analysis of the criminal justice system. The curriculum is based on the premise that a liberal education in the social sciences includes the development of a student's ability to 1) define problems effectively by asking appropriate questions; 2) understand and respect people with diverse opinions, backgrounds, characteristics, and lifestyles; 3) respect the right to freedom of inquiry, willingly challenge conventional wisdom, and be intellectually flexible when challenged by factual information; and 4) understand the significance of inequality in the way that criminal justice is administered. The theme of inequality is incorporated into the graduate program as it is in the undergraduate program. In particular, structural forms of oppression are examined, and emphasis is placed on issues of social justice, human rights, and treatment rehabilitation.

The framework of the program provides students with opportunities to develop a knowledge base that enhances understanding of criminal behavior and the workings of the criminal justice system. Core requirements give students experience in using various methods of research, analyzing and interpreting data, understanding and critiquing the main theoretical traditions in the field, and examining the organization of the criminal justice system. Furthermore, course electives enable students to focus on more specific interests (e.g., policing, courts, youth justice, etc.).

The M.A. in criminology provides an opportunity for both intellectual and professional development. The program serves those students with undergraduate degrees in criminology (or a related social science) who are interested in pursuing the advanced study of crime and justice. The program also serves those who have been employed in organizations and agencies and who wish to expand their knowledge and understanding in ways that may enhance their professional careers.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree or foreign equivalent in a related field is required. Preference is given to applicants with undergraduate degrees in criminology, criminal justice, corrections, or sociology.

Other requirements to be completed before admission:

Admission to the program is competitive. Applicants must have successfully completed an introduction to criminology or criminal justice course, the equivalent of one semester of research methods and/or statistics beyond the introductory level, and a course devoted primarily to social/behavioral theory.

Special Application Requirements:

Applicants must supply three letters of recommendation evaluating their scholarship and potential for graduate study (at least two



letters should be from academic faculty familiar with the applicant); an essay explaining why an advanced degree in criminology is of interest; why the applicant merits serious consideration; and a personal statement of the applicant's short- and long-term professional goals, and commitment to and preparation for graduate study in criminology.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550

Key to [test abbreviations](#)(TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 22 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 32 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The M.A. is offered under both Plan A and Plan B; each requires 38 credits. The Plan A option involves thesis work; the Plan B option involves a special project based upon a student's practicum work. The Plan B project combines theories, concepts, principles, and/or best practices from at least one course in the student's program of study with work being done in a practicum. All students must take CRIM 8100 (3 cr), CRIM 8200 (3 cr), CRIM 8201 (3 cr), CRIM 8140 (1 cr), and CRIM 8300 (3 cr). Plan A students must enroll in CRIM 8777 - Master's Thesis Credits (minimum of 10 credits required). Plan B students must enroll in CRIM 8600 - Criminology Practicum (minimum of 10 credits required). In addition to the credits listed above, all students must choose at least 9 additional credits in criminology courses, 5xxx or above.

Students are expected to include additional elective courses (6 cr) outside the major (in a minor or related field) as part of their program of study. The related field courses must be chosen in consultation with, and approved by, the student's advising/examining committee. Upon the advice and approval of the director of graduate studies, students may use 4xxx courses in related fields as appropriate. Sociology 4xxx courses may be included in either the Plan A or Plan B options for the M.A. in criminology.



Duluth Campus

Criminology Minor

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Sociology-Anthropology, University of Minnesota Duluth, 228 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-7801; fax: 218-726-7759)

Email: crimma@d.umn.edu

Website: http://www.d.umn.edu/socanth/criminology/macrim_graduateprogram.php

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 10
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Note: This program is not currently accepting new students. Please contact the Department of Sociology/Anthropology for more information about the status of the Criminology M.A.

The core courses in the criminology program feature relevant theoretical perspectives in understanding criminal behavior, methods of research and data analysis, and critical analysis of the criminal justice system. The curriculum is based on the premise that a liberal education in the social sciences includes the development of a student's ability to 1) define problems effectively by asking appropriate questions; 2) understand and respect people with diverse opinions, backgrounds, characteristics, and lifestyles; 3) respect the right to freedom of inquiry, willingly challenge conventional wisdom, and be intellectually flexible when challenged by factual information; and 4) understand the significance of inequality in the way that criminal justice is administered. The theme of inequality is incorporated into the graduate program as it is in the undergraduate program. In particular, structural forms of oppression are examined, and emphasis is placed on issues of social justice, human rights, and treatment rehabilitation.

The framework of the program provides students with opportunities to develop a knowledge base that enhances understanding of criminal behavior and the workings of the criminal justice system. Core requirements give students experience in using various methods of research, analyzing and interpreting data, understanding and critiquing the main theoretical traditions in the field, and examining the organization of the criminal justice system. Furthermore, course electives enable students to focus on more specific interests (e.g., policing, courts, youth justice, etc.).

The criminology program provides an opportunity for both intellectual and professional development, and serves those students with undergraduate degrees in criminology (or a related social science) who are interested in pursuing the advanced study of crime and justice. The program also serves those who have been employed in organizations and agencies and who wish to expand their knowledge and understanding in ways that may enhance their professional careers.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 4 credits in methods/statistics, 3 credits in theory, and 3 credits of electives.



Duluth Campus

English M.A.

English

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of English, 410 Humanities, 1201 Ordean Court, University of Minnesota Duluth, Duluth, MN 55812 (218-726-8228; fax: 218-726-7457)

Email: enql@d.umn.edu

Website: <http://www.d.umn.edu/enql/englishgrad/index.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 32 to 33
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Arts program offers courses in English, Irish, and American literature; creative writing; linguistics; composition and rhetorical theory; book history; publishing; and English education. The program has four master's emphases: literary studies, for concentrated study of literature; interdisciplinary study in Literature, Language, and Culture; Publishing and Print Culture; and Writing Studies.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An undergraduate degree including at least 30 credits in English or a related humanities field.

Other requirements to be completed before admission:

Entering students should have completed 30 credits in English (these may include credits in literature, language, advanced composition and other humanities fields), including 20 upper-division English courses that offer broad coverage of English and American literature. Any deficiencies will be determined and considered by the director of graduate studies in consultation with the graduate committee. Certain course prerequisites may be taken concurrently with graduate work and may be applied toward degree requirements.

Special Application Requirements:

GRE scores are on Verbal and Analytical Writing portions.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 100
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 600
- IELTS
 - Total Score: 7
- MELAB
 - Final score: 80

The preferred English language test is Test of English as Foreign Language



Key to [test abbreviations](#)(GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 25 to 27 major credits and 6 credits outside the major. The final exam is written and oral. A capstone project is required.

Capstone Project: This degree requires two Plan B Projects totaling 120 hours of effort before taking the final exam. The projects normally are completed in connection with courses in English or in a related field. A completed project must be approved by a graduate faculty member.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Language Requirement: Proficiency in an approved language.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

Courses at the 4000-level in English, writing studies and linguistics may not be included in degree in English. Some 4xxx courses are permitted in the related field.

Emphases Options

Literary Studies

Requires certification of a reading knowledge of Latin, Greek, French, Italian, Spanish, Russian, American Sign Language, or other approved language. This Emphasis requires a minimum of 32 credits, including at least 26 credits in the major and 2 Plan B projects.

-OR-

Language, Literature & Culture

Requires certification of a reading knowledge of a foreign language appropriate to the candidate's area of study and approved by the English graduate committee, or completion of at least 6 course credits beyond the 32 required credits. This Emphasis requires a minimum of 32 credits, including at least 25 credits in the major, distributed in literature, linguistics, information design, or composition/rhetoric; 6 to 8 credits in a related field; and 2 Plan B projects.

-OR-

Publishing & Print

Requires certification of a reading knowledge of Latin, Greek, French, Italian, Spanish, Russian, American Sign Language, or other approved language. This Emphasis requires a minimum of 33 credits, including at least 27 credits within the major; distributed in literature, publishing information design, and print culture; 6 to 8 in a related field; and 2 Plan B projects.

-OR-

Writing Studies

Requires certification of a reading knowledge of a foreign language appropriate to the candidate's area of study and approved by the English graduate committee, or completion of at least 6 course credits beyond the 32 required credits. This Emphasis requires a minimum of 32 credits, including at least 26 credits in the major, distributed in literature, linguistics, composition/rhetoric, information design and writing and 2 Plan B projects.



Duluth Campus

English Minor

English

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of English, 410 Humanities, 1201 Ordean Court, University of Minnesota Duluth, Duluth, MN 55812 (218-726-8228; fax: 218-726-7457)

Email: enql@d.umn.edu

Website: <http://www.d.umn.edu/enql>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 8
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master's minor program offers courses in English, Irish, and American literature; creative writing; linguistics; composition and rhetorical theory; book history; publishing; and English education. The program has three emphases: a literary studies emphasis for concentrated study of literature, an interdisciplinary emphasis in English studies, and an emphasis in publishing and print culture.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.



Duluth Campus

Liberal Studies M.Lib.Stu.

Women, Gender & Sexuality Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

College of Liberal Arts, M.L.S. Program, University of Minnesota Duluth, 494 Humanities, 1201 Ordean Court, Duluth, MN 55812 (218-726-8437)

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Liberal Studies

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The interdisciplinary master of liberal studies (M.L.S.) offers students an opportunity to engage in advanced studies in the social sciences, the humanities, or a blend of these two. This program prioritizes degree programs that adopt multiple disciplinary approaches to their subject matter and fosters cross-disciplinary skills at the service of a focused research question. To complete the M.L.S. degree, at least one to three papers or alternative projects with an in-depth exploration of an interdisciplinary topic are required.

Program Delivery

This program is available:

- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Entering M.L.S. students should have a bachelor's degree or equivalent.

Other requirements to be completed before admission:

For information about the application process, refer to www.d.umn.edu/grad/applicationinstructions.php.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 30 major credits and 0 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project is an expansion of work done in a course or another topic of special interest. Plan B papers and projects are submitted to the examining committee before the student's final oral presentation and examination and represent 120 hours of independent research.



This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.8 is required for students to remain in good standing.

The M.L.S. is offered only under Plan B. Students must complete 30 credits, including 4 credits of MLS 8001 - Theories, Methods and Applications of Graduate Study, 4 credits of MLS 8501 - Seminar in Community Engagement, and 4 credits of MLS - Seminar in Global Perspectives. One to three Plan B papers or creative projects are required. Inclusion of 4xxx courses on degree program forms is subject to adviser and director of graduate studies approval.



Duluth Campus

Liberal Studies Minor

Sociology/Anthropology

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

College of Liberal Arts, M.L.S. Program, University of Minnesota Duluth, 104 Darland Administration Building, 1049 University Drive, Duluth, MN 55812 (218-726-8437)

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

A minor in liberal studies allows current graduates to broaden their intellectual horizons through in depth exploration of a variety of interdisciplinary topics.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

A master's-level minor in liberal studies requires 6 credits of courses approved by the director of graduate studies.



Duluth Campus

Linguistics Minor

Writing Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Program in Linguistics, University of Minnesota Duluth, 435 Humanities Building, 1201 Ordean Court, Duluth, MN 55812 (218-726-8131; fax 218-726-6882)

Email: mlinn@d.umn.edu

Website: <http://www.d.umn.edu/writ>

- Program Type: Graduate free-standing minor
- Requirements for this program are current for Fall 2014
- Length of program in credits (Masters): 6
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Graduate students may elect linguistics--which is offered interdepartmentally and through the Program in Linguistics--as a related field, or, with approval of the director of graduate studies of the major, as a designated minor.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses towards program requirements is not permitted.

The minor in linguistics requires a minimum of 6 credits selected from ANTH 4628 - Language and Culture (3 cr), ENGL 5811 - Introduction to Modern English (4 cr), ENGL 5821 - History of the English Language (4 cr), LING 5195 - Special Topics (3 cr), LING 5802 - Applied Linguistics (4 cr), LING 5852 - Practicum in Teaching Linguistics (3 cr), LING 8500 - Graduate Seminar (3 cr), and LING 8591 - Independent Study in Linguistics (1-3 cr).



Duluth Campus

Master of Advocacy and Political Leadership

College of Liberal Arts - Adm

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

112 Cina Hall, 1123 University Drive, Duluth, MN 55812 (218-726-6711; fax: 218-726-6780)

Email: maplapps@d.umn.edu

Website: <http://www.umdmapl.org>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 32
- This program does not require summer semesters for timely completion.
- Degree: Master of Advocacy and Political Leadership

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

This applied degree is designed for residents of Minnesota and western Wisconsin with experience or interest in having an impact on and changing public policy. Graduates of this program generally go on to positions as local community leaders, labor leaders, government relations specialists in businesses, nonprofit sector policy advocates, inter-governmental relations specialists, political operatives, lobbyists, elected and appointed officials, staff to policy makers, and citizens. The program seeks to create a professional group of ethically grounded advocates and organizers. Students come from throughout the region with many already working in one of the above interest areas.

Cohorts of up to 15 students will form at the beginning of each semester and progress together through the four semesters required to complete the program. The program is 32 credits composed of 12 cohort course credits, 15 elective course credits, and 5 advocacy internship course credits. Classes meet 11 weekends each semester, and are scheduled in 3-hour time periods on Friday evening, Saturday morning, and Saturday afternoon. Students may choose to concentrate in one of three fields: community leadership (advocacy in the public sector), nonprofit advocacy, or labor organizing and leadership.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:

Admission to the master of advocacy and political leadership program is based on the following criteria:

- Applicant must hold a bachelor's degree with transcripts demonstrating the ability to handle graduate-level work.
- Prospective students must complete the program application.
- Two letters of recommendation and a short statement of interest must be submitted along with the application.
- Applicant must demonstrate experience in public service, which includes activities such as volunteering with nonprofits, involvement in student government, or activity in political/civic life.
- There is no entrance exam required for admittance to the program.

Applications are accepted on a rolling basis. New cohorts are admitted each semester.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 14 major credits and up to null credits outside the major. There is no final exam.



This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.75 is required for students to remain in good standing.

Elective course credits - 15 credits, to be selected from the following:

- MAPL 5110 - Ethics in Politics (3 cr)
- MAPL 5111 - Labor Organizing (3 cr)
- MAPL 5113 - Labor and Political Economy (3 cr)
- MAPL 5200 - Advocacy and Lobbying: Strategies and Tactics (3 cr)
- MAPL 5202 - Nonprofits and Government (3 cr)
- MAPL 5301 - Campaigns and Elections (3 cr)
- MAPL 5311 - Advocacy in the Public Sector: Service in the Elected Branch (3 cr)
- MAPL 5312 - Advocacy in the Public Sector: Service in the Executive Branch (3 cr)
- MAPL 5308 - Impact of Art and Social Change (3 cr)
- MAPL 5309 - Legal System and Public Policy (3 cr)
- MAPL 5315 - Sustainable Development Policy and Advocacy (3 cr)
- MAPL 5400 - Political Organizing and Advocacy in the Digital Age (3 cr)
- MAPL 5405 - Impact of Group Identity on the Policymaking Process (3 cr)

Advocacy Internship course credits: 5 credits

- MAPL 6009 - Advocacy Internship I (2 cr)
- MAPL 6008 - Advocacy Internship II (3 cr)

If they wish, students can complete nine electives in one of three fields of concentration: labor organizing and leadership, nonprofit advocacy, or community leadership (public sector), as described below. Concentration classes are open to all students and count toward the general elective requirements. It is not necessary for students to declare a concentration.

Required Coursework

- [MAPL 6001](#) - Political Process and Public Policy (3.0 cr)
- [MAPL 6005](#) - Political and Advocacy Leadership (3.0 cr)
- [MAPL 6004](#) - Political Organizing and Communication (3.0 cr)
- [MAPL 6002](#) - Policy Evaluation (3.0 cr)

Program Sub-plans

A sub-plan is not required for this program.

Students may not complete the program with more than one sub-plan.

Labor Organizing and Leadership

Students concentrating in labor organizing and leadership will learn to:

- value and promote the dignity of work and the dignity of all workers;
- understand the strategies and tactics of collective action and organizing and movement building;
- understand the role of labor in the political economy;
- understand the fundamental human and legal rights of workers and the challenges they face in the US and around the world;
- know what labor unions are and what they do in the workplace, in local communities, in the political arena and internationally;
- be acquainted with the defining events and major themes of U.S. and Minnesota Labor History;
- identify information sources for research on unions and labor issues.

Required Coursework

- [MAPL 5111](#) - Labor Organizing (3.0 cr)
- [MAPL 5113](#) - Labor and Political Economy (3.0 cr)
- MAPL 5405 *{Inactive}*(3.0 cr)

Non-Profit Advocacy

Students concentrating in nonprofit advocacy will learn to:

- understand the role and potential of the nonprofit sector in advancing public policies that strengthen communities and build a more just society;
- build their knowledge and skills in advocacy and organizing for change;
- lead their organizations and allies in collective action to advance social change movements;
- strengthen the nonprofit sector's role in engaging people in democracy supporting activities, including legislative and electoral processes;
- leverage nonprofits' ongoing and trusted relationships with people in the communities they serve to increase grassroots activism;



- know the nonprofit sector's history, characteristics, standards of practice, defining events, key issues, and accomplishments;
- secure and use resources available to support nonprofit research and advocacy.

Required Coursework

- [MAPL 5200](#) - Advocacy and Lobbying: Strategies and Tactics (3.0 cr)
- [MAPL 5202](#) - Nonprofits and Government: The Public and Private Partnership (3.0 cr)
- [MAPL 5308](#) - The Impact of Art on Social Change (Additional option under this concentration.)

Public Sector

Students concentrating in community leadership (public sector) will learn to:

- understand the duties and responsibilities of people serving as either staff or elected officials in the elected or administrative branches of government;
- become familiar with the organization and practices of the Minnesota Legislature, the U.S. Congress, and federal and state administrative offices;
- assess the structure of legislative and administrative public organizations in terms of their ability to make policy changes;
- analyze and plan both the passage and implementation of policy in which they are interested;
- appreciate the high ethical standards which must and usually do govern service in the public sector;
- gain an appreciation for the importance of constituent service and engagement while working in the public sector;
- understand both the theoretical and practical underpinnings of American legislative and administrative practice.

Required Coursework

- [MAPL 5113](#) - Labor and Political Economy (3.0 cr)
- [MAPL 5112](#) - Advocacy in the Public Sector: Service in the Elected Branch
- [MAPL 5110](#) - Ethics in Politics (Additional option under this concentration)
- [MAPL 5301](#) - Campaigns and Elections (Additional option under this concentration.)
- [MAPL 5315](#) - Sustainable Development Policy and Advocacy (Additional option under this concentration.)



Duluth Campus

Tribal Administration and Governance M.T.A.G.

American Indian Studies

College of Liberal Arts

Link to a [list of faculty](#) for this program.

Contact Information:

Department of American Indian Studies, University of Minnesota Duluth, Cina Hall 116, 1123 University Drive, Duluth, MN 55812 (218-726-7332)

Email: umdmtag@d.umn.edu

Website: <http://www.umdmtag.org>

- Program Type: Master's
- Requirements for this program are current for Fall 2014
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Tribal Admin and Governance

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Master of Tribal Administration and Governance (MTAG) is an applied professional development degree designed to develop the knowledge and skills needed to work as an administrator in a tribal government. Students in the program may already serve as tribal administrators, council members, or tribal leaders. Students who currently work or aspire to work professionally in tribal governments or management positions will benefit from this program, which emphasizes both the acquisition of academic knowledge and the application of practical skills.

The curriculum is based on the roles that tribal administrators, leaders, and professionals play in formal and informal situations that support tribal sovereignty and self-determination. Traditional language and culture is an important thread throughout the program. Program delivery is designed to accommodate working professionals and support existing commitments to families and home communities. A combination of online delivery and several weekend meetings per semester provides face-to-face interaction with experts in each area of the curriculum including faculty, staff, special guests, and students. The entire program is designed to accommodate working adults offering weekend and online classes. Weekend sessions meet four times per semester on Friday evenings and all day Saturday, or students may choose to participate entirely by remote connection.

Program Delivery

This program is available:

- completely online (all program coursework can be completed online)
- partially online (between 50% to 80% of instruction is online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree is required.

Special Application Requirements:

Applications are accepted for fall entry on a rolling basis. Unofficial transcripts or academic records, two letters of recommendation, and a personal statement must be uploaded directly to the online application. The personal statement should include what the student intends to get out of the MTAG program and accomplish in tribal administration and governance. Official transcripts or academic records will be required only if the applicant is admitted to the program.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB



- Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 38 major credits and up to null credits outside the major. There is no final exam.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

Semester One (Fall, Year One)

[MTAG 5110](#) - Principles of Tribal Sovereignty I (3.0 cr)

[MTAG 5210](#) - Administration Governance I (Strategic) (3.0 cr)

[MTAG 5310](#) - Foundations of Leadership and Ethics in Indigenous Community Life and Organizations (3.0 cr)

Semester Two (Spring, Year One)

[MTAG 5120](#) - Principles of Tribal Sovereignty II (3.0 cr)

[MTAG 5220](#) - Administration and Governance II (Operations) (3.0 cr)

[MTAG 5320](#) - Applied Leadership and Ethics in an Indigenous Organizational Context (3.0 cr)

Semester Three (Fall, Year Two)

[MTAG 5230](#) - Advanced Tribal Administration and Governance I (Human Resources) (3.0 cr)

[MTAG 5430](#) - Tribal Finance, Accounting and Budgets I (3.0 cr)

[MTAG 5530](#) - Federal Indian Law I (3.0 cr)

[MTAG 5997](#) - Tribal Administration and Governance Directed Project (2.0 cr)

Semester Four (Spring, Year Two)

[MTAG 5240](#) - Advanced Tribal Administration and Governance II (Project) (3.0 cr)

[MTAG 5440](#) - Tribal Finance, Accounting and Budgets II (3.0 cr)

[MTAG 5540](#) - Federal Indian Law II (3.0 cr)