Master of Science in Teaching (M.S.T.)

A Content-Rich, Research-Based Master's Program
for Secondary Science and Mathematics Teachers

Offered in conjunction with The University of Maine
Center for Science and Mathematics Education Research

For additional information, please contact Professor Susan McKay,
Director of the Center and Graduate Coordinator
(Susan_McKay@umit.maine.edu; (207) 581-1019).

Fields of concentration:
Physics and Astronomy, Mathematics, Earth Sciences, Generalist

This program is designed to benefit:
• Teachers who would like to strengthen their knowledge of the subjects
  that they teach while earning a Master's Degree;
• Recent graduates who have majored in mathematics, science or
  engineering and are interested in pursuing a career in teaching;
• Established scientists, engineers, or mathematicians who are interested
  in making a career change into secondary teaching.

Participants in this program will:
• Strengthen their backgrounds in the subjects that they teach;
• Study topics included in the Learning Results but often not covered in
  traditional introductory mathematics and science courses;
• Learn science and mathematics in courses taught using research-guided
  pedagogy and curricula, including hands-on, inquiry based methods;
• Participate in courses that combine content and methods, rather than
  taking separate content and methods courses;
• This program offers a generalist Master’s Degree, which can prepare science and mathematics teachers well for positions in small, rural schools, where they will need to teach more than one subject at the secondary level.

• Courses developed for this program are also available to undergraduates and serve to attract undergraduates to teacher training.

• Teaching assistants in this program provide talented, motivated educators to assist in improving introductory courses offered at the University in science and mathematics.

• The program, with its faculty and graduate students, helps the University of Maine become a leader in conducting research and disseminating the results of research in science and mathematics education. These areas are nationally very important and extremely fundable fields of scholarship.

• Expertise in science and mathematics education research on campus will lead to better teaching in mathematics and science courses at all levels at the University.

PROGRAM PREREQUISITES

An undergraduate degree in science, mathematics, engineering, secondary science or mathematics education, or a closely related field is required. Students must also have passed at least one semester of undergraduate psychology. Students working toward certification must pass all required Praxis exams. (Students may be admitted conditional upon passing these exams during their first year in the program) For the Physics and Astronomy concentration, two semesters of college-level physics (PHY111/112 or PHY121/122 or equivalent), one semester of college-level chemistry (CHY121/123 or equivalent), and two semesters of college-level calculus (MAT126/127 or equivalent), all with a grade of B or better, are required. For the Earth Sciences concentration, two semesters of college-level geology (GES101, GES102 or GES105 or equivalent) and one semester of college-level chemistry (CHY121/123 or equivalent) are required, all with a grade of B or better. For the mathematics concentration, two semesters of college-level calculus (MAT126/127 or equivalent), both with a grade of B or better, are required. For the generalist concentration, requirements for two of the concentrations above must be met.
Note: The requirements listed above are for the Master of Science in Teaching degree. All students seeking certification are advised to obtain a transcript audit from the Maine Department of Education to determine what other requirements must be met for certification. Fulltime MST students are eligible for assistantships while completing these additional requirements, and tuition waivers may be applied toward courses required for certification.

APPLICATION GUIDELINES

TO APPLY:

- Download the application from the University of Maine Graduate School website: www.umaine.edu/graduate.
- In your application essay, please indicate whether or not you are planning to work toward certification and let us know the area in which you are most interested in concentrating. Please include a description of any related teaching experiences, as well as any other information that will help us get to know your qualifications and interests better.
- GRE scores are required for all applicants. No subject test is required.
- To expedite handling of your application and avoid paying the application fee, send all application materials to MST Interdisciplinary Program Committee, c/o Ms. Leisa Preble, Department of Physics and Astronomy, 5709 Bennett Hall, The University of Maine, Orono, Maine 04469-5709. Please instruct your references to send their letters to this address as well, and have your transcripts sent there. Application fees will be paid by the Center for Science and Mathematics Education Research for all students accepted to the program.
- Please make sure to indicate on your application whether or not you are interested in studying full time, and if you would like to be considered for an assistantship or a tuition scholarship. Assistantships range from $16,000 - $21,500 per year and include a tuition waiver.
- If courses offered in a location other than the Orono campus would be helpful for you, please indicate this preference on your application.
- Both full-time and part-time students are encouraged to apply.