

EDUCATION, BS: EARLY ADOLESCENCE - ADOLESCENCE LEVEL: SCIENCE

The Science Education program is available for students who plan to teach middle or high school science. Science Education students gain real world experience in the classroom through student teaching or on-the-job experiences at area schools. Students who satisfactorily complete the program requirements also meet the Wisconsin teacher certification requirements for teaching science subject areas in those grades. Students at this level of certification may add the following licenses while pursuing or after obtaining their Science licensure as their initial certification:

- Bilingual
- English as a Second Language
- World Languages

Requirements

General Education Requirements (GERs)

UW-Milwaukee has General Education Requirements (<http://catalog.uwm.edu/policies/undergraduate-policies/#generaleducationtext>) that must be met in order to earn a bachelor's degree. Some of the requirements of your program may fulfill the campus GERs. Please review the requirements and consult with your academic advisor.

Program Admission Requirements (p. 2)

Program Core

Code	Title	Credits
COMMUN 103	Public Speaking (GER-HU, fulfilled prior to program admission)	3
CURRINS 328	Introduction to Teaching Science and Mathematics in Middle and High School (fulfilled prior to program admission)	3

Mathematics

MTHSTAT 215	Elementary Statistical Analysis (QL-B, GER-NS)	6
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Select a MATH elective to satisfy another 3 credits.

Minority Group Relations (Act 31) ¹

A component of the Human Relations Requirement for Teacher Certification is met by completing one of the following courses.

ANTHRO 213	American Indian Peoples of Wisconsin (GER-CD, GER-SS)	3
ENGLISH 276	Introduction to American Indian Literature: (GER-CD, GER-HU)	
AIS 203	Western Great Lakes American Indian Community Life of the Past (GER-CD, GER-SS)	
HIST 263	North American Indian History Since 1887 (GER-CD, GER-SS)	

Non-Western History or Contemporary Culture

Both statutory requirements can be met by taking one class from the list under Minority Group Relations (Act 31).

Conservation of Natural Resources (choose one)		3-4
CES 210	Introduction to Conservation and Environmental Science (GER-NS)	
CES 471	Practicum in Natural Resources Management	
GEOG 350	Conservation of Natural Resources (GER-SS)	
History and Philosophy of Science (choose one)		2-3
PHILOS 213	Introduction to the Philosophy of Science (GER-HU)	
PHILOS 324	Philosophy of Science	
PHILOS 335	Philosophy of Biology	
PHILOS 520	Philosophy of the Natural Sciences	
CHEM 502	Development of Modern Chemistry	
Total Credits		20-25

¹ Program may allow fulfillment of Act 31 with a 1-day workshop.

Content Area

The selection of at least one major and one minor (highly suggested) should be made in consultation with a faculty advisor **prior** to applying for admission to the School of Education. Contact your faculty advisor for the "MACSTEP Program Packet," which includes course lists and specific details regarding the majors and minors.

Code	Title	Credits
Majors (select at least one)		
	Biology	
	Broad Field Science ²	
	Chemistry	
	Earth and Space Science	
	Environmental Studies	
	Life and Environmental Science	
	Physical Science	
	Physics	
Minors (selecting one is highly suggested)		
	Biology	
	Earth and Space Science	
	Chemistry	
	Physics	

² The Broad Field Science major consists of 54 credits in science, including:

- 14 credits in each of two of the following: biology, chemistry, earth, and physics
- 8 credits in each of the remaining science areas
- Electives to be selected in consultation with a faculty advisor

Majors can earn a certification in another subject (biology, chemistry, physics, and earth and space science) if they have 15 credits in that subject area.

Professional Education Requirements

MACSTEP Sequence - Milwaukee Area Collaborative Secondary Science (and Math) Teacher Education Program. Formal admission to the School of Education required. A grade of C or better must be met for all professional requirements, including student teaching.

Code	Title	Credits
Summer		
CURRINS 510	Cooperative Strategies for Pre and Early Adolescents	2
CURRINS 518	Science Methods I: Middle/Secondary Methods and Fieldwork	3
CURRINS 545	Reading in the Content Areas: Middle, Junior, and Senior High School	3
CURRINS 629	Change and Change Strategies in Education	3
ED PSY 541	Assessment in Science and Math I	1
Fall		
CURRINS 510	Cooperative Strategies for Pre and Early Adolescents	1
CURRINS 516	Field Work in Middle School	3
CURRINS 519	Science Methods II: Middle/Secondary Methods and Fieldwork	6
ED PSY 542	Assessment in Science and Math II	1
EXCEDUC 536	Inclusion for Secondary Science and Math Educators	1
EXCEDUC 537	Math and Science Methods for All Learners	1
Spring		
ED PSY 543	Assessment in Science and Math III	1
EXCEDUC 538	Teaching Math and Science to All Learners	1
Student Teaching (Spring) ³		
CURRINS 427	Student Teaching in Science	10-12
Total Credits		37-39

³ Students must complete paperwork in order to be assigned a student teaching placement. To be approved for placement, additional criteria must be met. See Benchmarks (p. 2) for details.

Additional Requirements for Graduation

- Minimum cumulative grade point average of 2.75 in all professional education courses. This includes any transfer coursework that is counted towards certification at UWM, as well as grades earned in student teaching or field experiences;
- Satisfactory completion of a minimum 128 credits;
- Completion of the last year of coursework (30 credits) in residence at UW-Milwaukee; and
- Completion of edTPA (Teacher Performance Assessment) required for certification.

Advance to Major

Program Admission Requirements

Application to the Science Education program requires satisfactory completion of the requirements listed below. For more information about the application process, visit our website at: <http://uwm.edu/education/academics/science/>.

- **Pre-Professional Skills Test:** Passing scores on one of the following exams: Praxis I, CORE, ACT, SAT, or GRE. ACT, SAT, and GRE scores must be within five years of admission term to academic program. Please see your academic advisor for additional information.

- **English Composition:** Achieve a placement level of 4 or higher on the English Placement Test, or complete ENGLISH 102 or an equivalent with a grade of C or better.
- **Mathematics Skills:** Achieve a placement level of 30 or higher on the Math Placement Test, or complete MATH 103, MATH 105, MATH 175, or an equivalent with a grade of C or better.
- **Completion of COMMUN 103**, with a grade of C or better. Note: Completion of this course also fulfills part of the Humanities GER requirement.
- **Completion of CURRINS 328**, Introduction to teaching Science in Middle and High School, with a grade of C or better.
- **A 2.5 minimum cumulative GPA** in all UWM and transfer courses at the time of admission application.
- **A 2.75 cumulative GPA** in all Science content courses.
- **A minimum of 58 credits** (UWM and transfer credits) at the time of admission application. It is not required to have all the Core Curriculum courses completed at the time of application.
- **Meeting with faculty advisor** to review admission application. Faculty signature required on application.

Benchmarks

Student Teaching

Students must complete paperwork in order to be assigned a student teaching placement. To determine your deadline (February or April), visit the Office of Clinical Experiences website at uwm.edu/education/academics/clinical-experiences/ (<http://uwm.edu/education/academics/clinical-experiences/>).

To be approved for placement, you must meet the following criteria:

- Be admitted to the School of Education;
- Completion of all required coursework;
- Cumulative GPA of a minimum 2.5;
- A minimum of 2.75 in all your science content area and professional education courses;
- Passing scores reflected on your transcript for the Praxis II exam: General Science: Content Knowledge #10435;
- Removal of all F or I (incompletes) grades;
- TB test results submitted to the Office of Clinical Experiences; and
- Criminal Background Check submitted to the Office of Clinical Experiences;

Undergraduate Advising

Our purpose is to provide collaborative, mentoring relationships which promote educational, career, and professional development. We value a student-centered, holistic, and ethical approach to advising based on strong partnerships with students, faculty and staff, and the larger campus community. We are committed to creating a respectful and supportive environment. We encourage students to be self-reliant through informed decisions and choices based upon dissemination of accurate information. We value our own continuous professional development to enhance the quality of the advising experience.

How to Prepare for an Advising Meeting

- Review your Advisement Report in PAWS (<http://uwm.edu/registrar/academic-unit-services/paws-academic-advisement/>).
- Come prepared with questions or topics for discussion.
- Make a list of courses you think you should take.

- Investigate opportunities to prepare for the job you want.
- Keep a record of your academic progress.
- Understand you are ultimately responsible for creating your educational, life, and career plans.
- Maintain honest and open communication with your advisor.
- Take responsibility for choices you make as a student and member of the UW-Milwaukee community.

Scheduling an Appointment

Office of Student Services
Enderis Hall, Room 209
(414) 229-4721
soeinfo@uwm.edu

Graduate Advising

If you are a School of Education graduate student, you may schedule an appointment with your faculty advisor by contacting your faculty advisor directly. Faculty contact information can be found in the People Directory (<https://uwm.edu/education/people/>). Your faculty advisor will be listed in your PAWS account.

Honors in the Department of Teaching and Learning

Departmental Honors are granted to students who have achieved a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester.

Honors in the School of Education

Dean's Honor List

GPA of 3.750 or above, earned on a full-time student's GPA on 12 or more graded credits in a given semester.

Honors College Degree and Honors College Degree with Distinction

Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College (<http://catalog.uwm.edu/opportunities-resources/honors-college/>) section of this site.

Commencement Honors

Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is **not** rounded and is truncated at the third decimal (e.g., 3.499).

Final Honors

Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.