

MATERIALS SCIENCE (MSCI)

MSCI 291 Special Topics in Materials Science (1-3 crs)

Prerequisite: CHEM 104 or CHEM 109 or CHEM 115; PHYS 232; MSE 221

Consent: Instructor Consent Required

- *Field trips optional. A total of no more than nine credits from MSCI 291 and MSCI 491 may be applied toward major or graduation.*

Lecture and possibly laboratory or field work in the study of current topics in Materials Science of special interest to students and faculty.

Repeat: Course may be repeated for a maximum of 9 credits

MSCI 384 Materials Science Junior Seminar (1 cr)

Prerequisite: MSE 286

Career preparation for Materials Science majors, including ethics and other discussions relevant to the major. Will include seminars with external speakers and class discussions of relevant issues.

Lab/Studio Hours: 0

Seminar Hours: 1

MSCI 385 Materials Science Junior Seminar II (0.5 crs)

Prerequisite: MSCI 384

The second course in the junior seminar course sequence. Will include seminars with external speakers and class discussions of relevant issues.

Lab/Studio Hours: 0

Seminar Hours: .5

MSCI 395 Directed Studies (1-3 crs)

Prerequisite: Minimum 2.0 GPA in Materials Science or Materials Science & Engineering comprehensive majors

Consent: Department Consent Required

This course is designed to allow a single student or a group of students to pursue their educational goals and interests under the direction of a faculty member.

Repeat: Course may be repeated

Grading Basis: A-F Grades Only

MSCI 399 Independent Study - Juniors (1-3 crs)

Prerequisite: Minimum junior standing.

Consent: Department Consent Required

This course provides junior-level students with research opportunities in Materials Science or Materials Science & Engineering.

Repeat: Course may be repeated

Grading Basis: A-F Grades Only

MSCI 484 Materials Science Capstone I (1 cr)

Prerequisite: MSE 350; Credit may not be earned in both MSCI 480 and MSCI 484

- *This course requires access to a laptop computer which can be brought to class when required. Please see the Materials Science and Biomedical Engineering Department laptop requirement: <https://www.uwec.edu/academics/college-arts-sciences/departments-programs/materials-science-biomedical-engineering/academic-offerings/materials-science-biomedical-engineering-laptop-requirements/>*

First of a two-course capstone sequence. This course emphasizes hands-on, project-based experiences that are formulated and executed by the student.

Lab/Studio Hours: 0

Seminar Hours: 2

MSCI 485 Materials Science Capstone II (2 crs)

Prerequisite: MSCI 484; Credit may not be earned in both MSCI 485 and MSCI 481

- *This course requires access to a laptop computer which can be brought to class when required. Please see the Materials Science and Biomedical Engineering Department laptop requirement: <https://www.uwec.edu/academics/college-arts-sciences/departments-programs/materials-science-biomedical-engineering/academic-offerings/materials-science-biomedical-engineering-laptop-requirements/>*

Second of a two-semester capstone sequence. This course emphasizes writing projects based on student designed experiments.

Attributes: LE-11 Integration

Lab/Studio Hours: 0

Seminar Hours: 4

MSCI 491 Special Topics in Advanced Materials Science (1-3 crs)

Prerequisite: MSCI 300. Limited to Materials Science or Materials Science & Engineering majors.

Consent: Instructor Consent Required

- *Field trips optional. A total of no more than nine credits from MSCI 291 and MSCI 491 may be applied toward major or graduation.*

Lecture and possibly laboratory or field work in the study of current topics of Materials Science of special interest to advanced students and faculty.

Repeat: Course may be repeated for a maximum of 9 credits

MSCI 499 Independent Study - Seniors (1-3 crs)

Prerequisite: Minimum senior standing.

Consent: Department Consent Required

This course provides senior-level students with research opportunities in Materials Science or Materials Science & Engineering.

Repeat: Course may be repeated

Grading Basis: A-F Grades Only
