Frequently Asked Questions

Q: How do I sign up for a minor?

Answer: There is a blue *Curriculum Add/Drop Form* that you must fill out and have signed by the advisor in the program that administers the minor you are signing up for. Changes are official for a semester when the form is completed by the end of week 1.

Q: How do I drop a minor?

Answer: the blue *Curriculum Add/Drop Form* is used also for dropping a minor. You do not need any approval signatures; just fill it out and take it to the Registrar's Office

Q: Do credits from a minor double count towards my major?

Answer: Yes, they may, but you must earn 6 credits of 3000 or higher level that do not double count towards your major except as free elective. You must have 6 non-overlapping credits not double counting for each minor that you expect to receive.

Q: Can I minor in more than one thing?

Answer: Yes. See above for rules on double counting.

Q: What courses are offered and when?

Answer: The course schedule is on the web: *www.banweb.mtu.edu/pls/owa/bzskfcls.p_sel_crse_search*

Michigan Tech

Michigan Technological University
Department of Chemical Engineering

Faculty Involved with the Polymer Science & Engineering Minor:

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Minor in Polymer Science and Engineering at Michigan Tech

The minor in Polymer Science and Engineering prepares students for careers in the field of polymer science, polymer engineering, or polymer and composite manufacturing. This minor helps to meet the demand for graduates with a breadth of understanding of the chemical and mechanical properties of polymers, plastics, and composites. The students who are interested in this program are those who want to work in polymer-related organizations, including the largest chemical companies in the world, several of which are based in Michigan.

Required credits: 16-17cr
Required classes: See other side

MichiganTech

Degree Services
Registrar's Office

Minor in Polymer Science and Engineering

ECMM

Name (please print): _____
(Last) (First) (Middle)

Student Number: _____

Primary Major: _____ Expected Major Completion Term: _____

Required Courses – *Polymer Science Track*
Select 8-10 credits

_____ CH 2410 Organic Chemistry I (3) **and**
_____ CH 2420 Organic Chemistry II (3)

_____ CH 2411 Organic Chemistry Laboratory I (1)

_____ CM/CH 4610 Intro to Polymer Science (3) **or**
_____ BE 4300 Adv Polymeric Biomaterials (3) **or**
_____ MY 4600 Intro to Polymer Engineering (3)

Elective Courses - *Select 7-8 credits*

_____ BE 4000 Independent Study (1-3)*
_____ CM/CH 4620 Polymer Chemistry (3)
_____ CM/CH 4631 Polymer Science Laboratory (2)
_____ CH 4690 Current Topics in Polymer Chem (var)
_____CH 4710 Biomolecular Chemistry I (3)
_____ CH 4990 Undergrad Research - Chemistry (1-3)*
_____ CM 4000 Chem Eng Undergrad Research (1-3)*
_____ CM 4650 Polymer Rheology (3)
_____ CM 4655 Polymer Rheology Lab (1)
_____ MEEM 3999 Mech Eng Undergrad Research
_____ MEEM 4635 Design with Plastics (3)
_____ MEEM 4999 Mech Eng Senior Research Thesis

* Topic must be approved by department chair.

Credits Required = 16-17
Total Credits _____

Required Courses – *Polymer Engineering Track*
Select 9-10 credits

_____ MEEM 2150 Mechanics of Materials (3) **or**
_____ ENG 2120 Statics/Mechanics of Materials (4)

_____ MEEM3210 Fluid Mechanics (3) **or**
_____ CM 3110 Transport Processes I (3) **or**
_____ BE/ENG 3200 Thermodynamics/Fluid Mech (3) **or**
_____ MY 3110 Materials Processing II (3)

_____ CM/CH 4610 Intro to Polymer Science (3) **or**
_____ MY 4600 Intro to Polymer Engineering (3) **or**
_____ BE 4300 Advanced Polymer Biomaterials (3)

Elective Courses – *Select 6-7 credits*

_____ BE 4000 Independent Study (1-3)*
_____ CH 4990 Undergrad Research - Chemistry (1-3)*
_____ CM 4000 Chem Eng Undergrad Research (1-3)*
_____ CM/CH 4631 Polymer Science Laboratory (2)
_____ CM 4650 Polymer Rheology (3)
_____ CM 4655 Polymer Rheology Lab (1)
_____ MEEM 3999 Mech Eng Undergrad Research
_____ MEEM 4170 Failure of Material in Mech (3)
_____ MEEM 4403 Computer-Aided Design Meth (4)
_____ MEEM 4635 Design with Plastics (3)
_____ MEEM 4999 Mech Eng Senior Research Thesis
_____ MY 4155 Composite Materials (3)

* Topic must be approved by department chair.

Credits Required = 16
Total Credits _____

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C: CM4610 (CH1120), CM4620 (CH2420 or CH2400), CM4631 (CM4610 C), MEEM4403 (ENG1102), CM4641 (CM4620 C), MEEM4170 (MEEM3501), BE3200 (MA2160 and (CH1100 or CH1110) and PH2100), MEEM3210 (MEEM2200 and MEEM2700 C), MEEM2150 (MEEM2110), CM4655 (CM4610 C or CH4610 C or CM4650 C), CM4650 ((CM3110 or MEEM3210 or ENG3200 or MY3110 or CE3600) and (MA3520 or MA3521 or MA3530 or MA3560)), CH2420 (CH2410 or CH2400), MY4150 (MY2100), CH2400 (CH1120), MEEM4635 (MY2100 and MEEM2150 and MEEM3210 and MEEM3230 C), CH2411 ((CH2410 C or CH2400) C and CH1120), CM3110 (CM2120 and PH2100 and (MA3520 or MA3521 or MA3530 or MA3560)), MY3110 (MY3100), MY4600 (MY2100), CH4610 (CH1120), ENG3200 (MA2160 and (CH1100 or CH1110) and PH2100), ENG2120 (MA2160 and PH2100), CH4631 (CH4610 C or CM4610 C), CH4641 (CH4620 C), CH2410 (CH1120)

Student Date Department Advisor Date