Frequently Asked Questions

Q: How do I sign up for a minor?

- Answer: See the minor advisor first. The Department of Chemical Engineering requires that you turn in a minor audit form to the advisor before the minor may be added. Then you may submit a request to add the minor using the online curriculum change portlet on MyMichiganTech. https://mymichigantech.mtu.edu/

Q: How do I drop a minor?

- Answer: Submit a request to drop the minor using the online curriculum change portlet on MyMichiganTech. No approval is needed to drop a minor. https://mymichigantech.mtu.edu/

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

- Answer: Yes, they may double count for both your major and minor.

Q: Can I minor in more than one thing?

- Answer: Yes, however each course can only be used towards one minor and only two minors can be printed on your diploma.

Q: When are the courses offered?

- Answer: The course schedule is on the web: *http://www.mtu.edu/registrar/* Note that some courses are only offered every other year, so it is best to plan ahead.

Michigan Technological University
Chemical Engineering

Faculty Involved with the Polymer Science & Engg Minor:

- **Dr. Gerard Caneba (CM)** ***caneba@mtu.edu***
- **Dr. Megan Frost (BE)** ***mcfrost@mtu.edu***
- **Dr. Patricia Heiden (CH)** ***paheiden@mtu.edu***
- **Dr. Julia King (CM)** ***jaking@mtu.edu***
- **Dr. Bruce Lee (BE)** ***bplee@mtu.edu***
- **Dr. Faith Morrison (CM)** ***fmorriso@mtu.edu***

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Updated 5/21/2018

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: 18cr
Required classes: See other side

Michigan Technological University
Registrar's Office

Academic Year 2018-19
Minor in Polymer Science and Engineering (ECMM)
Department of Chemical Engineering
Credits Required: 18

Student Name and ID Number

Introduction to Polymers Course (Select one course, 3 credits)	**Credits**
BE 4300 Polymeric Biomaterials (3) *Prereqs: BE3800*	
CM/CH 4610 Introduction to Polymer Science (3) *Prereqs: CH1122 or (CH1160 and CH1161)*	
MSE 4110 Introduction to Polymer Engineering (3) *Prereq: MSE2100*	

Chemistry or Engineering Courses (Select one set of classes, 3 - 6 credits)	**Credits**
CH 2410 Organic Chemistry I (3) *Prereqs: CH1122 or (CH1160 and CH1161)* **and** CH 2420 Organic Chemistry II (3) *Prereqs: CH2410*	
CM 3110 Transport/Unit Operations I (3) *Prereqs: CM2120 and (MA3520 or MA3521 or MA3530 or MA3560) and MA3160 and PH2100*	
ENG 3200 Thermodynamics/Fluid Mech (4) *Prereqs: MA2160 and (CH1112 or (CH1150 and CH1151)) and PH2100 and ENG1102*	
MEEM 3201 Intro Fluid Mechanics & Heat Transfer (4) *Prereqs: MEEM2201 and MEEM2911 and (MA3520 or MA3521 or MA3530 or MA3560)*	
MSE 3110 Materials Processing II (4) *Prereqs: MSE2110 and MSE3100 and (MA3520 or MA3521 or MA3530 or MA3560)*	

Elective Courses (Select remaining 9 - 12 credits)	**Credits**
BE 3300 Biomechanics I: Statics and Dynamics (3) *Prereqs: BE2400 and (MA2321 or MA2320 or MA2330) and (MA3521 orMA3520 or MA3530)) and BL2010* **or** MEEM 2150 Mechanics of Materials (3) *Prereq: MEEM 2110*	
BE 4335 Smart Polymers (3) *Prereqs: BE3350 and BE3800*	
CH/CM 4620 Polymer Chemistry (3) *Prereqs: CH2420*	
CH 4710 Biomolecular Chemistry I (3) *Prereqs: CH2420*	
CM 4060 UG Research in Polymer Engg (1-6) *Prereqs: none*	
CM/CH 4631 Polymer Sci Lab (2) *Prereqs: CH4610(C) or CM4610(C) or BE4300(C) or MY4600(C)*	
CM 4650 Polymer Rheology (3) *Prereqs: (CM3110 or MEEM3210 or ENG3200 or MSE3100 or CE3600) and (MA3520 or MA3521 or MA3530 or MA3560)*	
CM 4655 Polymer Rheology Lab (1) *Prereqs: CM4610(C) or CH4610(C) or CM4650(C) or BE4300(C) or MY4600(C)*	
MEEM 4170 Failure of Materials in Mech (3) *Prereq: MEEM3501 or MEEM3400*	
MEEM 4635 Design with Plastics (3) *Prereqs: MSE2100 and MEEM2150 and (MEEM3210 and MEEM3230(C) or CM3110)*	
MSE 4430 Composite Materials (3) Prereqs: *MSE2100*	
XX xxxx Undergraduate Research (1-6) *Topic must be approved by academic advisor*	
Total Credits Required: 18	

Student Signature **Date** **Academic Advisor Signature** **Date**