Michigan Technological University Minor in Pharmaceutical Chemistry Program Code CHPM, Academic Year 2021-22 Department of Chemistry Total Credits Required: 22 to 28

Required Courses: 19 to 24 credits

Course	Credits
CH 4222 Bioanalytical Chemistry (5) Prereqs: CH1160 and CH1161 and CH3510 C and CH3511 C	
or CH 2212 Quantitative Analysis (5) Prereqs: CH1160 and CH1161	
and CH 4212 Instrumental Analysis (5) Prereqs: CH2212 and CH3510 C and CH3511 C	
CH 3510 Physical Chemistry I (3) Prereqs: CH1160 and CH1161 and PH2200 C and MA2160	
CH 3511 Physical Chemistry Lab I (2) Prereqs: CH3511 C	
CH 4110 Pharmaceutical Chemistry: Mechanism of Drug Action (3) Prereqs: CH2410 or CH2430	
CH 4120 Pharmaceutical Chemistry: Drug Design (3) Prereqs: CH2420 or CH2440	
CH 4710 Biomolecular Chemistry I (3) Prereqs: CH2420 or CH2440	

Elective Courses: 3 to 4 credits

Course	Credits
CH 4140 Pharmaceutical Analysis (3) Prereqs: CH2410 or CH2430	
CH 4720 Biomolecular Chemistry II (3) Prereqs: BL3020 or CH4710	
MA 2720 Statistical Methods (4) Prereqs: MA1020 or MA1030 or ALEKS math placement >/=61 or CEEB Calculus BC>2 or CEEB Calculus AB subscore >/=2 or Math ACT of 22 or MATH SAT of 540 or MA 3710 Engineering Statistics (3) Prereqs: MA2160	
CH 4990 Undergraduate Research in Chemistry* (3)	

*Undergraduate research experiences will be permitted in the minor as long as the topics are in the area of pharmaceutical chemistry.