Michigan Technological University
Registrar's Office

Academic Year 2019-20
Minor in Pharmaceutical Chemistry (CHPM)
Department of Chemistry
Credits Required: 22-28

Student Name and ID Number

Required Courses: 19 - 24 Credits	**Credits**
CH 4222 Bioanalytical Chemistry (5) **or** CH2212 Quantitative Analysis (5) **and** CH4212 Instrumental Analysis (5)	
CH 3510 Physical Chemistry I (3)	
CH 3511 Physical Chemistry Lab I (2)	
CH 4110 Pharmaceutical Chemistry: Drug Action (3)	
CH 4120 Pharmaceutical Chemistry: Drug Design (3)	
CH 4710 Biomolecular Chemistry I (3)	

Elective Courses: 3 - 4 Credits	**Credits**
CH 4140 Pharmaceutical Analysis (3)	
CH 4720 Biomolecular Chemistry II (3)	
MA 2720 Statistical Methods (4) **or** MA 3710 Engineering Statistics (3)	
CH 4990 Undergraduate Research in Chemistry* (3)	
Total Credits Required = 22 - 28	

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

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C: CH4140 (CH2410), CH4222 (CH1160 and CH1161) and CH3510 C and CH3511 C), CH2212 (CH1160 and CH1161)), CH4212 (CH2212 and CH3510 C and CH3511 C), CH3510 (CH1160 and CH1161)) and PH2200 C and MA2160), CH4710 (CH2420), CH4110 (BL2100 or CH4710), CH4720 (BL4010 or CH4710), MA3710 (MA2160), MA2720 (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.

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