

MSIPS Sample Curriculum for students entering the Fall 2023 term

Available courses for the MSIPS program will vary depending on the year an applicant applies and is accepted into the program. The sample curricula below is intended to provide useful information to applicants regarding the courses that may be available during the chosen year of enrollment for each track in the program. Specific course selections for each student will be determined mutually by the advisor and the student following matriculation into the MSIPS program. A sample list of elective courses is listed below but does not represent a complete list of the many options available for students at the University of Michigan.

Pharmaceutical Sciences Track**

Fall Term 2023				Winter Term 2024				Spring/Summer Term 2024		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
PS 701	Equilibria and Dosage Form	2		PS 707	Pharm. Solids	2		INTPHARM 790	Capstone	8
PS 703	Mass Transport	2		PS 717	Biopharm Engineering	3				
PS 704	Analytical Methods	2		CP 822	Res and Trans in Pgenomic	3				
INTPHARM 750	Seminar	1		PHARM 412	Clinical and Research Ethics	1				
	<i>Electives*</i>	4		INTPHARM 750	Seminar	1				
		11			<i>Electives*</i>	3				
						13				

32

Medicinal Chemistry Track**

Fall Term 2023				Winter Term 2024				Spring/Summer Term 2024		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
MC 532	Bioorgan Princ Med Chem	3		MC 534	Computational princ.	3		INTPHARM 790	Capstone	8
Chem 540	Organic Principles	3		CP 822	Res and Trans in Pgenomic	3				8
PS 701	Equilibria and Dosage Form	2		PHARM 412	Clinical and Research Ethics	1				
INTPHARM 750	Seminar	1		INTPHARM 750	Capstone	1				
	<i>Electives*</i>	3			<i>Electives*</i>	4				
		12				12				

32

Clinical Pharmacy Track**

Fall Term 2023				Winter Term 2024				Spring/Summer Term 2024		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
CPTS 824	Metabolomics and Proteomics	3		Pharm 647	Clin Trials for Trans. Sci	2		INTPHARM 790	Capstone	8
PS 704	Analytical Methods	2		CPTS 822	Res and Trans in Pgenomic	3				8
CPTS 834	Patient Reported Outcomes	2		CPTS 832	Pharmacy Infomatics Res.	3				
INTPHARM 750	Seminar	1		PHARM 412	Clinical and Research Ethics	1				
	<i>Electives*</i>	4		INTPHARM 750	Capstone	1				
		12			<i>Electives*</i>	2				
						12				

32

Examples of Elective Courses*

U-M Elective Courses Offered Fall Semester				U-M Elective Courses Offered Winter Semester			
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq
Biochem 515	Intro to Biochem	4		Biochem 515	Intro to Biochem	4	
Biophys 520	Theory & Methods Biophy	3		Biophys 521	Prin Biophysical Chem	3	
BioStat 521	Applied Biostatistics	4		Biostat 522	Biostats Health-related	3	
CDB 530	Cell Biology	3		Cancbio 554	The Science of Cancer	4	
Chem 520	Methods of Bio Chem	3	BioCh 415	Pcol 601	Quant. Princ of Pcol	3	
Chem 540	Organic Principles	3		Physiol 510	Systems and Integrative	4.5	
Stats 500	Statistical Learning: Regress	3		Stats 500	Statistical Learning: Regress	3	

* Electives may be chosen from College of Pharmacy courses or from other graduate level courses offered at the University of Michigan

** Courses listed are suggested but not required for students interested in this track. Nine credits per semester is full time.

A minimum of 32 credits are required for degree