

## MSIPS Sample Curriculum for students entering the Fall 2021 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 2021				Winter Term 2022				Spring/Summer Term 2022		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
PS 701	Equilibria and Dosage Form	2		PS 707	Pharm. Solids	2		MSIPS	Capstone	8
PS 703	Mass Transport	2		PS 717	Biopharm Engineering	3				8
PS 704	Analytical Methods	2		CP 822	Res and Trans in Pgenomic	3				
MC 660	RCRS Ethics	0.5		MC 660	RCRS Ethics	0.5				
MSIPS	Seminar	1		MSIPS	Capstone	1				
	<i>Electives*</i>	5			<i>Electives*</i>	3				
		12.5				12.5				

### Medicinal Chemistry Track\*\*

Fall Term 2021				Winter Term 2022				Spring/Summer Term 2022		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
MC 532	Bioorgan Princ Med Chem	3		MC 534	Computational princ.	3		MSIPS	Capstone	8
Chem 540	Organic Principles	3		CP 822	Res and Trans in Pgenomic	3				8
PS 701	Equilibria and Dosage Form	2		MC 660	RCRS Ethics	0.5				
MC 660	RCRS Ethics	0.5		MSIPS	Capstone	1				
MSIPS	Seminar	1			<i>Electives*</i>	5				
	<i>Electives*</i>	3				12.5				
		12.5								

### Clinical Pharmacy Track\*\*

Fall Term 2021				Winter Term 2022				Spring/Summer Term 2022		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
CPTS 801	Res. Grant Proposal	2		Biostat 522	Biostats Health-related	3		MSIPS	Capstone	8
BioStat 521	Applied Biostatistics	4		CP 647	Clin Trials for Trans. Sci	2				8
CP 830	Health Service Res.	3		CPTS 802	Research Grant Proposal 2	2				
MC 660	RCRS Ethics	0.5		MC 660	RCRS Ethics	0.5				
MSIPS	Seminar	1		MSIPS	Capstone	1				
	<i>Electives*</i>	2			<i>Electives*</i>	4				
		12.5				12.5				

### 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