

MSIPS Sample Curriculum for students entering the Fall 2020 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 2020				Winter Term 2021				Spring/Summer Term 2021		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
PS 700	Biopharm and Drug Dispo.	2		PS 710	Micro PK, Cell Drug Trans	2		MSIPS	Capstone	8
PS 702	Biomol concepts	2		PS 705	Nanotech	2				8
PS 706	Biologic products	2		PS 717	Biopharm Engineering	3	Bio172			
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>	4				
		12.5				12.5				

Medicinal Chemistry Track**

Fall Term 2020				Winter Term 2021				Spring/Summer Term 2021		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
Chem 540	Organic Principles	3		MC 533	Bioorg Principles	2	MCS32	MSIPS	Capstone	8
MC 532	Bioorgan Princ Med Chem	3		MC 535	Prin. Drug Design	2	MCS32			8
PS 702	Biomol concepts	2		MC 660	RCRS Ethics	0.5				
MC 660	RCRS Ethics	0.5		MSIPS	Capstone	1				
MSIPS	Seminar	1			<i>Electives*</i>	7				
	<i>Electives*</i>	3				12.5				
		12.5								

Clinical Pharmacy Track**

Fall Term 2020				Winter Term 2021				Spring/Summer Term 2021		
Course	Description	Credits	Prereq	Course	Description	Credits	Prereq	Course	Description	Credits
BioStat 521	Applied Biostatistics	4		CP 822	Res and Trans in Pgenomic	3		MSIPS	Capstone	8
CP 830	Health Service Res.	3		CP 647	Clin Trials for Trans. Sci	2				8
MC 660	RCRS Ethics	0.5		CP 832	Pharmacy Informatics Res.	3				
MSIPS	Seminar	1		MC 660	RCRS Ethics	0.5				
	<i>Electives*</i>	4		MSIPS	Capstone	1				
		12.5			<i>Electives*</i>	3				
						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 521	Applied Biostatistics	4	
CDB 530	Cell Biology	3		Biostat 522	Biostats Health-related	3	
Chem 520	Methods of Bio Chem	3	BioCh 415	Canbio 554	The Science of Cancer	4	
Chem 540	Organic Principles	3		CDB 530	Cell Biology	3	
Pcol 601	Quant. Princ of Pcol	3		Chem 520	Methods of Bio Chem	3	BioCh 415
Physiol 510	Systems and Integrative	4.5		Pcol 601	Quant. Princ of Pcol	3	
Stats 500	Statistical Learning: Regress	3		Physiol 510	Systems and Integrative	4.5	
				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