

2021-22 ACADEMIC MAP

BS - Mathematics -Pre Engineering

TOTAL HRS: 120



Academic map is a guide to help students stay on track to degree completion. Consult undergraduate catalog and academic advisor for other requirements.

* minimum grade required

		FALL SEMESTER					SPRING SEMESTER					
	PREFIX	COURSE	CREDIT	AREA	GR*	SEM/GR	PREFIX	COURSE	CREDIT	AREA	GR*	SEM/GR
YEAR 1-Freshman	ENG 101	Composition I	3	Gen Ed			ENG 102	Composition II	3	Gen Ed		
	CHE 101/103	Gen Chem I and Lab	4	Gen Ed	C		CHE 102/104	Gen Chem II and Lab	4	Gen Ed	C	
	MAT 251	Calculus I	3	Major	C		MAT 252	Calculus II	3	Major	C	
	CIS 205	Microcomputer Apps	3	Gen Ed			MAT 210	Computer Prog Fund	3	Major	C	
		General Elective	1	Electives				Fine Arts	3	Gen Ed		
	FYS 100/300 ¹	First Year Seminar	1	Univ Req					16			
			15									
YEAR 2-Sophomore	MAT 300	Statistics	3	Major	C			Humanities & Fine Arts	3	Gen Ed		
	ENG 203/206	Literature	3	Gen Ed			MAT 254	Calculus IV	3	Major	C	
	MAT 253	Calculus III	3	Major	C		MAT 305	Foundations of Math	3	Major	C	
	COM 101/202	Communication Studies	3	Gen Ed				General Electives	6	Electives		
		General Elective	3	Electives					15			
			15									
YEAR 3-Junior	MAT 442	Linear Algebra	3	Major	C		MAT 322	Differential Equations	3	Major	C	
	PHY 231	General Physics I	3	Spec Dgr	C			Perspectives on Society	3	Gen Ed		
	PHY 235	General Physics Lab I	1	Spec Dgr	C		PHY 232	General Physics II	3	Spec Dgr	C	
		Foreign Language	3	Spec Dgr			PHY 236	General Physics Lab II	1	Spec Dgr	C	
		General Elective	4	Electives				Foreign Language	3	Spec Dgr		
				14				General Elective	1	Electives		
			14									
YEAR 4-Senior	MAT 300+ level	Math Electives	6	Major	C		MAT 490	Senior Seminar in Math	3	Major	C	
	HIS 100/200 level	History	3	Gen Ed			MAT 425	Modern Algebra	3	Major	C	
		Perspectives on Society	3	Gen Ed			MAT 300+ level	Math Elective	3	Major	C	
	PHY 371	Thermodynamics	4	Electives	C			General Electives	6	Electives		
				16					15			

- ¹All incoming students required to enroll in FYS 100 (freshmen), FYS 103 (honors), or FYS 300 (transfers).
- Electrical Engineering - General Electives: CHE 372.
- Chemical/Petroleum Engineering - General Electives: CHE 319, 320, 321, 322, and 432.
- Environmental Engineering - General Electives: Choose from GIS 200, 202, 241, 251, 391; and BIO 100, 101, 123, 301, 309, 416.
- Biomedical Engineering - General Electives: Choose from BIO 100, 101, 300, 319, 328, 349, 350, 442; and CHE 319, 320, 321, 322, 440, 441, 443.
- At least 2.5 GPA in upper-level mathematics courses.
- At least 2.5 GPA in upper-level mathematics courses completed at DSU.