

Curriculum Map – Physics Area (Engineering Physics (Mechanical) Track) Effective Fall 2020

NOTE: If you are required to complete any developmental courses, you may not be able to complete the degree in four years. This curriculum map assumes that you have not transferred in any previously completed college level courses.

All students must have 36 hours of general education courses which include:

FYS – First Year Seminar	ENG 100 – Core Writing I
COMS 108 – Fund. Of Speech Communication	ENG 200 – Core Writing II
MATH 131, 135, 152, 174 or 175 - CORE Math	Capstone

One 3 credit hour course from each of the following categories

HUM I	SBS I	NSC I
HUM II	SBS II	NSC II

The approved course list may be accessed through the current MSU Undergraduate Catalog.

FIRST YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits		✓	Spring Semester	Code	Credits
	CHEM 111/111L Principles of Chemistry I & Lab	R	4			CHEM 112/112L Principles of Chemistry II & Lab	R	4
	MATH 175 Calculus I	G/R	4			ENG 100 Writing I	G	3
	EMM 186 Manufacturing Processes I	R	3			COMS 108 Fundamentals of Speech	G	3
	PHYS 105 Introduction to Physics & Engineering Professions	R	1			PHYS 181 Introduction to Scientific Computing	R	3
	FYS 101 First Year Seminar	G	3			MATH 275 Calculus II	R	4
Total Credit Hours					Total Credit Hours			

SECOND YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits		✓	Spring Semester	Code	Credits
	MATH 276 Calculus III	R	4			MATH 363 Differential Equations	R/U	3
	PHYS 231/231L Engineering Physics I & Lab	R	5			PHYS 232/232L Engineering Physics II & Lab	R	5
	ENG 200 Writing II	G	3			EMM 203 Computer Aided Design I	R	3
	NSC I Natural Sciences - Elective	G	3			ETM 260 Thermal and Fluid Systems	R	3
Total Credit Hours					Total Credit Hours			

THIRD YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits		✓	Spring Semester	Code	Credits
	PHYS 353 Concepts of Modern Physics I	R/U	4			PHYS 354 Concepts of Modern Physics II	R/U	3
	PHYS 340 Experimental Physics	R/U	3			EMM 303 Mechanics of Material	R/U	3
	SBS I Social/Behavioral Sciences - Elective	G	3			HUM I Humanities - Elective	G	3
	PHYS 481 Mathematics for Scientists & Engineers	R/U	3			PHYS 381 Computer Solutions to Engineering and Science Problems	R/U	3
	MATH 353 Introduction to Statistics	R/U	3			PHYS 221 Statics	R	3
Total Credit Hours					Total Credit Hours			

FOURTH YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits		✓	Spring Semester	Code	Credits
	PHYS 499C Capstone & Senior Thesis I	G/U	2			PHYS 499D Capstone & Senior Thesis II	G/U	1
	SBS II Social/Behavioral Sciences - Elective	G	3			HUM II Humanities - Elective	G	3
	PHYS 391 Dynamics	R/U	3			PHYS 361 Fundamentals of Electronics	R/U	3
	NSC II Natural Sciences - Elective	G	3			PHYS 411 Thermodynamics	R/U	3
	Free Elective	E/U	3			Free Elective	E/U	3
						Free Elective	E/U	1
Total Credit Hours					Total Credit Hours			

(E) Elective (G) General Education Course (P) Pre-requisite (R) Required Course
 (U) Upper Division Course 300-400 level (you must have 42 hours)