Curriculum Map – Physics Area – MSUTeach Track

NOTE: This curriculum map assumes that students have not transferred in any previously completed college level courses.

All baccalaureate degree seeking students must complete a minimum of 33 hours of general education courses which includes:

FYS 101 – First Year Seminar
MATH 123, 131, 135, 152, 174 or 175*
COMS 108 – Fund. Of Speech Communication
Knowledge – Arts & Humanities (HUM)
Knowledge – Social & Behavioral Sciences (SBS)
ENG 100 – Writing I
ENG 200 – Writing II
Knowledge – Natural Science (NSC; select 2)
Global Cultures – Arts & Humanities (HUM)
Ethics & Civil Engagement – Social & Behavioral Sciences (SBS)

The approved NSC, HUM, and SBS course list is located in the current MSU Undergraduate Catalog.
*If applicable, specific mathematics course required for degree shown below.

FIRST YEAR COURSE SCHEDULE

✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits
	PHYS 105 Intro to Physics & Engineering Professions	R	1		PHYS 181 Intro to Scientific Computing	R	3
	CHEM 111/L Principles of Chem I (Level 2 NSC)	G/R	4		CHEM 112/L Principles of Chemistry II	R	4
	UTCH 100 Step I	R	1		UTCH 150 Step 2	R	1
	ENG 100 Writing I	G	3		ENG 200 Writing II	G	3
	MATH 175 Calculus I	G	4		MATH 275 Calculus II	R	4
	FYS 101 First Year Seminar	G	3		COMS 108 Speech Communication	G	3
	Total Credit Hours		**16**		**Total Credit Hours**		**18**

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/L Eng Physics I	R	5		PHYS 232/L Eng Physics II	R	5
	UTCH 200 Knowing and Learning in Mathematics and Science	R	3		UTCH 250 Perspectives on Science and Mathematics (Level 3 SBS)	G/R	3
	Level 2 HUM	G	3		Level 2 SBS	G	3
	Level 2 NSC	G	3		Free Elective	E	1
	Total Credit Hours		**18**		**Total Credit Hours**		**15**

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		PHYS 412 Light and Physical Optics	R/U	3
	UTCH 300 Classroom Interactions	R/U	3		PHYS 499C Senior Thesis I	U	2
	Level 3 HUM	G	3		UTCH 315 Functions and Modeling	R/U	3
					PHYS 350 Nuclear Science	R/U	4
	Total Credit Hours		**13**		**Total Credit Hours**		**15**

FOURTH YEAR COURSE SCHEDULE

✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits
	PHYS 381 Computer Solutions	R/U	3		UTCH 450 Apprentice Teaching	R/U	12
	UTCH 400 Research Methods	R/U	3				
	UTCH 350 Project Based Instruction	R/U	3				
	PHYS 481 Math for Sci & Eng	R/U	3				
	PHYS 499D Senior Thesis II	U	1				
	Total Credit Hours		**13**		**Total Credit Hours**		**12**

(E) Elective, (G) General Education Course (S) Supplemental
(P) Pre-requisite (R) Required Course (U) Upper Division Course 300-400 level (you must have 42 hours)
Revised: 3-10-2021