

Materials Science and Engineering Curriculum Flow Chart – ACT 19 to 26

	Year 1	Year 2	Year 3	Year 4
FALL	MA1032 Data, Functions, Graphs (4)	MA2160 Multivariable Calculus (4)	MY3100 Matls Processing I (4)	MY4900 MSE Professional Development (1)
	CH1150 Univ. Chemistry I (3)	PH1200 Introductory Physics Lab II (1)	MY3200 Matls Characterization I (4)	MY4901 Senior Design Project I (2)
	CH1151 Univ. Chemistry I Lab (1)	PH2100 Univ. Physics I - Mechanics (3)	MY3400 Mechanical Properties of Materials (3)	CM/CH4610 Intro to Polymer Science (3) or MY4600 Intro to Polymer Engineering (3)
	ENG1001 Engineering Problem Solving (2)	MY2100 Introduction of Materials Engineering (3)	MA2320 or MA2321 Elementary Linear Algebra (2) (half-semester)	EC3400 Economic Decision Analysis (3)
	UN1001 Perspectives (3)	ENG1102 Engineering Modeling and Design (3)	MA3520 or MA3521 Brief Differential Equations (2) (half-semester)	Tech Electives (5)
		UN2002 Institutions (3)	Gen Ed (3)	Gen Ed (3)
	13 total	17 total	18 total	17 total
SPR	MA1160 Calculus I (4)	MA3160 Multivariable Calculus (4)	MY3110 Matls Processing II (4)	MY4910 Senior Design Project II (3)
	PH1100 Introductory Physics Lab (1)	PH2200 Univ. Physics II - E&M (3)	MY3210 Matls Characterization II (4)	MY4800 Matls Selection & Design (3)
	CH1160 Univ Chemistry II (3)	ENG2120 Statics-Strength of Materials (4)	MY3300 Design of Microstructure (3)	Tech Electives (3)
	CH1161 Univ Chemistry II Lab (1)			
	ENG1100 Engineering Analysis (2)	MY2000 Intro to Materials Processing (3)	MY3700 Electronic, Magnetic and Optical Props Matls (4)	Gen Ed (3)
	UN1002 World Cultures (4)	UN2001 Revisions (3)	Gen Ed (3)	MA3710 Engineering Statistics (3)
	15 total	17 total	18 total	15 total

Electives

Technical Electives must be at the 3000 or higher level in Science, Engineering or Mathematics.

Physical Education (3 credits) are not included in the flowsheet and must be added by the student.

Prerequisites

Most courses have prerequisites. Please see the MSE academic advisor or the University Catalog at

https://www.banweb.mtu.edu/pls/owa/stu_ctg_utils.p_online_all_courses ug for course descriptions and prerequisites.