

Materials Science and Engineering Curriculum Flow Chart – 128 Credits Required

	Year 1	Year 2	Year 3	Year 4
FALL	MA1160 Calculus I (4)	MA3160 Multivariable Calculus (4)	MY3100 Matls Processing I (4)	MY4900 MSE Professional Development (1)
	CH1150 Univ. Chemistry I (3)	CH1160 Univ Chemistry II (3)	MY3200 Matls Characterization I (4)	MY4901 Senior Design Project I (2)
	CH1151 Univ. Chemistry I Lab (1)	CH1161 Univ Chemistry II Lab (1)	MY3400 Mechanical Props Matls (3)	CM/CH4610 Intro to Polymer Science (3) or MY4600 Intro to Polymer Engineering (3)
	PH1100 Introductory Physics Lab I (1)	PH2200 Univ. Physics II - E&M (3)	MA3710 Engineering Statistics (3)	EC3400 Economic Decision Analysis (3)
	ENG1101 Engineering Analysis and Problem Solving (3)	MY2100 Intro Matls Sci & Engr (3)	Gen Ed (3)	Electives (5)
	UN1001 Perspectives (3)	UN2002 Institutions (3)		Gen Ed (3)
	15 total	17 total	17 total	17 total
SPR	MA2160 Calculus II (4)	MA2320 or MA2321 Elementary Linear Algebra (2) (half-semester)	MY3110 Matls Processing II (4)	MY4910 Senior Design Project II (3)
	PH2100 Univ. Physics I - Mechanics (3)	MA3520 or MA3521 Brief Differential Equations (2) (half-semester)	MY3210 Matls Characterization II (4)	MY4800 Matls Selection & Design (3)
	PH1200 Introductory Physics Lab II (1)	ENG2120 Statics-Strength of Materials (4)	MY3300 Design of Microstructure (3)	Electives (6)
	ENG1102 Engineering Modeling and Design (3)	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)		
	15 total	17 total	15 total	15 total

Electives

At least 7 hours (of 10) must be at the 3000 or higher level in Science, Engineering or Mathematics. 3 hours are free electives. 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.