Revised 1/28/13

BS in Materials Science and Engineering - Curriculum Flow Chart
2013-2014 131 Credits Required – 128 credits shown

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

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes
Students who vary from this schedule or are seeking double majors might experience time conflicts with required courses.

	Year 1	Year 2	Year 3	Year 4
FALL	MA1160 Calculus I (4)	MA3160 Multivariable Calculus (4)	MY3100 Matls Processing I (4)	MY4920 Senior Design Project I (2)
	CH1150 Univ. Chemistry I (3)	CH1160 Univ Chemistry II (3)	MY3200 Matls Characterization I (4)	MY4300 Mechanical Behavior of Materials (3)
	CH1151 Univ. Chemistry I Lab (1)	CH1161 Univ Chemistry II Lab (1)	MY3701 Semiconductors (2)	MY4600 Intro to Polymer Engineering (3)
	PH1100 Introductory Physics Lab I (1)	PH2200 Univ. Physics II E&M (3)	PH2020 Intro to Scientific Programming and Error Analysis (1)	Approved Electives (3)
	ENG1101 Engineering Analysis and Problem Solving (3)	MY2100 Intro Matls Sci & Engr (3)	HASS Gen Ed (3)	HASS Gen Ed (3)
	UN1015 Composition (3)	Social/Behavioral list (3)	HASS Gen Ed (3)	HASS Gen Ed (3)
	15 total	**17 total**	**17 total**	**17 total**
SPRING	MA2160 Calculus II (4)	MA2321 Elementary Linear Algebra, Track A (2) and MA3521 Brief Differential Equations, Track B (2)*	MY3110 Matls Processing II (4)	MY4930 Senior Design Project II (2)
	PH2100 Univ. Physics I Mechanics (3)		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)	Approved Electives (6)
	ENG1102 Engineering Modeling and Design (3)	MY2110 Intro to Materials Science and Engineering II (3)	MY4940 Design of Experiments (2)	Free Elective (4)
	UN1025 Global Issues (3)	Humanities/Arts list (3)	EC3400 Economic Decision Analysis (3)	
		PH2400 Modern Physics (3)		
	14 total	**17 total**	**16 total**	**15 total**

* Students may take MA2320 Elementary Linear Algebra (2) and MA3520 Brief Differential Equations (2) as separate one semester courses if preferred. MA2320/2321 is a prerequisite for MA3520.

Approved Electives are courses in Science, Engineering or Mathematics at 3000 level or higher (except ENT, CM4610).

General Education Distribution Courses are from the HASS (Humanities, Arts, and Socal Sciences) list .At least 6 credits are required to be at 3000 level or higher. EC3400 is required in the MSE curriculum and does not count as a HASS requirement.

Prerequisites Most courses have prerequisites. Please see the MSE academic advisor (mseadvise@mtu.edu) 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.