Materials Science and Engineering Undergraduate Advising Worksheet

FALL	*SPRING*	*SUMMER*
Semester 1	**Semester 2**	
CHM2045/2095 (3)[1] _____	CHM2046/2096 (3) _____	
CHM2045L (1) _____	CHM2046L (1) _____	
MAC2311 (4)[2] _____	ENC3246 (3) _____	
GE-H (3) _____/_____	HUM2305 (3) _____	
GE-S (3) _____/_____	MAC2312 (4) _____	
Semester 3	**Semester 4**	**Semester 5**
EIN4354, MAN3025, or MAR3023 (3-4) _____	EGM2511 (3) _____	EEL3003 (3) _____
EMA3010 (3) _____	**EMA3011 (3)** _____	GE – H/N or S/N (3) _____
MAC2313 (4) _____	**EMA3800 (3)** _____	GE – S/D (3) _____
PHY2048 (3)[3] _____	MAP2302 (3) _____	_____
PHY2048L (1) _____	PHY2049 (3) _____	_____
Computer Prog (2) _____	PHY2049L (1) _____	
Semester 6	**Semester 7**	**Restrictive Notes:**
EGM3520 (3) _____	**EMA3013C (2)** _____	*1: EMA 3011 is taught in the spring of the sophomore year and has the sequence CHM 2045 and 2046 as prerequisites therefore MSE majors must complete CHM 2045 with a grade of C or better by end of Semester 3.*
EMA3050 (3) _____	**EMA3413 (3)** _____	
EMA3066 (3) _____	**EMA3513C (4)** _____	*2: Engineering Critical Tracking requires majors to complete the MAC 2311, 2312, 2313 sequence by the end of Semester 6 and therefore MSE majors must complete MAC 2311 with a grade of C or better by the end of Semester 3.*
EMA3080C (2) _____	**EMA4125 (3)** _____	
EMA4314 (3) _____	**EMA4223 (3)** _____	*3: EMA 4223 (Mechanical Behavior) is required in the spring of the Junior year; its prerequisites are the series EGM 2511 (Statics), PHY2048 (Physics with Calculus I), and EGM3520 (Mechanics of Materials) therefore MSE majors must complete PHY2048 with a grade of C or better by the end of Semester 5.*
Semester 8	**Semester 9**	
EMA4324 (3) _____	**EMA4121 (3)** _____	****Courses listed in **Bold** are only offered in the semester in which they appear*
EMA4913/4915 (2-3) _____	**EMA4714 (3)** _____	
Specialization Course _____	**EMA4914/4916 (3)** _____	
Elective Course	Specialization Course _____	
(Choose 1 Below):	Elective Courses	
• **EMA4061 Bio: Struc/Prop (3)**	(Choose 1 if not taken in previous fall):	
• **EMA4120 Phys Metal 1 (3)**	• **EMA4615 Comp. Sem. Mat.(3)**	
• **EMA4144 Phys Cer 1 (3)**	• **ENU4800 Nuclear Materials (3)**	
• **EMA4161C Polymer Phys (4)**	• **EMA4666 Proc Polymers (3)**	
• **EMA4614 Proc Elec Mtls (3)**		
• **EMA4623C Proc Metall (3)**		
• **EMA4645 Proc Cer Mtls (3)**		

Specialization Courses (Choose 1 of the following specialties):

		Specialization:
• **EMA4041L (1)** • **EMA4144 (3)** • **EMA4645 (3)**	• **EMA4145 (3)**	**Ceramics**
• **EEE3396 (3)** • **EMA3414L (1)** • **EMA4614 (3)**	• **EMA4615 (3)**	**Electronic Materials**
• **EMA4120 (3)** • **EMA4623C (4)**	• **EMA4224 (3)**	**Metals**
• **EMA4061 (3)** • **EMA4161C (4)** • **EMA4666 (3)**	• **EMA4062 (3)**	**Poly-Bio**

Disclaimer: *The courses required for the BS MSE degree are offered only once a year in specific semesters. Furthermore, junior and senior level courses may be scheduled concurrently; as a result, course availability is maximized by taking the courses in sequence within a continuous two-year period (e.g. junior and senior year). Students must recognize and accept responsibility of the ramifications of the required sequencing of courses needed for the MSE BS degree. Beyond the impacts of not meeting critical tracking requirements additional semesters (years) will be required to obtain the degree, when the published track is not followed. Students falling off track must accept responsibility for arranging courses needed to fulfill degree requirements*