

# Material Science Engineering

## Four Year Plan (2016-2017 and 2017-2018 ready for calculus)

FALL SEMESTER		SPRING SEMESTER		
<b>FIRST YEAR</b>	UF 100 Intellectual Foundations	3	ENGL 101 Introduction to College Writing	3
	CHEM 111, 111L General Chemistry I with Lab	4	CHEM 112, 112L General Chemistry II with Lab	4
	MATH 170 Calculus I	4	MATH 175 Calculus II	4
	ENGR 120 or ENGR 130 Introduction to Engineering	3-4	PHYS 211, 211L Physics I with Calculus and Lab	5
	<b>SEMESTER TOTAL</b>	<b>14+</b>	<b>SEMESTER TOTAL</b>	<b>16</b>
FALL SEMESTER		SPRING SEMESTER		
<b>SECOND YEAR</b>	MATH 275 Multivariable and Vector Calculus	4	MATH 333 Differential Equations	4
	PHYS 212, 212L Physics II with Calculus and Lab	5	UF 200 Civic and Ethical Foundations	3
	MSE 245 Introduction to MSE	3	DLL, DLV, or DLS course	3
	ENGL 102 College Writing and Research	3	MSE 246 Materials for Society (CID)	3
			MSE 150 Introduction to Computation for MSE	3
			MSE 280 Intro to Materials Lab Practice	1
	<b>SEMESTER TOTAL</b>	<b>15</b>	<b>SEMESTER TOTAL</b>	<b>17</b>
FALL SEMESTER		SPRING SEMESTER		
<b>THIRD YEAR</b>	MSE 308 Thermodynamics of Materials	3	MSE 318 Phase Transformations and Kinetics	3
	MSE 312 Mechanical Behavior of Materials	3	MSE 381 Materials Analysis Laboratory	3
	MSE 380 Materials Properties Laboratory	3	MSE 321 Structural Characterization	3
	ENGR 210 Statics	3	PHYS 309, 309L Modern Physics with Lab	4
	MATH 360 Engineering Statistics	3	Technical emphasis elective	3
	<b>SEMESTER TOTAL</b>	<b>15</b>	<b>SEMESTER TOTAL</b>	<b>16</b>
FALL SEMESTER		SPRING SEMESTER		
<b>FOURTH YEAR</b>	MSE 415 Materials Processing (or 410)	3	MSE 410 Electrical Properties of Materials (or 415)	3
	MSE 480 Senior Project	3	(FF) MSE 482 Senior Project II	3
	MSE 498 Materials Science Seminar	1	Technical emphasis elective	3
	ENGR 240 or ECE 210 Electrical Circuits	3	DLL, DLV, or DLS course	3
	Technical emphasis elective	3	DLL, DLV, or DLS course	3
	DLL, DLV, or DLS course	3		
	<b>SEMESTER TOTAL</b>	<b>16</b>	<b>SEMESTER TOTAL</b>	<b>15</b>

**HIGHLIGHTED COURSES** are offered only in the semester in which they are listed.

**DISCIPLINARY LENS COURSES:** Students need to take one DLL, one DLV, and two DLS courses. DLS courses must come from two different fields.

**TECHNICAL EMPHASIS:** Students must complete 9 credits of technical emphasis – courses that are related to one another and which support the student’s MSE degree. The emphasis area and courses must be pre-approved by the advisor.

**GRADE POLICY:** A C- or above is required for all prerequisite courses and for all upper division courses within the student’s major.

### MSE UNDERGRADUATE ADVISORS:

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# 2016-17 and 2017-18

