

## Mechanical Engineering Sample 4-Year Plan

FIRST YEAR	Fall Term		Spring Term	
	Course	Hours	Course	Hours
All first-year students must take FUSE 101 in the fall semester and FUSE 102 in the spring semester.	FUSE 101 Frontiers	3	FUSE 102 Intersections	3
	MATH 231 Calculus I	4	MATH 232 Calculus II	4
	PHYS 211 General Physics I	5	PHYS 212 General Physics II	5
	EGRA 140 GraphComm & Basic Making	2	EGRA 160 Intro to Design	2
	EGRA 130 Intro to Microcontrollers	2	EGRA 123 MATLAB I	1.5
We assume one class			EGRA 124 MATLAB II	1.5
overlap between a Fusion				
Exploration area and a class needed for a certificate.	Total Hours	16	Total Hours	17
SOPHOMORE	Fall Term		Spring Term	
	Course	Hours	Course	Hours
If you are planning to attend graduate school AND planning to study abroad, it is optimal to study abroad during the summer term following either the sophomore or junior year.	MATH 235 Linear Algebra	3	MATH 366 Differential Equations	3
	CHEM 121 or CHEM 131+131 L	5	EGRM 240 Materials & Manufacturing	3
	EGRA 200 Circuits I	3	EGRM 230 Thermodynamics	3
	EGRM 220 Statics & Mech of Materials I	3	CSCI 251 Intro to Computer Science*	4
	Fusion Course	3	Fusion Course	3
			Note: *This class counts towards Fusion Explorations #4 (Exploring the Natural World)	
	Total Hours	17	Total Hours	16



## Mechanical Engineering Sample 4-Year Plan

JUNIOR	Fall Term		Spring Term	
	Course	Hours	Course	Hours
Students must officially declare a major by the time 60 hours are completed in order to continue registering.	MATH 233 Calculus III	4	EGRA 360 Junior Design	2
	EGRM 320 Statics & Mech of Materials II	3	EGRM 350 Measurement Systems	3
	EGRM 325 Dynamics	3	EGRM 330 Fluid Mechanics	3
	Fusion Explorations #2 ETHICS**	3	2 Business Short Courses	1
	2 Business Short Courses	1	2 Technical Short Courses	1
	2 Technical Short Courses	1	Fusion Course	3
			Fusion Course	3
	Notes:** Any ethics class that satisfies Fusion Explorations #2 (Ethics)			
	Total Hours	15	Total Hours	16

SENIOR	Fall Term		Spring Term	
	Course	Hours	Course	Hours
Expectant graduates must apply for graduation and meet with a representative in the Registrar's Office the semester prior to	EGRA 460 Capstone Design I	3	EGRA 465 Capstone Design II	3
	EGRM 430 Heat Transfer	3	EGRA 420 Control Systems I	3
	EGRM 420 Matls & Machine Comp Des	3	Mechanical Engineering Elective	3
	1 Business Short Course	0.5	1 Business Short Course	0.5
	1 Technical Short Course	0.5	1 Technical Short Course	0.5
	Fusion Course	3	Fusion Course	3
	Fusion Course	3	Fusion Course	3
	Total Hours	16	Total Hours	16