

4-Year Program with Study Abroad in Valencia

MECHANICAL ENGINEERING CURRICULUM

4-Year Program (for students starting in September 2020 with 2nd Year – FALL in Valencia, Spain)

Student: _____ ID: _____ Advisor: _____



UNIVERSIDAD POLITECNICA DE VALENCIA

1st Year – FALL (17 cr)		Grade
ENG 101 ^C	College Composition (3 cr)	
MAT 126 ^C	Calculus I (4 cr)	
MEE 101	Intro to Mech. Eng. (1 cr)	
MEE 120	Eng. Graphics & CAD (2 cr)	
PHY 121 ^C	Physics for Eng. & Sci. I (4 cr)	
	HVSC Elective (3 cr)	

1st Year – SPRING (17 cr)		Grade
MAT 127 ^C	Calculus II (4 cr)	
MEE 125	Computational Tools for MEs (3 cr) or COS 220 or ECE 177	
MEE 150 ^C	Statics (3 cr)	
PHY 122	Physics for Eng. & Sci. II (4 cr)	
	HVSC Elective (3 cr)	

2nd Year – FALL (17 cr)		Grade
CHY 121/3	General Chemistry I/Lab (4 cr)	—/—
or CHY 131/3	Chemistry for Engineers/Lab (4 cr)	
MAT 228 ^C	Calculus III (4 cr)	
MEE 230 ^C	Thermodynamics I (3 cr)	
MEE 270 ^C	Dynamics (3 cr)	
	HVSC Elective (3 cr)	

2nd Year – SPRING (16 cr)		Grade
EGE 220	Fund. Electronic Circuits (3 cr)	
ENG 320	Tech. Comm. for Engineering (3 cr)	
MAT 258	Diff. Eq. & Lin. Algebra (4 cr)	
MEE 231	Thermodynamics II (3 cr)	
MEE 251 ^C	Strength of Materials (3 cr)	

3rd Year – FALL (15 cr)		Grade
MEE 320	Materials (3 cr)	
or MEE 370	Controls (3 cr)	
MEE 330	Manufacturing Engineering (3 cr)	
or MEE 360	Fluid Mechanics (3 cr)	
MEE 341	Mechanical Lab I (3 cr)	
or MEE 380	Design I (3 cr)	
MEE 381	Design II (3 cr)	
or MEE 456	Finite Element Method (3 cr)	
STS 332	Statistics for Engineers (3 cr)	
	or Engineering Elective (3 cr)	

3rd Year – SPRING (15 cr)		Grade
MEE 320	Materials (3 cr)	
or MEE 370	Controls (3 cr)	
MEE 330	Manufacturing Engineering (3 cr)	
or MEE 360	Fluid Mechanics (3 cr)	
MEE 341	Mechanical Lab I (3 cr)	
or MEE 380	Design I (3 cr)	
MEE 381	Design II (3 cr)	
or MEE 456	Finite Element Method (3 cr)	
STS 332	Statistics for Engineers (3 cr)	
	or Engineering Elective (3 cr)	

4th Year – FALL (15 cr)		Grade
MEE 432	Heat Transfer (3 cr)	
or MEE 471	Mechanical Vibrations (3 cr)	
MEE 442	Mechanical Lab II (2 cr)	
MEE 487	Capstone Design I (4 cr)	
	MEE Technical Elective (3 cr)	
	MEE Technical Elective (3 cr)	

4th Year – SPRING (17 cr)		Grade
MEE 432	Heat Transfer (3 cr)	
or MEE 471	Mechanical Vibrations (3 cr)	
MEE 443	Mechanical Lab III (2 cr)	
MEE 488	Capstone Design II (3 cr)	
	MEE Technical Elective (3 cr)	
	HVSC Elective (3 cr)	
	HVSC Elective (3 cr)	

^C and ^C indicate the minimum grade required in that course.

Engineering Elective (3 cr)	
Course	Grade

MEE Technical Electives (9 cr)	
Course	Grade

	Course	HVSC credits	Grade	Human Values and Social Context (HVSC) areas (18 cr)					Ethics (not part of HVSC)
				Western Cultural Tradition	Social Contexts & Institutions	Cultural Diversity & International Perspectives	Population & Environment	Artistic & Creative Expression	
1.	ENG 320	3			X				
2.									
3.									
4.									
5.									
6.									
(if needed) 7.									
(if needed) 8.									

Students must complete 18 credits in the HVSC areas, and each of the 5 HVSC areas must be satisfied at least once. Students must also take a course that satisfies the Ethics requirement. Note that some courses satisfy more than one category (e.g. Ethics and an HVSC area).

2nd Year – FALL in Valencia

CHY 121/3 Intro to Chemistry/Lab (4 cr.)

MAT 228 Calculus III (4 cr.)

MEE 230* Thermodynamics I (3 cr.)

MEE 270* Dynamics (3 cr.)

Elective (3) HVSC Elective



Gain a semester-long study abroad experience without falling behind!