

MECHANICAL ENGINEERING

Recommended Program Sequence

Bachelor of Science Degree

(57 Units in Engineering, 123 Total Units)

Student _____ ID# _____ Adviser _____

Telephone _____ Catalog Year _____ Graduation Date _____

_____ Email _____

ADVISING SHEET

MAJOR CODE: 054402

2020-2021

1ST (Fall) SEMESTER				Units	Grade	Sem	Transfer	2nd (Spring) SEMESTER				Units	Grade	Sem	Transfer
ME 1	Intro to ME	1	___	___	___			ME 2	Cmpt App in ME	1	___	___	___		
ME 26	Engr Graphics	3	___	___	___			CHEM 1A	Gen Chemistry	3	___	___	___		
ECE71/CSCI40	(Intro Prog)	3/4	___	___	___			CHEM 1AL	Gen Chemistry Lab	2	___	___	___		
GE Area A2	ENGL 10	3	___	___	___			MATH 76	Math Analysis II	4	___	___	___		
MATH 75	Math Analysis I	4	___	___	___			PHYS 4A	Mech+Wave Motion	3	___	___	___		
GE Area B2 ²	Life Sciences	<u>3</u>	___	___	___			PHYS 4AL	Lab Mech+Wave	1	___	___	___		
		17/18						GE Area D1	HIST 11 or 12	<u>3</u>	___	___	___		
										17					
3rd (Fall) SEMESTER								4th (Spring) SEMESTER							
ME 31	Engr Materials	3	___	___	___			ME 95	Manuf Processes	2	___	___	___		
ME 32	Engr Materials Lab	1	___	___	___			CE 20	Engr Mech Statics	3	___	___	___		
MATH 77	Math Analysis III	4	___	___	___			ECE 91	Inro Elec Engr	3	___	___	___		
PHYS 4B	Elec+Mag+Heat	3	___	___	___			ECE 91L	Elec Cir Lab	1	___	___	___		
GE Area A1	Oral Communication	3	___	___	___			MATH 81 ⁴	Applied Analysis	3	___	___	___		
GE Area C2	PHIL 20	<u>3</u>	___	___	___			PHYS 4C	Light + Mod Phys	3	___	___	___		
		17						GE Area D2	PLSI 2	<u>3</u>	___	___	___		
										18					
5th (Fall) SEMESTER								6th (Spring) SEMESTER							
ME 112	Engr Mech: Dyn	3	___	___	___			ME 116	Fluid Mechanics	3	___	___	___		
ME 115	Instu & Meas Lab	1	___	___	___			ME 118**	Fluid Mech Lab	1	___	___	___		
ME 136	Thermodynamics	3	___	___	___			ME 156	Adv Thermo	3	___	___	___		
ME 125	Engr Stat & Expt	3	___	___	___			ME 134 ¹	Kinematics of Mach	3	___	___	___		
CE 121	Mech of Mtls	3	___	___	___			ME 140	Adv Engr Analysis	3	___	___	___		
		13								13					
7th (Fall) SEMESTER								8th (Spring) SEMESTER							
Technical Area Course³								Technical Area Course³							
		<u>3</u>	___	___	___					3	___	___	___		
ME 135	Intro Dsgn-Sr Cap I	3	___	___	___			ME 155	Sr Cap Design II	3	___	___	___		
ME 145	Heat+Mass Trans	3	___	___	___			ME 166	Energy Sys Design	3	___	___	___		
ME 154	Dsgn of Mach Elem	3	___	___	___			ME 159	Mech Sys Dsgn Lab	1	___	___	___		
GE Area D3 ²	Social Sciences	3	___	___	___			GE Area M/I	PLSI 120	<u>3</u>	___	___	___		
		15								13					

¹Also counts as major GPA

²See Catalog for G.E. Courses

³Take a minimum of 6 units in Group A (ME 122, 137, 142, 144, 146, 162 or 164 (to be offered in alternate years)). A maximum of 3 units from Group B (ME 180, 190, 191T) may be substituted for a course in Group A with faculty adviser's approval.

⁴Engr 101 may be taken as an alternative for Math 81 with adviser's approval.

*Math 75 is a pre/co-requisite for all engineering courses except ME 1.

**NOTE: Department approved writing course or equivalent must be taken in the junior year if the student fails the writing exam requirement.

Must have a minimum grade of "C" or better on all math, science and engineering courses.

Bachelor of Science Degree in Mechanical Engineering

Major Requirements	66
ME 1, 2, 26, 31, 32, 95, 112, 115, 116, 118, 125, 135, 136, 140 145, 154, 156.....	(40)
CE 20, 121.....	(6)
ECE 70/ECE 71/CSCI 40, ECE 91 and ECE 91L.....	(7)
 Design Applications.....	 (7)
ME 155, ME 159 and ME 166	
 Technical Area Courses.....	 (7)
Take a minimum of three units from the courses offered in Group A: ME 137, 142, 144, 146, 162, or 164. A maximum of three units from Group B may be substituted for a course in Group A with faculty advisor's approval: ME 180, 190, 191T; ECE 121, 121L, 155	
 Other Requirements	57
 1. General Education	36
COMM 3, 7, or 8 (GE Area A1); ENGL 10 (GE Area A2); HIST 11 or 12 (GE Area D1) and select one course from each of the following GE Areas: B2, and D3	
The following courses are required to satisfy both GE and major requirements:	
CHEM 1A (GE Area B1).....	MATH 75 (GE Area B4)
PHIL 20 (GE Area C2)	PLSI 2 (GE Area D2)
ME 134 (GE Area 1B).....	PLSI 120 (GE Area M/I)
 2. Additional Requirements	21
MATH 76, 77, 81; PHYS 4A, 4AL, 4B, 4C	
 TOTAL.....	123

Advising Notes:

1. Courses in mathematics, the physical sciences, or engineering taken CR/NC are not counted toward fulfillment of degree requirements in mechanical engineering.
2. Mechanical engineering majors might consider a math, physics, or business minor.
3. Since the mechanical engineering major curriculum is very demanding, many students, especially those not fully prepared in mathematics, chemistry and/or physics, take 4-1/2 or more years to graduate rather than the traditional 4 years.
4. *Advising is mandatory* in the Lyles College of Engineering. A registration hold will be placed on students who fail to see their adviser at least once per academic year.
5. *The Upper-Division Writing Skills* requirement has to be completed no sooner than the term in which 60 units of coursework are completed or no later than the term in which 90 units are completed. This requirement can be met by passing the university writing examination or by taking ENGR 105W or a department-approved writing course. Must be taken and passed with a letter grade of "C" or better in the junior year if the student fails the writing exam requirement.
6. With faculty adviser approval, ENGR 101 may be taken instead of MATH 81.