MECHANICAL ENGINEERING

Recommended Program Sequence

Bachelor of Science Degree **(57 Units in Engineering, 129 or 123 Total Units)**

Student_____ ID#_____ Adviser_____

Telephone_____ Catalog Year_____ Graduation Date_____

Email_____

ADVISING SHEET **MAJOR CODE: 054402** **2015-2016**

1ST (Fall) SEMESTER		Units	Grade	Sem	Transfer
ME 1	Intro to M E	1			
ME 26	Engr Graphics	3			
ECE71/CSCI 40	Intro Programming	4			
GE Area A2	English 10	3			
MATH 75*	Math Analysis I	4			
GE Area B2[2]	Life Sciences	3			
		18			

2nd (Spring) SEMESTER		Units	Grade	Sem	Transfer
ME 2	Cmpt App in ME	1			
CHEM 1A	Gen Chemistry	5			
MATH 76*	Math Analysis II	4			
PHYS 4A*	Mech+Wave Motion	4			
PHYS 4AL	Lab Mech+Wave	1			
GE Area D1	Hist 11 or 12	3			
		17			

3rd (Fall) SEMESTER		Units	Grade	Sem	Transfer
ME 31	Engr Materials	3			
ME 32	Engr Materials Lab	1			
MATH 77*	Math Analysis III	4			
PHYS 4B *	Elec+Mag+Heat	3			
GE Area A1	Comm 3,7, or 8	3			
GE Area C2	PHIL 20	3			
		17			

4th (Spring) SEMESTER		Units	Grade	Sem	Transfer
ME 95	Manuf Processes	2			
CE 20	Engr Mech Statics	3			
ECE 91	Inro Elec Engr	3			
ECE 91L	Elec Cir Lab	1			
MATH 81[4*]	Applied Analysis	3			
PHYS 4C	Light + Mod Phys	3			
GE Area D2	Pl Si 2	3			
		18			

5th (Fall) SEMESTER		Units	Grade	Sem	Transfer
ME 112*	Engr Mech: Dyn	3			
ME 115	Instu & Meas Lab	1			
ME 136*	Thermodynamics	3			
ME 125	Engr Stat & Expt	3			
CE 121	Mech of Mtls	3			
GE Area C1[2]	Arts or fulfilled major	3			
		16			

6th (Spring) SEMESTER		Units	Grade	Sem	Transfer
ME 116*	Fluid Mechanics	3			
ME 118	Fluid Mech Lab	1			
ME 156	Adv Thermo	3			
ME 134[1]	Kinematics of Mach	3			
GE Area D3[2]	Social Sciences	3			
GE Area M/I	PL SI 120	3			
		16			

NOTE: Completion of UD Writing Exam or Dept. Approved Writing Course.

7th (Fall) SEMESTER		Units	Grade	Sem	Transfer
Technical Area Course[3]		3			
ME 135	Intro Dsgn-Sr Cap I	3			
ME 140	Adv Engr Analysis	3			
ME 145	Heat+Mass Trans	3			
ME 154	Dsgn of Mach Elem	3			
		15			

8th (Spring) SEMESTER		Units	Grade	Sem	Transfer
Technical Area Course[3]		3			
ME 155	Sr Cap Design II	3			
ME 166	Energy Sys Design	3			
ME 159	Mech Sys Dsgn Lab	1			
GE Area IC	PHIL120 or fulfilled major	3			
		13			

[1]Also counts as major GPA
[2]See Catalog for G.E. Courses
[3]Take a minimum of 6 units in Group A (ME 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.
[4]Engr 101 may be taken as an alternative with adviser's approval.

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"**

Bachelor of Science Degree in Mechanical Engineering
2015-2016

Major Requirement ....(66)

ME 1, 2, 26, 31, 32, 95, 112, 115, 116, 118, 125, 135, 136, 140
145, 154, 156.....(40)
CE 20, 121.....(6)
ECE71/CSCI40, ECE 91 and ECE 91 L.....(7)

Design Applications.....(7)
Design Application: ME 155, ME 159 and ME 166

Technical Area Courses..(6)
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 63

1. **General Education .....(36 or 42)**
COMM 3, 7, or 8 (GE Area A1); (ENGL 1 (GE Area A2); HIST 11 or 12 (GE Area D1) and select one course from each of the following GE Areas: B2, C1 or fulfilled by major, 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) ..... PL SI 2 (GE Area D2)
ME 134 (GE Area 1B) ..... PHIL 120 or fulfilled by major (GE Area IC)
PL SI 120 (GE Area M/I)

2. **Additional Requirements .....(21)**
MATH 76, 77, 81; PHYS 4A, 4AL, 4B, 4C

TOTAL .....123 or 129

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.