TEXAS A&M UNIVERSITY - MECHANICAL ENGINEERING 2017-2018 - Cat. #140 **KEY** 16 hrs. MATH 151* **ENGL 104*** ENGR 111* UCC PHYS 218* Foundations of Engineering Composition & 1st Year Engineering Coursework Mechanics Elective Engr. I Math I Rhetoric University Core Curriculum (UCC) general education electives MATH 151 MATH 151 Lab courses or courses with labs ENGR 112* MATH 152* PHYS 208* CHEM 107*/117 UCC 17 hrs. Gen. Chem. for Required Prerequisite Foundations of Engineering Electricity & Elective Engineers/Lab Engr. II Math II **Optics** Preceded or accompanied by; co-requisite PHYS 218 ENGR 111 MATH 151 MATH 152 MATH 151 3 Number of course credits * Course requires grade of C or better MATH 251* 3 MEEN 225* MEEN 210* 17 hrs. MEEN 222* Communication UCC Modeling for Engineering Engineering Elective: COMM 205; Materials Science Elective Math III Mechanics Mech. Design ENGL 203 or 210 PHYS 218 MATH 251 PHYS 218 CHEM 107 ENGR 111 MATH 152 **TOTAL CREDIT HOURS: 128** MATH 308* CVEN 305* ECEN 215* MEEN 315* MEEN 260* meen.tamu.edu Differential Prin. of Electrical Mechanics of Mechanical Prin. of 15 hrs. **Equations** Engr. Materials Thermodynamics Measurements NAME: MEEN 225 ECEN 215 PHYS 208 MATH 251 MEEN 225 MATH 251 (MATH 251) MEEN 225 MEEN 315 MATH 308 UIN: MEEN 363* MEEN 357* MEEN 360* MEEN 345* UCC MEEN 361* MEEN 344* 17 hrs. Engr. Analysis for Mtls. & Mfg. Elective Dynamics and Fluid Mechanics Mtls. & Mfg. Lab Fluid Mechanics Mech. (ICD) **Vibrations** Select. in Dsn. Lab ENGR 112 MATH 308 MEEN 225 MEEN 357 **MEEN 260** MEEN 222) (MEEN 260 MEEN 222 MEEN 225 MEEN 260 MEEN 344 MEEN 315 CVEN 305 MEEN 360 MEEN 210 MATH 308) CVEN 305 MEEN 210 CVEN 305 MEEN 368* UCC MEEN 464* MEEN 364* **ISEN 302 MEEN 381** MEEN 461* Solid Mech. in Elective Heat Transfer Econ. Anly. Engr. Dynamic Syst. 16 hrs. Heat Transfer Seminar and Control (ICD) Mech. Design Lab Project ECEN 215 | MEEN 363 CVEN 305 | MEEN 357 MATH 308 MEEN 344 MEEN 345 MEEN 461 MATH 152 MEEN 360 MEEN 260 MEEN 401* **MEEN 404 UCC Elective Requirements MEEN Stem** MEEN/Non-MEEN 5 hrs. UCC core.tamu.edu Intro. to Mech. Engineering MEEN 421, 431, Technical Elective POLS 206, 207 Engr. Design Elective Laboratory or 475 6 credits of American History** MEEN 360/361 MEEN 364 MEEN 360/361 MEEN 364 3 credits of Creative Arts** MEEN 461 MEEN 401 MEEN 368 MEEN 461 3 credits of Social/Behavioral MEEN 402 MEEN/Non-MEEN 3 Sciences** 15 hrs. **MEEN MEEN Stem** ENGR/PHIL 482

Technical

Elective

MEEN 421, 431,

or 475

Engineering

Ethics

**6 credits of International, Cultural

be fulfilled by these UCC electives

Diversity (ICD) must be taken and can

Year 1

Year 2

Year 3

Year 4

Intermediate

Design

MEEN 401

Technical

Elective

Mechanical Engineering Suggested Graduation Timeline

Following are recommendations and a timeline of what is suggested by the Mechanical Engineering Advising Office for successful completion of a degree in 4 years.

Freshman Year Expectations

Curriculum:

- > Start and complete freshmen engineering coursework
- ➤ Apply to MEEN via Howdy at first opportunity

MEEN Ambassadors:

➤ MEEN Ambassadors available in 200 MEOB to answer questions regarding the Mechanical Engineering Department and curriculum.

Student Responsibilities:

- > Attend Departmental Information Sessions
- > Explore engineering majors
- Check own class schedule for conflicts, accuracy, or problems
- ➤ Know and use college & university resources*
- ➤ Begin exploring clubs and organizations**
- ➤ Begin researching minors, engr. certificates & career choices***
- > Career Center & Resume
- ➤ Attend Engineering Career Fairs

Sophomore Year Expectations

Curriculum:

- Freshmen engineering completed
- > Start MEEN core courses and finish math/physics courses with minimum of C grades
- Communication and UCC course electives

Advisor:

- Advisors available in 200 MEOB to assist with:
 - Degree evaluation corrections
 - Declaring minor or certificate
 - Study Abroad
 - Academic planning/big picture
 - UCC and tech elective suggestions***

Get Involved:

- ➤ College & other clubs/organizations**
- > Pursue study abroad options
- ➤ Volunteer work
- > Apply for Internship/Co-op
- > Pursue research opportunities
- > Pursue additional scholarships
- ➤ Career Center & Resume
- ➤ Attend Engineering Career Fairs
- > Create and submit online degree plan
- Check degree evaluation for errors; discuss with advisor

Junior Year Expectations

Curriculum:

- > MEEN Core courses: min. C grade
- > ISEN 302, UCC courses
- > Technical elective courses
- ➤ Minor or engineering certificate
- > Review graduation requirements

Advisor:

- > Advisors available in 200 MEOB to assist with:
 - Degree evaluation corrections
 - Declaring minor or certificate***
 - Study Abroad
 - Academic planning/big picture
 - UCC and technical elective suggestions***

Get Involved:

- College & other clubs/organizations; accept officer position**
- ➤ Study Abroad
- ➤ Volunteer work
- > Apply/Complete Internship/Co-op
- > Pursue research opportunities
- Pursue additional scholarships
- > Career Center/Refine resume
- > Attend Engineering Career Fairs
- > Research post-graduate school options and take GRE
- Review FE exam materials over summer between junior/senior years
- Update and submit online degree plan
- Check degree evaluation for errors; discuss with advisor

Senior Year Expectations

Curriculum:

- ➤ Finish MEEN core courses; Technical electives & UCC courses
- > Minimum 2.0 Cum. GPA to graduate
- ➤ Minimum 128 total credits
- Meet with advisor during semester prior to final semester to verify all graduation requirements are met
- Apply for graduation online in Howdy at beginning of final semester

<u>Advisor:</u>

- Advisors available in 200 MEOB to assist with:
 - Degree evaluation corrections
 - Clear degree candidates
 - Career/post graduate ideas
 - Recommendations

Get Involved:

- ➤ Update online grad plan
- > Attend Engineering Career Fairs
- ➤ Apply and interview for long-term employment/sign contract
- Update Career Center on long-range plans
- Pursue post-graduate school options
- ➤ Turn over clubs/organizations responsibilities to underclass members; train as needed**
- Attend MEEN and TAMU graduation ceremonies
- Check degree evaluation for errors; discuss with advisor