MECE 4361 Senior Design Project I
MECE 3336 Thermodynamics II
MECE 4101 Fundamentals of Engineering
Choose 1 Technical Elective
Choose 1 Government/Political Science (Core)
Choose 1 Creative Arts (Core)

Choose 1 Technical Elective
MECE 3321 Mechanics of Solids
MECE 3315 Fluid Mechanics
MECE 3115 Fluid Mechanics
MECE 3304 System Dynamics
MECE 3360 Heat Transfer Laboratory
Choose 1 Technical Elective
MECE 4350 Machine Elements
Choose 1 Professional Ethics

Choose 1 American History (Core)
MECE 2350 Numerical Methods for Engineers
Choose 1 Communication (Core)
MATH 2413 Calculus I
Choose 1 Chemistry I
Choose 1 Chemistry I Lab
MECE 1101 Introduction to Engineering
MANE 2332 Engineering Statistics
MANE 3364 Manufacturing Processes
MANE 3164 Manufacturing Processes Lab

Learning Framework
• Mechanical engineering is a broad field with applications in almost all areas of industry including aviation and aerospace, alternative energy, automotive, automated manufacturing and robotics, chemical, computer, electronics, petroleum, nanotechnology, materials, textiles, and heavy equipment and machinery. The Department of Mechanical Engineering offers a Bachelor of Science in Mechanical Engineering (BSME) degree that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). This degree provides a broad, solid education in engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have rigorous foundation for engineering practice in industry as well as for graduate studies in engineering and other disciplines. The program has well-equipped, accessible laboratories and extensive experimental and computing facilities.

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Degree Info
Mechanical engineering is a broad field with applications in almost all areas of industry including aviation and aerospace, alternative energy, automotive, automated manufacturing and robotics, chemical, computer, electronics, petroleum, nanotechnology, materials, textiles, and heavy equipment and machinery. The Department of Mechanical Engineering offers a Bachelor of Science in Mechanical Engineering (BSME) degree that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). This degree provides a broad, solid education in engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have rigorous foundation for engineering practice in industry as well as for graduate studies in engineering and other disciplines. The program has well-equipped, accessible laboratories and extensive experimental and computing facilities.
### FIRST YEAR
- Complete 33 credit hours every year in order to graduate in 4 years.
- Shoot for a GPA of 3.5.
- Take MATH 2414 in your first year.
- Complete your core English classes (section 101) during your first year.
- Complete your chemistry and physics/chemistry during your first year.
- Complete your computer science class.

### SECOND YEAR
- Complete major foundation classes, such as Statics, Dynamics, and Thermodynamics. Continue to take a math or engineering analysis class every semester.
- Complete 34 credit hours.
- Complete 34 credit hours.

### THIRD YEAR
- Complete 34 credit hours.
- Have you landed an internship or acquired research experience? This is the year to make it happen.
- Start thinking about your Senior Design project, assembling your team, and choosing the project. You may want to look at various national design competitions sponsored by professional societies such as ASME, SAMPE, SAE, and AIAA.
- Complete at least 30 credit hours to graduate.

### FOURTH YEAR
- Complete 34 credit hours.
- Have you landed an internship or acquired research experience? This is the year to make it happen.
- Start thinking about your Senior Design project, assembling your team, and choosing the project. You may want to look at various national design competitions sponsored by professional societies such as ASME, SAMPE, SAE, and AIAA.
- Complete at least 30 credit hours to graduate.

### LIFE AFTER GRADUATION
- Complete 34 credit hours.
- Shoot for a GPA of 3.5.
- Think about three people you can ask for letters of recommendation (profs,, mentors, advisors, supervisors, etc.). Give them at least two weeks’ advance notice if you need a letter! Only ask for letters when you actually have an application that requires them.
- When is the deadline for your graduate school application? Visit the program admissions webpage. Most do not accept late applicants!

### GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT
- Create a résumé and set up your profile on the Career Center icon (My.UTRGV.edu).
- Got summer plans? Visit Career Center and ask about places to do some job shadowing.
- Research shows that students who work on campus perform better than those who work off campus. Look for a job on the Career Center portal!
- Check your UTRGV email for the daily Messenger.

### APPLY WHAT YOU LEARN
- Look for a service-learning course! For guidance, visit the Engaged Scholarship & Learning Office.
- Participate in a campus-sponsored community service project.
- Join another student organization. Perhaps ASME, SAMPE, SAE, or Visit Utng.edu/Vlink for options.
- Ask a student in class to study with you.

### MILESTONES
- UTRGV has a Writing Center and a Learning Center. Make it a point to visit them!
- Complete your core English classes (section 101) during your first year.
- Complete 33 credit hours every year in order to graduate in 4 years.
- Shoot for a GPA of 3.5.
- Take MATH 2414 in your first year.

### ADVICE & SUPPORT
- Attend the Freshman Mechanical Engineering convocation in the Fall.
- Visit a faculty member during their office hours and ask a question about class.
- Classes fill up fast. When registration opens, be sure to register on the first day for your group.
- Cold or flu getting you down? We have Student Health Services on campus with free office visits.
- My.UTRGV.edu.

### CAREERS
- Machine design
- Systems design
- Manufacturing and production
- Energy conversion
- Energy resources
- Transportation and environmental impact
- Materials and structures
  - Automotive
  - Aerospace
  - Electronics
  - Chemical products
  - Petroleum
  - Textiles
  - Industrial equipment
  - Heating and air conditioning systems
- National Aeronautics and Space Administration
- Utility companies
- National laboratories
- Federal government:
  - Department of Energy
  - Department of Defense
  - Federal Aviation Administration

For additional info, visit the Career Center website and check out “What Can I Do With This Major?” www.utrgv.edu/careercenter