To obtain a minor in ESM a student must complete 21 credit hours of ESM courses as indicated below.

Amanda Stanley (Room 225 Norris Hall) has been appointed to advise all students studying for a minor in ESM. In accordance with University policy and regulations, she will perform all functions appropriate to an advisor for students studying for a minor.

1. Complete 21 hours of ESM coursework on an A/F basis. A GPA of 2.0 is required in the ESM courses.

2. Complete the following courses:
   - ESM 2104 Statics, CO: MATH 2204
   - ESM 2204 Mechanics of Deformable Bodies, PRE: ESM 2104, MATH 2204
   - ESM 2304 Dynamics, PRE: ESM 2104, MATH 2204, CO: MATH 2214
   - ESM 3054 Mechanical Behavior of Materials, PRE: ESM 2204, MSE 2074 OR MSE 2074 OR MSE 3046 OR MSE 3046 OR AOE 3094 OR CEE 3604

3. Complete one of the following (Fluid Mechanics requirement):
   - ESM 3234 Fluid Mechanics I-Control Volumes, PRE: ESM 2304, PHYS 2204
   - ESM 3024 Introduction to Fluid Mechanics, PRE: ESM 2304, MATH 2204
   - ME 3404 Fluid Mechanics, PRE: ME 2124, MATH 2214
   - CEE 3304 Fluid Mechanics for CEE, PRE: ESM 2104
   - AOE 3104 Aircraft Performance, PRE: AOE 3104 OR AOE 3204, ESM 3104, ESM 2074, CO: ESM 3046
   - AOE 3104 Aero/Hydrodynamics, PRE: AOE 3104 OR AOE 3204, ESM 2304
   - AOE 3204 Ship Hydrodynamics, PRE: ESM 2104, MATH 2204, AOE 2104 OR AOE 2204, AOE 2074, CO: ESM 2104
   - AOE 3104 Aero/Hydrodynamics, PRE: AOE 3104 OR AOE 3204, ESM 2304

4. Complete six hours from the following list. At least 3 hours must be 4xxx or above.
   - ESM 3034 Fluid Mechanics Laboratory, PRE: ESM 2304, ECE 3074, CO: ESM 3234
   - ESM 3064 Mechanical Behavior of Materials Lab, PRE: ESM 2074, CO: ESM 3054
   - ESM 3124 Dynamics II-Analytical & 3D Motion, PRE: ESM 2304, MATH 2214, MATH 2204
   - ESM 3124 Dynamics III-Vibration and Control, PRE: ESM 3124, MATH 2214
   - ESM 3124 Solid Mechanics, PRE: ESM 2304, MATH 2214, MATH 2204
   - ESM 3334 Fluid Mechanics II-Differential Analysis, PRE: ESM 3334, MATH 2214
   - ESM 3444 Mechanics Laboratory, PRE: ESM 3234, ESM 3034, ESM 3074, ESM 3134, ESM 3244, ECE 3074, CO: ESM 3134, ESM 3134, ESM 3334
   - ESM 4014 Applied Fluid Mechanics
   - ESM 4024 Advanced Mechanical Behavior of Materials, PRE: ESM/MSE 3054
   - ESM 4044 Mechanics of Composite Materials, PRE: ESM 2204
   - ESM 4084/AOE 4084 Engineering Design Optimization, PRE: MATH 2204
   - ESM 4105 Engineering Analysis of Physiologic Systems
   - ESM 4105 Engineering Analysis of Physiologic Systems
   - ESM 4114 Nonlinear Dynamics and Chaos, PRE: ESM 2304 OR PHYS 2204, MATH 2214
   - ESM 4204 Musculoskeletal Biomechanics and Biologic Control
   - ESM 4224 Biodynamics & Control
   - ESM 4234 Mechanics of Biological Materials and Structures
   - ESM 4245 Mechanics of Animal Locomotion, PRE: ESM 3054
   - ESM 4246 Mechanics of Animal Locomotion, PRE: ESM 3234
   - ESM 4304 Hemodynamics
   - ESM 4734/AOE 4024 Introduction to Finite Elements
   - ESM 5405 or 5406 Clinical Internship in Biomedical Engineering

5. Students completing the minor must obey all prerequisite rules. Some courses above may have additional prerequisites not required for the minor.

† Students taking a non-ESM course for this minor requirement must take an additional 3 credit hours of ESM coursework from #4.