

- Course Number and Title: ENGR 233. Engineering Mechanics I (a.k.a., Statics)
- Catalog Description: Engineering mechanics using vector methods. Force systems, resultants, equilibrium, distributed forces, area moments, and friction.
- Credit Hours: 3 Credits (3)
- Prerequisite(s) / Corequisite(s): Prerequisite(s): ENGR 190 or MATH 1440 or MATH 1521G.  
Pre/Corequisite(s): PHYS 1310G or PHYS 1230G
- Required: Required for BSME and BSAE Degrees
- Course Availability: Fall and Spring Semesters + Summer
- Instructor (Usual): John Ross Tapia (See <https://et.nmsu.edu/people/people-directory.html>)
- Textbook: Tran, P., *SolidWorks 2022 Basic Tools: Getting started with Parts, Assemblies and Drawings*, 1<sup>st</sup> Ed., SDC Publications, 2022 (ISBN-10: 1630574643 or ISBN-13: 978-1630574642).
- Course Learning Objectives: After completing this course, a student should be able to:
  - 1) Have an understanding of the force systems, resultants, equilibrium, distributed forces, area moments, and friction.
  - 2) Be able to apply the acquired knowledge to formulate, solve and interpret solutions of engineering mechanics problems.
- Topics Covered: Engineering mechanics using vector methods. Force systems, resultants, equilibrium, distributed forces, area moments, internal forces and friction.