

Course Objectives

This course is designed to provide students with a clear and thorough demonstration of the theory and applications of engineering statics. Materials covered in this course are crucial to just about every subsequent engineering course that students will take, and every one of those courses will build off the knowledge gained in this course.

The main objectives of this course are to:

1. Provide the students with a clear and thorough understanding of the *theory and applications* of engineering statics. A complete understanding of concepts involved in statics is absolutely critical to successfully becoming an engineer;
2. Demonstrate a good knowledge of the concepts and applications of *vectors, force systems* and *moments of forces*;
3. Provide the students with a thorough understanding of the concept, drawing and the use of *free-body diagrams*, which is an essential part in solving any problem in statics;
4. Provide the means for developing the students' ability to formulate *equilibrium equations*;
5. Provide the students with the means for developing good *problem-solving skills*; and
6. Enhance the students' *creativity* and *imagination*, and *systematic thinking* capabilities as required by the engineering discipline.