ENR201: Statics

Students analyze the structural integrity of mechanical devices such as frames, trusses, beams and cable. Using vector algebra and calculus, understand how Newton's Laws can address engineering static equilibrium problems and master free body diagram construction. Vectors, dot and cross product, moment of a force, reduction of loadings to an equivalent force, construction of free body diagrams, calculation of reaction forces and moments for structures, static equilibrium loadings are among the topics covered.

Credits 3
Prerequisite Courses
MAT240: Calculus I
Co-Requisite Courses
MAT250: Calculus II
Semester Offered
Varies