

EN6902

Engineering Mechanics 2



Course Aim This course introduces the fundamentals of statics in engineering mechanics and develops students' skills in solving statics engineering problems

Short Title EM2
Faculty EDICT
Polytechnic Level
Credits 15

Pre-requisites EN6907 and EN6903

Co-requisites None
Anti-requisites None

Version 8
Effective From September 1, 2018
Indicative NQF Level 6
Student Contact hrs 90
Self-directed hrs 60
Other directed hrs 0
Total learning hrs 150

Learning Outcomes On successful completion of this course, students will be able to:

- 1 Determine unknown forces for non-concurrent force systems such as pin-jointed frameworks using graphical and analytical techniques.
- 2 Select appropriate beams for engineering applications by calculating stresses, and considering mechanical and material properties, in standard and non-standard beam sections.
- 3 Size shafts for given torque loadings by calculating twisting properties and shear stresses.

NQF Sub-strand

Practical
Application of
knowledge
Practical
Application of
knowledge
Practical
Application of
knowledge