

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**

**Faculty** EDICT

**Credits** 15

**Pre-requisites** EN6914 (or ENB5914) and EN6903 (or ENB5903)

**Co-requisites** None

**Anti-requisites** None

**Version** 7

**Effective From** September 1, 2016

**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