APPROVED

EN7920: Mechanical Project

Course Details

Course Code:	EN7920
Course Title:	Mechanical Project APPROVED
Short Title:	
Course Level::	Level 7
Valid From::	2020/2021 Sem 1

Credits::	60

Owner:	Engineering Technology

Assessment Method:	Achievement

Course Aim	To provide engineering students with advanced understanding and specialist skills in engineering design, stress analysis, beam design, engineering ethics, pressure vessel design, strain measurement, environment impact assessment, prototype manufacturing integrated in a fully immersive PBL environment.

CILO	
On Completion of this course, the learner will be able to	
#	**Learning Outcome Description**
1	Evaluate and analyse mechanical components, applied loading and construction material in terms of stress, strain, stress planes, stress concentrations and failure; for a set of performance criteria
2	Produce detailed manufacturing engineering drawings using 3D CAD for engineering components and assemblies to meet industry standard.
3	Manufacture and fabricate mechanical components and assemblies to a specified design, working in teams and applying project management techniques
4	Design, critically analyse and build engineering components to meet design specifications and standards
5	Use appropriate strain measurement methods and techniques to analyse engineering components
6	Solve mechanical design problems involving thick, thin and compound cylinders, using analytical techniques
7	Demonstrate a general understanding of the principles of industrial control
8	Demonstrate ethical, legal and social responsibility as an engineering technologist including the critical analysis of the environmental aspects of a given engineering application using sustainable solutions

Requisites

- Pre Requisite: EN6904 , EN6902 , EN7917 , EN7919 , EN6107 , EN7908

- Anti Requisite: ENB6912, ENB6913, ENB6914, ENB6909

Examinations
Assessment Type Examination (Unseen)
Assessment Type Examination (seen/open book)

No Other Controlled Assessments

Uncontrolled Assessments
Assessment Type Practical Project
Assessment Type Practical Project
Assessment Type Practical Project

Affiliated Entities

Entity Code	Entity Title	Entity Version	Entity Type
None			