EN6990 Engineering Practice

Course Aim
This course aims to provide students with a range of practical skills and an understanding of engineering principles required to machine or fabricate engineering components. Exposure to these workshop skills will give the student an understanding and an underpinning knowledge on which to base future engineering design considerations or decisions.

Short Title EDICT
Faculty
Polytechnic Level
Credits
Pre-requisites
Co-requisites
Anti-requisites
None
None

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

1. Demonstrate detailed knowledge and understanding of workshop safety including the identification and management of workshop hazards.

2. Produce simple engineering reports in a well-structure manner.

3. Interpret basic engineering drawings and use appropriate measuring equipment to manufacture components to a specified tolerance.

4. Demonstrate detailed knowledge and understanding of manufacturing processes, materials and terminology.

5. Manufacture basic engineering components using:
   - Hand tools
   - Hand Power tools
   - Power machines (radial drills bench presses etc...)
   - Lathes
   - Milling machines
   - Engravers
   - CNC machines
   - MMAW (Manual metal arc welding)
   - GMAW (Gas metal arc welding)
   - GTAW (Gas Tungsten arc welding)
   - Hard soldering/brazing/soft soldering

NQF Sub-strand
Practical Application of knowledge
Practical Application of knowledge
Generic, Problem Solving and Analytical Skills
Practical Application of knowledge
Practical Application of knowledge

Version 6
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

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