

EN6001

Engineering Computing



Course Aim To give students a detailed knowledge of structured programming techniques, the C/C++ programming language and to present a detailed application of symbolic language programming techniques as they relate to engineering problem-solving.

Short Title

Faculty EDICT

Polytechnic Level 5

Credits 15

Pre-requisites ENB5907

Co-requisites None

Anti-requisites None

Version 3

Effective From February 1, 2016

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 Demonstrate a detailed understanding of the general concept of a computer system.
- 2 Apply basic and some advanced programming skills to create a computer program utilising a modern integrated development environment and conforming to a defined specification.
- 3 Demonstrate a detailed understanding of structured programming techniques for solving defined engineering problems.
- 4 Apply basic and some advanced programming skills to design and document a structured C/C++ program using basic concepts of engineering analysis.

NQF Sub-strand

Theoretical
Understanding
Practical
Application of
knowledge
Practical
Application of
knowledge
Practical
Application of
knowledge