Course Aim: To develop advanced embedded systems using a commercial microcontroller using the C++/C and Assembly programming languages.

Short Title
Faculty: EDICT
Polytechnic Level: 15
Credits:
Pre-requisites: EN7030 (ENB6030) & EN7006 (ENB6006)
Co-requisites: None
Anti-requisites: None

Learning Outcomes

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

1. Programme a commercial microcontroller in an advanced embedded system using C/C++ and Assembly programming languages.
2. Programme a commercial microcontroller in an advanced embedded system to interface with a range of specialized electronic circuits using level and clocked interface.
3. Design, implement and critically analyze advanced algorithms to achieve specified outcomes for embedded systems.
4. Implement advanced programs which use features of operating systems to implement an advanced embedded system.

Version: 2
Effective From: February 1, 2016
Indicative NQF Level: 8
Total learning hrs: 150
Self-directed hrs: 90
Other directed hrs: 0

NQF Sub-strand
Practical Application of knowledge
Practical Application of knowledge
Practical Application of knowledge
Practical Application of knowledge