

EN7035

PLC Programming & Applications



Course Aim To introduce advanced level theories, principles and concepts in the area of PLC-controlled automated control systems and to solve industrial process control problems using Programmable Logic Controllers (PLCs) and Human Machine Interfaces (HMI).

Short Title PLC Programming
Faculty EDICT
Polytechnic Level 6
Credits 30
Pre-requisites ENB5230 & ENB5020
Co-requisites None
Anti-requisites None

Version 3
Effective From February 1, 2016
Indicative NQF Level 7
Student Contact hrs 120
Self-directed hrs 180
Other directed hrs 0
Total learning hrs 300

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

- 1 Apply advanced level programming skills in the design, implementation and testing of PLC programming code to solve defined or undefined industrial automation control problems.
- 2 Apply advanced practical skills and theoretical knowledge for the integration of a range of field devices to a PLC to solve advanced industrial process control problems.
- 3 Apply specialist level programming and testing skills in the implementation of a range of HMI applications to a process control problem.

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