

EN6230

Instrumentation and Control



Course Aim The aim of this course is to provide an intermediate knowledge of the concepts used in Instrumentation and Control for engineers.

Short Title None
Faculty EDICT
Polytechnic Level 5
Credits 15
Pre-requisites ENB5010, ENB5914
Co-requisites None
Anti-requisites None

Version 2.00
Effective From 1.2.2016
Indicative NQF Level 6
Student Contact hrs 60
Self-directed hrs 90
Other directed hrs None
Total learning hrs 150

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

- 1 Demonstrate detailed understanding of basic control and instrumentation concepts and terminology.
- 2 Apply detailed analysis of first and second-order dynamical systems.
- 3 Apply basic instrumentation and control strategies to a feedback control system to satisfy advanced level tasks.
- 4 Apply basic tuning methods for finding suitable PID controller parameters for a defined control design problem.

NQF Sub-strand

Theoretical
Understanding

Practical
Application of
knowledge

Practical
Application of
knowledge

Practical
Application of
knowledge