

EN8231

## Control System Design



**Course Aim** To apply analysis and design techniques for the control of feedback systems and to apply the specification, analysis and design of feedback control systems using software simulation and control design software.

**Short Title**

**Faculty** EDICT

**Credits** 15

**Pre-requisites** EN6230 (ENB5230) & EN7007 (ENB6007)

**Co-requisites** None

**Anti-requisites** EN8230 (ENB7230)

**Version** 2

**Effective From** February 1, 2016

**Indicative NQF Level** 8

**Student Contact hrs** 60

**Self-directed hrs** 90

**Other directed hrs** 0

**Total learning hrs** 150

**Learning**

**Outcomes**

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

- 1 Demonstrate critical knowledge related to the analysis of stability and performance in closed-loop control systems.
- 2 Apply specialist skills in the advanced analysis and design of feedback control systems using software simulation and control design software.
- 3 Design, implement, test experimentally and critically analyse the effectiveness of a feedback control system for a practical engineering application.

**NQF Sub-strand**

Theoretical  
Understanding

Practical  
Application of  
knowledge

Practical  
Application of  
knowledge