

EN7008

## Power Electronics



**Course Aim** To develop advanced theoretical concepts in power electronics circuit design and provides specialist level skills to the students for the analysis and testing of power electronics circuits.

**Short Title** None  
**Faculty** EDICT

**Credits** 15  
**Pre-requisites** EN7061 & EN6080  
**Co-requisites** None  
**Anti-requisites** None

**Version** 7  
**Effective From** September 1, 2018  
**Indicative NQF Level** 7  
**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 advanced knowledge of theories of the design and analysis of power electronic circuits.
- 2 Implement a power electronics circuit according to defined specifications and requirements, applying advanced principles of power electronics circuit design.
- 3 Test, evaluate and document the performance of power electronic circuits using experimental and simulation results to provide design improvements.

**NQF Sub-strand**

- Theoretical Understanding
- Practical Application of knowledge
- Generic, Problem Solving and Analytical Skills