

EN7061

Analogue Electronic Circuits



Course Aim This course addresses advanced level theories, principles and concepts of analogue electronic circuit design including modelling of non-linear electronic device characteristics. It enables students to develop modelling and testing techniques for analogue electronic circuits using simulation software and experimental work.

Short Title

Faculty EDICT

Credits 15

Pre-requisites EN6907 (ENB5907) & EN6000 (ENB5000)

Co-requisites None

Anti-requisites EN6060

Version 1

Effective From September 1, 2018

Indicative NQF Level 7

Student Contact hrs 90

Self-directed hrs 60

Other directed hrs

Total learning hrs 150

Learning

Outcomes

- On successful completion of this course, students will be able to:
- 1 Demonstrate advanced level knowledge of theories, principles and concepts relating to the design of analogue electronic circuits and the practical applications of a range of discrete analogue electronic components.
 - 2 Design analogue electronic circuits by selecting and using a range of discrete/non-discrete electronic components and devices.
 - 3 Model, simulate and analyze the dynamic behaviour of analogue electronic circuits.
 - 4 Analyse the dynamic behaviour of analogue devices and circuits through the acquisition of voltage current readings/data using a range of electronic measuring instruments

NQF Sub-strand

Theoretical
Understanding

Practical
Application of
knowledge

Practical
Application of
knowledge

Practical
Application of
knowledge