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
EDICT

Faculty

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

NQF Sub-strand
Theoretical Understanding

Self-directed hrs
Student Contact hrs
Indicative NQF Level
Other directed hrs
Total learning hrs

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.