EN6020 Digital Devices and Systems

Course Aim: To develop a detailed theoretical understanding of the characteristics, behaviour and operation of digital devices and systems and to acquire basic skills in the design and testing of digital electronics circuits.

Short Title: EDICT
Faculty: 15
Credits: EN6000 (ENB5000) and EN6010 (ENB5010)
Pre-requisites: None
Co-requisites: None
Anti-requisites: None

Version: 4
Effective From: September 1, 2018
NQF Level: 6
Total learning hrs: 150
Student Contact hrs: 90
Self-directed hrs: 60
Other directed hrs: 0

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

1. Demonstrate detailed knowledge in the application of Boolean Algebra to simplify logic circuits.
2. Apply detailed knowledge and basic skills in the design methodology used to solve combinational logic problems.
3. Apply detailed knowledge and basic skills in the design methodology used to design sequential logic circuits.
4. Demonstrate detailed knowledge in identifying elements of a hardware description language.

NQF Sub-strand:
Theoretical Understanding
Practical Application of knowledge
Practical Application of knowledge

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