

**APPROVED**

## EN6080: Alternating Current ( AC ) Circuit theory

### Course Details

Course Code:	EN6080
Course Title:	Alternating Current ( AC ) Circuit theory <b>APPROVED</b>
Short Title:	AC Circuit Theory
Course Level::	Level 6
Valid From::	2022/2023 Sem 1
Credits::	15
Owner:	Engineering Technology
Assessment Method:	Achievement
Course Aim	Introduce detailed theories, principles and concepts of common electrical/electronic components as applied to single phase and 3 phase alternating current (AC) circuits and to introduce basic practical design skills for AC circuit design.

CILO	
On Completion of this course, the learner will be able to	
#	Learning Outcome Description
1	Demonstrate knowledge of thermodynamics properties, concepts and laws applied in electrical circuits.
2	Apply detailed AC theories and principles to solve electrical problems related to AC circuit design and analysis
3	Apply basic and some advanced practical skills to design and analyze single-phase and 3-phase AC circuits for well-defined engineering applications
4	Use a range of measurement devices to analyze, simulate, test, measure and display electrical AC signals (voltages, currents and electrical power).
Requisites	
<ul style="list-style-type: none"> <li>Pre Requisite: EN6000 or ENB5000</li> </ul>	

Examinations
<b>Assessment Type</b> Examination (Unseen)
<b>Assessment Type</b> Examination (Unseen)
No Other Controlled Assessments
Uncontrolled Assessments
<b>Assessment Type</b> Practical Project

Affiliated Entities			
Entity Code	Entity Title	Entity Version	Entity Type
ICT8011	Bachelor of Information and Communications Technology (Programming Major)	1	Programme
ICT8011	Bachelor of Information and Communications Technology (Programming Major)	2	Programme
BFA8800	Bachelor of Film and Animation	2	Programme
BFA8801	Bachelor of Filmmaking	1	Programme
BFA8802	Bachelor of Animation and Visual Effects	1	Programme
BWM8000	Bachelor of Web Media	3	Programme
DES8000	Bachelor of Visual Design	3	Programme
ENT6040	Diploma in Engineering Technology (Electrical)	2	Programme
ENT6050	Diploma in Engineering Technology (Electromechanical)	1	Programme
ENT6060	Diploma of Engineering Technology (Communications and Networks)	1	Programme
ENT6090	Diploma in Industrial Instrumentation and Automatic Control	1	Programme
ENT7031	Associate Degree in Engineering Technology (Electronics)	2	Programme
ENT7040	Associate Degree in Engineering Technology (Electrical)	1	Programme
ENT7050	Associate degree in Engineering Technology (Electromechanical)	1	Programme
ENT7060	Associate Degree in Engineering Technology (Communications and Networks)	1	Programme
ENT7090	AEngTech Industrial Instrumentation and Automatic Control	1	Programme
ENT8020	Bachelor of Engineering Technology (Mechanical)	3	Programme
ENT8031	Bachelor of Engineering Technology (Electronics)	4	Programme
ENT8040	Bachelor of Engineering Technology (Electrical)	2	Programme
ENT8050	Bachelor of Engineering Technology (Electromechanical)	2	Programme
ENT8060	Bachelor of Engineering Technology (Communications and Networks)	2	Programme
ENT8070	Bachelor of Engineering Technology (Chemical and Industrial Processes Engineering)	1	Programme
ENT8080	Bachelor of Engineering Technology (Civil)	1	Programme
ENT8090	Bachelor of Engineering Technology (Industrial Instrumentation and Automatic Control)	1	Programme
ICT7011	Associate Degree in Information and Communications Technology (Programming Major)	1	Programme
ICT7022	Associate Degree in Information and Communications Technology (Information Systems)	1	Programme
ICT7041	Associate Degree in Information and Communications Technology (Database Systems Major)	1	Programme
ICT7051	Associate Degree in Information and Communications Technology (Cyber Security)	1	Programme
ICT8022	Bachelor of Information and Communications Technology (Information Systems Major)	1	Programme
ICT8031	Bachelor of Information and Communications Technology (Networking Major)	1	Programme
ICT8041	Bachelor of Information and Communications Technology (Database Systems Major)	1	Programme
ICT8051	Bachelor of Information and Communications Technology (Cyber Security Major)	2	Programme
MCS8000	Minor in Control Systems	1	Programme
No Code Yet	Copy Of Associate Degree in Engineering Technology (Communications and Networks)	1	Programme
No Code Yet	Copy Of Bachelor of Information and Communications Technology (Cyber Security Major)	1	Programme
No Code Yet	Copy Of Diploma in Engineering Technology (Electrical)	1	Programme
NEDICTE	Non-EDICT Electives	1	Group