

APPROVED

EN7230: Instrumentation and Automatic Control

Course Details

Course Code:	EN7230		
Course Title:	Instrumentation and Automatic Control	APPROVED	
Short Title:	Instrumentation & Control		
Course Level::	Level 7		
Valid From::	2021/2022 Sem 2		
Credits::	15		
Owner:	Engineering Technology		
Assessment Method:	Achievement		
Course Aim	The aim of this course is to provide a thorough knowledge (theoretical and practical) of the principles and best practices of Instrumentation, measurement and control.		

CILO	
On Completion of this course, the learner will be able to	
#	Learning Outcome Description
1	Demonstrate advanced knowledge of core principles of control and instrumentation.
2	Critically analyze and evaluate transient response characteristics of first and second order systems.
3	Apply and demonstrate instrumentation and control strategies for a feedback control system.
4	Communicate clearly in a well structure manner the tuning methods for finding suitable PID controller parameters to meet an industry standard requirement for a defined control design problem.
Requisites	
<ul style="list-style-type: none"> • Pre Requisite: EN6010, EN6914 • Anti Requisite: EN6230 	

Examinations
Assessment Type Examination (Unseen)
Other Controlled Assessments
Assessment Type Lab Assignment
Uncontrolled Assessments
Assessment Type 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
DET6005	Diploma in Petroleum and Process Plant Operations	3	Programme
ENT6040	Diploma in Engineering Technology (Electrical)	2	Programme
ENT6050	Diploma in Engineering Technology (Electromechanical)	1	Programme
ENT6070	Diploma in Engineering Technology (Chemical and Industrial Processes Engineering)	1	Programme
ENT6071	Diploma in Engineering Technology (Petroleum Refining and Operations)	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
ENT7070	Associate Degree in Engineering Technology (Chemical and Process Engineering)	1	Programme
ENT7090	AEEngTech 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 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