EN7230 Instrumentation and Automatic Control

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.

Short Title	None	Version	1
Faculty	EDICT	Effective From	February 1, 2018
Polytechnic Level		Indicative NQF Level	7
Credits	15	Student Contact hrs	90
Pre-requisites	EN6010, EN6914	Self-directed hrs	60
Co-requisites	None	Other directed hrs	None
Anti-requisites	EN6230	Total learning hrs	150

Learning Outcomes	On successful completion of this course, students will be able to:	NQF Sub-strand
1	Demonstrate advanced knowledge of core principles of control and instrumentation.	Theoretical Understanding
2	Critically analyse and evaluate transient response characteristics of first and second order systems.	Theoretical Understanding
3	Apply and demonstrate instrumentation and control strategies for a feedback control system.	Practical Application of knowledge
4	Formulate, apply and present tuning methods for finding suitable PID controller parameters to meet an industry standard requirement for a defined control design problem.	Practical Application of knowledge