

EN7908 Manufacturing, Control and Environmental Sustainability



Course Aim To equip students with specialized knowledge of engineering manufacturing process and their environmental impacts. The principles and concepts of process control will also be covered.

Short Title	ManConEnv	Version	1
Faculty	EDICT	Effective From	February 1, 2018
Credits	15	NQF Level	7
Pre-requisites	EN6990 (or ENB5990)	Student Contact hrs	90
Co-requisites	None	Self-directed hrs	60
Anti-requisites	EN6908	Other directed hrs	0
		Total learning hrs	150

Learning Outcomes	On successful completion of this course, students will be able to:	NQF Sub-strand
1	Select and analyse appropriate mechanical engineering manufacturing processes for metal components/assemblies to achieve required product specifications. Range includes: casting, , forging, rolling , extrusion	Practical Application of knowledge
2	Design, process, evaluate and cost parameters for casting and metal forming applications.	Communication, ICT, Numeracy
3	Analyse environmental impact of manufacturing activities	Theoretical Understanding
4	Critically analyse the effectiveness of a feedback control system for a practical engineering application	Generic, Problem Solving and Analytical Skills