## DMX7301 Thermal Power Generation

Level	7
Course Code	DMX7301
Course Title	Thermal Power Generation
Credit value	3
Core/Optional	Core
Course Aim/s	To provide comprehensive knowledge and broadening the student's' abilities to analyse and evaluate thermal power generating plants.
Course Learning Outcomes (CLO):	At the completion of this course student will be able to:
	CLO1: Evaluate thermal power plant performance and economics.
	CLO2: Apply the principles of thermodynamics to steam, gas, and diesel power plant cycles.
	CLO3: Explain the design and operational features Boilers, Condensers, Steam turbines, Gas turbines, Combustion chambers, Heat exchanges and Pumping system.
	CLO4: Explain principles of nuclear power generation; differentiate reactors and their safe operation.
	CLO5 : Analyze the operation of electrical system requirement in a thermal power plant.
	CLO6: Assess applicability of Combined Heat & Power (CHP) technologies and waste heat recovery systems in thermal power plants.
	CLO7: Explain environmental pollution, safety measures in thermal power plants and review strategies for mitigation of environmental impacts and safety technologies.
Content	Outline Syllabus:
	Unit 01: Overview of Thermal Power Generation Unit 02: Steam and Gas Power Plant Unit 03: Diesel Power Cycle Unit 04: Nuclear Power Cycle Unit 05: Electrical Systems Unit 06: New Trends in Power Generation