

	Module	Description	Host	Presentation dates
Overview	Smart Grid Technology Overview	Introduction to the key concepts of the Smart Grid, including information and communication technologies and their application and integration.	SU	3 - 7 Mar 2025
	Overview of the Power Plant Industry	The course establishes a balanced understanding of the global energy domain.	UCT	To be presented in 2026
	Hydrogen in the Energy System	A systemic view of energy systems with a specific focus on hydrogen.	SU	24 - 28 Feb 2025
Technology	Advanced Photovoltaic Systems	Fundamentals, financial modelling, technical design, installation and maintenance of PV systems.	SU	19 - 23 May 2025
	Wind Energy	Fundamentals, resource and feasibility modelling, technical design, project development and grid-integration of Wind Energy systems.	SU	30 Jun - 4 Jul 2025
	Energy Storage Systems	Fundamentals, applications, technologies, modelling and design, and economics of Energy Storage systems.	SU	24 - 28 Mar 2025
	Solar Thermal Energy Systems	Fundamentals of solar thermal energy systems, specifically CSP, including concentrator principles and thermal storage applications.	SU	31 Mar - 4 Apr 2025
	Smart Grid Communications	Communications fundamentals, applications and technologies within the context of the power system.	SU	18 - 22 Aug 2025
	Bioenergy	The practical and commercial application of various technologies for biomass conversion into bio-energy, ranging from bio-fuels to electricity.	SU	2 - 6 Jun 2025
	Water Power Technologies	Water Power technologies associated with the elevation or movement of water, including resources, conversion technologies, and implementation.	SU	26 - 30 May 2025
	Renewable Energy Systems	The scientific, engineering, resource and integration aspects of various types of renewable energy systems at introductory level.	SU	3 - 7 Mar 2025
	Green Hydrogen Technology	The available and developing technologies used for green hydrogen production, distribution, storage and end-use.	SU	12 - 16 May 2025
	Power System Data Analytics	The data analytics life cycle applied to solve power system problems, with special focus on demand and renewable energy short-term forecasting.	SU	26 - 30 May 2025
	Implementation & Integration	Long-term Power System Planning	The principles and techniques informing optimised long-term generation capacity planning, and transmission expansion planning.	SU
Distribution Customer Concepts		Understanding the concepts inherent in the end use of electricity, including load modelling, pricing, technologies, and mini- and microgrids.	SU	5 - 9 May 2025
Power System Operations		The fundamentals of power system operations in a future with high shares of VRE, and the processes and technologies that support such operations.	SU	10 - 14 Mar 2025
Power System Flexible Operations		Operational power system flexibility optimisation where technical systems and electricity markets interact, and flexibly operating power plants.	UCT	3 - 7 Mar 2025
Green Hydrogen Project Engineering		A course focussed on the principles of designing, funding and successfully implementing fit-for-purpose projects based on green hydrogen.	SU	25 - 29 Aug 2025

Week start (Monday)	Week end (Friday)	Module	CPD registration deadlines
10/Feb/2025	14/Feb/2025		
17/Feb/2025	21/Feb/2025		
24/Feb/2025	28/Feb/2025	Hydrogen in the Energy System	10/Feb/2025
03/Mar/2025	07/Mar/2025	Smart Grid Technology Overview / Renewable Energy Systems	17/Feb/2025
10/Mar/2025	14/Mar/2025	Power System Operations	24/Feb/2025
17/Mar/2025	21/Mar/2025	Week with public holiday	
24/Mar/2025	28/Mar/2025	Energy Storage Systems	10/Mar/2025
31/Mar/2025	04/Apr/2025	Solar Thermal Energy Systems	17/Mar/2025
07/Apr/2025	11/Apr/2025		
14/Apr/2025	18/Apr/2025	Week with public holiday	
21/Apr/2025	25/Apr/2025	Week with public holiday	
28/Apr/2025	02/May/2025	Week with public holiday	
05/May/2025	09/May/2025	Distribution Customer Concepts	21/Apr/2025
12/May/2025	16/May/2025	Green Hydrogen Technology	28/Apr/2025
19/May/2025	23/May/2025	Advanced Photovoltaic Systems	05/May/2025
26/May/2025	30/May/2025	Power System Data Analytics / Water Power Technologies	12/May/2025
02/Jun/2025	06/Jun/2025	Bioenergy	19/May/2025
09/Jun/2025	13/Jun/2025		
16/Jun/2025	20/Jun/2025	Week with public holiday	
23/Jun/2025	27/Jun/2025		
30/Jun/2025	04/Jul/2025	Wind Energy	16/Jun/2025
07/Jul/2025	11/Jul/2025		
14/Jul/2025	18/Jul/2025	Long-term Power System Planning	30/Jun/2025
21/Jul/2025	25/Jul/2025		
28/Jul/2025	01/Aug/2025		
04/Aug/2025	08/Aug/2025		
11/Aug/2025	15/Aug/2025		
18/Aug/2025	22/Aug/2025	Smart Grid Communications	04/Aug/2025
25/Aug/2025	29/Aug/2025	Green Hydrogen Project Engineering	11/Aug/2025
01/Sep/2025	05/Sep/2025		
08/Sep/2025	12/Sep/2025		