

Optional Program: **ADVANCED POWER ELECTRONICS**

Learning Modules - ECTS Credits

3th Theoretical Semester		
Learning Modules	ECTS	Title of courses
NY4E1	3	Multivariable Systems
SYSTEM CONTROL AND DIAGNOSIS		Static Converters Reliability
		Commutation Mechanism & Functional Integration
NY4E14	4	Design by Optimization
SYSTEM OPTIMIZATION		System Design
		Short Project: System Design (EHA)
		Autonomous Energy Systems - Hybridization
		Short Project "Fuel Cell - FC"
		Embedded Grid Design
NY4E16	5	Actuator Control
CONTROL AND OBSERVATION OF ACTUATORS		Theme, Study, Research: Actuator Controls
		Sources, reversability, storage
		SABER Learning
NY4E17	5	Design of Static Converters
POWER CONVERTER DESIGN		Static Converter Associations
		Short Project: Power Converters (Discharge Supply)
		½ Thematic Day : Lighting
		½ Thematic Day : Railway
		Modelling and Advanced Control of Static Converters
		Theme, Study and Research: Architecture and Advanced Control of Static Converters
NY4E18	3	Grid Conditioning
GRIDS		Short Project : Grid Conditioning
		Static Converters for HVDC Grids
		Short Project: HVDC Static Converters
NY4E19	3	Electromagnetic Compatibility
X-LEVEL STATIC CONVERTERS, PWM CONTROL AND EMI		X Level Static Converters
		Vector Space Modulation (VSM)
		Short Project VSM + X level Static Converters
NY4E20	7	Project Management
ENGINEERING		CV and Job Interview
		English
		Industrial Project
Total 3st Semester ECTS Credits	30	