

	SEMESTER 7 (AUTUMN)=1st-year master	ECTS
ASI	ASI - Automatique et Systèmes Intelligent <i>Automatic control and Intelligent Systems</i>	
	IT Tools and Optimization - 4EUS3ITO	5
HOE	HOE - Hydraulique Ouvrages et Environnement <i>Hydraulics, Civil & Environmental Engineering</i>	
	Engineering Hydrology (HOE / M1-HCE) - 4EUS3HYI	5
	Engineering Hydrology (HOE / M1-HCE) - 4EUS3HYI	5
	Materials and Structures (HOE-GHO / M1-HCE) - 4EUS3MS	5
IEE	IEE - Ingénierie de l'Energie électrique <i>Electrical Power Engineering</i>	
	Computer Sciences (IEE / SEM / M1-SGB) - 4EUS3MON	5
IEN	IEN - Ingénierie de l'Energie nucléaire <i>Engineering of Nuclear Power</i>	

	SEMESTER 8 (SPRING)= 1st-year master	ECTS
HOE	HOE - Hydraulique Ouvrages et Environnement <i>Hydraulics, Civil & Environmental Engineering</i>	
	Géo-environnement / Geo-environment - 4EUS4GEO	5
	Open Channel Hydraulics (HOE / M1-HCE) - 4EUS4HSL	5
	Soil and Rock Mechanics (HOE-GHO / M1-HCE) - 4EUS4MSR	5
SEM	SEM - Systèmes Energetiques et Marchés <i>Energy systems and associated markets</i>	
	Energy Conversion for Renewable (SEM / M1-SGB) - 4EUS4COE	5
	Smart Cities (SEM / M1-SGB) - 4EUS4HAT	5
	Heat and Mass Transfers (IEN / ME / SEM / M1-SGB) - 4EUS4HMT	5
	Generation and Storage (SEM / M1-SGB) - 4EUS4PSJ	5
SEM	SEM - Systèmes Energetiques et Marchés <i>Energy systems and associated markets</i>	
	Energy Conversion for Renewable (SEM / M1-SGB) - 4EUS4COE	5
	Smart Cities (SEM / M1-SGB) - 4EUS4HAT	5
	Heat and Mass Transfers (IEN / ME / SEM / M1-SGB) - 4EUS4HMT	5
	Generation and Storage (SEM / M1-SGB) - 4EUS4PSJ	5
IEN	IEN - Ingénierie de l'Energie nucléaire <i>Engineering of Nuclear Power</i>	
	Heat and Mass Transfers (IEN / ME / SEM / M1-SGB) - 4EUS4HMT	5

	SEMESTER 9 (AUTUMN)= 2nd-year master	ECTS
ASI	ASI - Automatique et Systèmes Intelligent <i>Automatic control and Intelligent Systems</i>	
	Non Linear and Model Predictive Controls (ASI / M2-MARS / M2-MISCIT) - 5EU9NLM0	5
	Robust Control of Mechatronic Systems (ASI / M2-MARS / M2-MISCIT) - 5EU9RCM0	5
	Artificial Intelligence and Autonomous Systems (M2-MARS / ASI) - WEUMAIA0	5
	Mobile Robotics (M2-MARS / ASI) - WEUMROB0	5
	Systems Monitoring, Diagnostics and Reliability (ASI / IEE / M2-MARS) - 5EUS5SDR	5
HOE	HOE - Hydraulique Ouvrages et Environnement <i>Hydraulics, Civil & Environmental Engineering</i>	
	River Dynamics (HOE / M2-HCE / Master ECE) - 5EUS5DYF	5
	Mechanical Structure Design (HOE-GHO / M2-HCE / Master GCER / Master MEEES) - 5EUS5CMO	5
	Natural Hazards and Soil Improvements (HOE-GHO / M2-HCE) - 5EUS5RNC	5
	Water Management in a Non Stationary Environment (HOE-REA / M2-HCE / M2-ECE) - 5EU5WAT6	5
	Water Quality and Treatment (HOE-REA / IEN / M2-HCE / M2-STPE) - 5EUS5QTE	5
	Asset Management for Civil Engineering Works and Networks (HOE / M2-HCE) - 5EUS5GPO	5
	Advanced Simulation Tools for Mechanics and the Environment (HOE / ME / M2-HCE / M2-FME) - 5EUS5OSA	5
IEE	IEE - Ingénierie de l'Energie électrique <i>Electrical Power Engineering</i>	
	Power Electronics Semiconductor Devices (IEE / M2-SGB) - 5EU9PES9	5
	Modelling and Operation of Electrical Grids (IEE / M2-SGB) - 5EUS5MFR	5
	Systems Monitoring, Diagnostics and Reliability (ASI / IEE / M2-MARS) - 5EUS5SDR	5
	Design Models for Power Electronics (IEE / M2-SGB) - 5EU9DMP9	5
	Microgrids, Smartgrids and Supergrids (IEE / SEM / M2-SGB / M2-ENTECH) - 5EUS5SMA	5
	ICT for Smart Grids and Smart Cities (IEE / M2-SGB) - 5EU5ICT6	5
	Research Project (IEE / M2-SGB) - 5EUS5PR1	5
IEN	IEN - Ingénierie de l'Energie nucléaire <i>Engineering of Nuclear Power</i>	
	Advanced Fluid Mechanics for Processes (IEN / ME / M2-FME) - 5EUS5MFA	5
	Advanced Heat Transfer and Energetics (IEN / ME / SEM-ISE / M2-FME / M2-ENTECH) - 5EUSADHT	5

ME	ME - Mécanique et Energétique Mechanical & Energy Engineering	
SEM	SEM - Systèmes Energetiques et Marchés Energy systems and associated markets	
	Modelling, Design and Dispatch of Smart Power Systems (SEM / M1-SGB / DE-SG) - 4EU3MDD7	5
	Design and Control of Dynamic Systems (SEM / M1-SGB / DE-SG) - 4EU3CCS	5
	Energy economics/Economie & smart energy (SEM / M1-SGB) - 4EU3EE3	5
	Computer Sciences (IEE / SEM / M1-SGB) - 4EU3MON	5
Common to all programs		

ME - Mécanique et Energétique Mechanical & Energy Engineering		
Heat and Mass Transfers (IEN / ME / SEM / M1-SGB) - 4EU4HMT		5
SEM - Systèmes Energetiques et Marchés Energy systems and associated markets		
Energy Conversion for Renewable (SEM / M1-SGB) - 4EU4COE		5
Smart Cities (SEM / M1-SGB) - 4EU4HAT		5
Heat and Mass Transfers (IEN / ME / SEM / M1-SGB) - 4EU4HMT		5
Generation and Storage (SEM / M1-SGB) - 4EU4PSJ		5
Commun/Common		
Team Project / Projet d'ingénierie (toutes filières / M1-SGB / M1-HCE) - 4EU4PRO		5
Projet industriel / Industrial Project (toutes filières / M1-SGB / M1-HCE) - 4EU4PIN8		10
Projet recherche / Research Project (toutes filières / M1-SGB / M1-HCE) - 4EU4PRE6		10

Advanced Numerical Simulations (IEN / ME / M2-FME / M2-ENTECH) - 5EUS5SNA		5
ME - Mécanique et Energétique Mechanical & Energy Engineering		
Advanced Heat Transfer and Energetics (IEN / ME / SEM-ISE / M2-FME / M2-ENTECH) - 5EU5ADHT		5
Advanced Project - 5EU9AP8		5
Aerodynamics and Combustion (ME / M2-FME) - 5EUS5AIE		5
Sustainable Marine Energies - Fluid/Structure Interactions (ME / M2-FME / M2-ENTECH / M2-EFM) - 5EUSSEMR		5
Advanced Fluid Mechanics for Processes (IEN / ME / M2-FME) - 5EUS5MFA		5
Hydraulic Machines and Hydroelectricity (ME / M2-FME / M2-ENTECH) - 5EUS5MHH		5
Advanced Simulation Tools for Mechanics and the Environment (HOE / ME / M2-HCE / M2-FME) - 5EUS5OSA		5
Research Courses (ME / M2-FME) - 5EUS5RE		5
Advanced Numerical Simulations (IEN / ME / M2-FME / M2-ENTECH) - 5EUS5SNA		5
SEM - Systèmes Energetiques et Marchés Energy systems and associated markets		
Overall Multidisciplinary Project (SEM / M2-SGB / M2-ENTECH) - 5EUS5PRI		5
Energies for Ecodistricts (SEM-GSE / M2-ENTECH) - 5EU5DH7		5
Smart Systems - 5EU9SSY1		5
Advanced Heat Transfer and Energetics (IEN / ME / SEM-ISE / M2-FME / M2-ENTECH) - 5EU5ADHT		5
New Sustainable Technologies (SEM-ISE / M2-SGB / M2-ENTECH) - 5EUS5NTD		5
Economie et société / Economy and Society - 5EUS5ECS		5
Energy Management and Energy Efficiency of Buildings (SEM / M2-SGB / M2-ENTECH) - 5EUS5GEB		5
Energy Markets and New Energy Stakeholders (SEM / M2-SGB) - 5EUS5IME		5
Microgrids, Smartgrids and Supergrids (IEE / SEM / M2-SGB / M2-ENTECH) - 5EUS5SMA		5
Commun/Common		
Parcours numérique - Machine Learning and Optimization (toutes filières / M2-SGB) - 5EU9MLO0		5
Enjeux de l'ingénierie pour un projet de transition - SEM9REC9		1,5

Contact: international.ense3@grenoble-inp.fr

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