EUROPEAN MASTER ON FUSION SCIENCES AND ENGINEERING PHYSICS – FUSION EP

PROGRAMME 1st YEAR

	AMU		UCM / UC3M		UGent		U Lorraine		U Stuttgart	
FIRST YEAR	Plasma Physics	4	Plasma Physics	6	Plasma Physics	6	Fundamentals of Plasma Physics	6	Plasma Physics I	3
	Charged Fluid Dynamics	4	Introductory Atomic and Molecular Physics	6	Atomic and Molecular Physics	6	Atomic and Molecular Physics	6	Plasma Physics II	3
	Statistical Physics	6	Classical Electrodynamics	6	Magnetohydrodynamics of Plasmas	6	Classical Electrodynamics, Waves, Antenna and Emission Processes	6	Fusion research	3
	Quantum Mechanics	6	Computational Physics	6	Computational Fluid Dynamics	6	Computational physics	6	Numerical plasma phys. I	3
	Electromagnetism and Optics	4	Experimental Techniques in Plasmas, Nuclear Physics and Materials	6	Continuum Mechanics	6	Instrumentation and Signal Processing	6	Numerical plasma phys. II	3
	Mathematics for Physics	4	Fluid Dynamics	6	Cross-Course Project	6	Mechanics of Continuous Media	6	Advanced Physics lab	12
	Numerical methods and lab	8	Laboratory Project:	6	Plasma Technology and Fusion Technology	6	Lab Project	6	Advanced Experimental Physics	9
	Short internship	4							Microwave technology	3
	Scientific watch	2							Additional elective	3
	Language & Culture	6	Language & Culture	6	Language & Culture	6	Language & Culture	6	Language & Culture	6
	First year elective courses (12 ECTS)									
	On-line group work on the GOLEM device									