



POLITÉCNICA

UNIVERSIDAD
POLITÉCNICA
DE MADRID

UPM English Offer 2019-2020



POLITÉCNICA

Universidad Politécnica de Madrid
School of Aeronautics and Space Engineering

Master of Science in Aeronautical Engineering

2019-2020 academic year



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
143003011	Applied und Unsteady Aerodynamics (AAynE)	6.0	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003011_1S_2018-19.pdf
143003012	GNC and Optimization of Missile Trajectories (GNCyOTM)	4.5	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003012_1S_2018-19.pdf
143003021	Hypersonic Aerodynamics (AH)	4.5	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003021_1S_2018-19.pdf
143003022	Astrodynamic and Attitude Dynamics (AyDA)	6.0	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003022_1S_2018-19.pdf
143003023	Space Thermal Control (CTE)	4.5	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003023_1S_2018-19.pdf
143003033	Physical Basis of Rocket Engines by Plasma Acceleration (FFMCAP)	3.0	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003033_1S_2018-19.pdf
143003037	Experimental Techniques in Fluid Mechanics (TEMF)	3.0	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003037_1S_2018-19.pdf
143003045	Air Transport Environmental Impact (IATA)	3.0	2nd	1st	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_14IB_143003045_1S_2018-19.pdf
143003048	Optional Courses or Internship (PrEm)	12	2nd	2nd	https://www.etsiae.upm.es/index.php?id=736
143004010	Master Thesis (TFM)	18 to 30	2nd	2nd	https://www.etsiae.upm.es/index.php?id=736



POLITÉCNICA

Universidad Politécnica de Madrid
School of Agricultural, Food and Biosystems Engineering
Academic year 2019-2020



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
BACHELOR of SCIENCE IN AGRO-ENVIRONMENTAL ENGINEERING					
25001110	Geology	4	1	2	http://www.etsiaab.upm.es/Docencia/Grados%20ETSIAAB?fmt=detail&prefmt=articulo&id=f2a09c39ef183610VgnVCM10000009c7648a
25001205	Soil Science	4	2	3	http://www.etsiaab.upm.es/Docencia/Grados%20ETSIAAB?fmt=detail&prefmt=articulo&id=f2a09c39ef183610VgnVCM10000009c7648a
BACHELOR DEGREE AGRICULTURAL ENGINEERING					
205000076	Geology and climatology	6	1	2	http://www.etsiaab.upm.es/Docencia/Grados%20ETSIAAB?fmt=detail&prefmt=articulo&id=9ab3b3a3d9200610VgnVCM10000009c7648a
205000083	Soil Science	5	2	3	http://www.etsiaab.upm.es/Docencia/Grados%20ETSIAAB?fmt=detail&prefmt=articulo&id=9ab3b3a3d9200610VgnVCM10000009c7648a
MASTER of SCIENCE IN BIOLOGY COMPUTATIONAL					
203000021	Statistical analysis and data visualization	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000022	Large scale data management	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000023	Machine learning	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000024	Bioinformatics program challenges	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000025	Genomics data analyses and visualization	6	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000026	Genomics assisted breeding	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000027	Computational approaches in evolutionary biology	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000028	Systems biology: modelization and simulations	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000029	Synthetic biology	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000030	Computational structural biology for lead discovery	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000031	Health data and knowledge management	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000032	Semantic technologies	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000033	Knowledge representation and acquisition	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000034	Programmable biology: DNA computation and biocircuits engineering	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000035	Big data engineering	3	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000036	Professional development	3	1	2	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000037	Technology valorisation and innovation	3	1	2	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000041	Biology for computational science	6	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios
203000042	Programming for computational biology	6	1	1	http://dia.fi.upm.es/masterbc/?q=es/ asignaturas_seminarios



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
	Zoology	6		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/ZOOLOGY.pdf
	Animal applied ecology	6		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/ANIMAL_APPLIED_ECOLOGY.pdf
	Limnology	3		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/LIMNOLOGY.pdf
	Structure and function of woody plants	6		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/STRUCTURE_AND_FUNCTION_OF_WOODY_PLANTS.pdf
	Advanced Silviculture	3		2	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/ADVANCED_SILVICULTURE_MIM.pdf
	Knowledge management. Tools in decision making	3		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/KNOWLEDGE_MANAGEMENT.pdf
	CONTROL OF POLLUTION IN THE NATURAL ENVIRONMENT	3		2	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/CONTROL_OF_POLLUTION.pdf
	UNIT OPERATIONS IN THE FOREST INDUSTRIES	5		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/UNIT_OPERATIONS_IN_THE_FOREST_INDUSTRIES.pdf
	MONITORING AND CONTROL OF POLLUTION IN SOILS, WATER AND VEGETATION	3		2	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/MONITORING_AND_CONTROL_OF_POLLUTION.pdf
	LIDAR DATA APPLIED TO FOREST INVENTORY AND MANAGEMENT	3		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/Guia_Academica_LIDAR_ingles.pdf
	USES OF MEDICINAL AND AROMATIC PLANTS (MAPs)	3		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/USES_OF_MEDICINAL_AND_AROMATIC_PLANTS.pdf
	Scientific research and communication	3		1	http://www.montes.upm.es/sfs/montesymedionatural/English/Academic_offer_in_English/Estaticos/Scientific_research_and_communication_first_S.pdf



POLITÉCNICA

Universidad Politécnica de Madrid
 ESCUELA TÉCNICA SUPERIOR DE INGENIEROS DE CAMINOS, CANALES Y PUERTOS/SCHOOL OF CIVIL ENGINEERING (ETSICCP)
 2019-2020 academic year

**BSc in Civil Engineering (Grado en Ingeniería Civil y Territorial)**

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
45001203	ENGLISH	6	2nd	1st	page 11: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-ICT-EN.pdf

BSc in Materials Engineering

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
45000120	Mechanical behaviour of materials III	6	3rd	1st	http://www.materiales.upm.es/GIM/fichas/45000120-2016.pdf
45000121	Properties of materials II	6	3rd	1st	http://www.materiales.upm.es/GIM/fichas/45000121-2016.pdf
45000122	Composite materials	6	3rd	1st	http://www.materiales.upm.es/GIM/fichas/45000122-2016.pdf
45000123	Simulation in materials engineering	6	3rd	1st	http://www.materiales.upm.es/GIM/fichas/45000123.pdf
45000129	Soft matter	6	3rd	1st	http://www.materiales.upm.es/GIM/fichas/45000129-2016.pdf
45000125	Mechanical behaviour of materials IV	6	3rd	2nd	http://www.materiales.upm.es/GIM/fichas/45000125-2016.pdf
45000126	Nanotechnology	6	3rd	2nd	(Guide only available in Spanish) http://www.materiales.upm.es/GIM/fichas/45000126.pdf
45000127	Surface engineering	6	3rd	2nd	(Guide only available in Spanish) http://www.materiales.upm.es/GIM/fichas/45000127.pdf
45000128	Materials recycling	6	3rd	2nd	http://www.materiales.upm.es/GIM/fichas/45000128-2016.pdf
45000124	Quality and quality management	6	3rd	2nd	http://www.materiales.upm.es/GIM/fichas/45000124-2016.pdf

MSc in Civil Engineering (Máster en Ingeniería de Caminos, Canales y Puertos)

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
43000384	Experimental structural analysis	4.5	2nd	1st	page 13: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000390	Advanced analysis and design of concrete structures	4.5	2nd	2nd	page 12: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000397	Structural composite materials	4.5	2nd	2nd	page 15: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000388	Design, analysis and construction bridges	4.5	2nd	2nd	page 11: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000404	Hydroelectric systems analysis	4.5	2nd	2nd	page 17: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000406	Marine energies	4.5	2nd	2nd	page 18: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000411	Transports demands models	4.5	2nd	2nd	page 20: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000414	Smart ports	4.5	2nd	2nd	(Guide only available in Spanish) page 313: http://www.caminos.upm.es/mastericcp/Documentos/04AG_2018-19_TOMO_II.pdf#page=313
43000420	Development and civil engineering	4.5	2nd	2nd	page 22: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000423	Global economy and international environment in business administration	4.5	2nd	2nd	page 23: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf
43000422	Finance infrastructure and public services	4.5	2nd	2nd	page 24: https://www.caminos.upm.es/internacional/Documentos/INCOMING/Guide-MUICCP-EN.pdf

MSc in Materials Engineering

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
43000317	Optical, electrical and magnetic characterization of materials	4	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000317-2017.pdf
43000314	Structural characterization of materials I: Microscopy and Diffraction	5	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000314-2017.pdf
43000315	Structural characterization of materials II: Spectroscopy	5	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000315-2017.pdf
43000321	Materials economics and management	3	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000321-2017.pdf
43000320	Modeling and simulation in material science & engineering	3	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000320-2017.pdf
43000318	Advanced numerical methods	3	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000318-2017.pdf
43000319	Materials selection	3	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000319-2017.pdf
43000316	Mechanical characterization and analysis	4	1st	1st	http://www.materiales.upm.es/master/fichas/2017/43000316-2017.pdf
43000322	Forensic engineering: In service failure analysis	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000322-2017.pdf
43000324	Structural integrity	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000324-2017.pdf
43000325	Design and fabrication of advanced composite materials	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000325-2017.pdf
43000327	Advanced forming process	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000327-2017.pdf
43000328	Impact behavior of materials	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000328-2017.pdf
43000331	Materials for sport	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000331-2017.pdf
43000332	Materials for transportation	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000332-2017.pdf
43000330	Materials under extreme in-service conditions	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000330-2017.pdf
43000333	Materials for aerospace industry	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000333-2017.pdf
43000356	Materials for renewable energies	6	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000356-2017.pdf
43000334	Functional materials at macro and micro/nanometer scales	5	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000334-2017.pdf
43000335	New emerging materials and technologies	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000335-2017.pdf
43000337	Materials for electronic and optoelectronic devices	4	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000337-2017.pdf
43000339	Polymeric materials for advanced applications	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000339-2017.pdf
43000340	Materials and applications in nanotechnology	6	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000340-2017.pdf
43000341	Materials and microfabrication technologies for electronic devices	6	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000341-2017.pdf

43000342	Spintronics and nanomagnetism	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000342-2017.pdf
43000326	Quality management and metrology	3	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000326-2017.pdf
43000338	Materials for photonic devices	4	1st	2nd	http://www.materiales.upm.es/master/fichas/2017/43000338-2017.pdf

Note that 2nd semester subjects may be possibly taught in Spanish depending on the preference of the majority of students

MSc in Civil Engineering Systems

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
43000271	Hydroelectric systems analysis	4.5	1st	2nd	http://www1.caminos.upm.es/sic/files/03_Master/TA_analisis_de_sistemas_hidroelectricos_eng.pdf
43000274	Coastal engineering	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/TA_ingenieria_del_litoral.pdf
43000281	Transport planning theory	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/TA_politica_y_planificacion_del_transporte.pdf
43000277	Economic and transport operation	4.5	1st	1st	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/TA_economia_y_operacion_del_transporte.pdf
43000279	Traffic management	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/TA_gestion_de_la_circulacion_viaria.pdf
43000282	Ports management	4.5	1st	1st	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/TA_gestion_portuaria.pdf
43000284	Systems analysis applied to civil engineering	4.5	1st	1st	http://www1.caminos.upm.es/sic/files/03_Master/CI_analisis_de_sistemas_aplicados_a_la_ing_civil_eng.pdf
43000288	Sustainable management of drainage basins	4.5	1st	1st	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/GA_04AH_43000143_1S.pdf
43000289	Control of hydraulic systems	4.5	1st	2nd	http://www1.caminos.upm.es/sic/files/03_Master/FI_control_de_sistemas_hidraulicos_eng.pdf
43000290	Urban water services management	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/FI_gestion_de_servicios_de_agua_urbana.pdf
43000294	Climate analysis and the effects on the public works (shore)	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/GA_04AH_43000149_2S.pdf
43000285	Finance infrastructure	4.5	1st	2nd	http://www1.caminos.upm.es/sic/files/03_Master/CI_financiacion_de_infraestructuras.pdf
43000286	Methods for regional planning and sustainability	4.5	1st	1st	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/CI_tecnicas_de_planificacion_territorial.pdf
43000287	Applied statics for civil engineers	4.5	1st	1st	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/CI_estadistica_aplicada_a_la%20investigacion_en_ingenieria.pdf
43000297	Roads use systems	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/sic/files/03_Master/FI_sistemas_de_explotacion_de_carreteras.pdf
43000298	Sustainable transportation strategies	4.5	1st	1st	http://www1.caminos.upm.es/sic/files/03_Master/FI_estrategias_de_movilidad_sostenible.pdf

MSc in Structure, Foundations and Materials Engineering

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
43000442	Project and construction of mixed structures and bridges	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000442_2S_2017-18.pdf
43000444	Nonlinear finite element models for solids and structures	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000444_2S_2018-19-1.pdf
43000445	Computational mechanics	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000445_2S_2018-19.pdf
43000439	Dynamic and seismic analysis of structures	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000439_2S_2018-19.pdf
43000388	Design, analysis and construction bridges	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/Design_Analysis_and_Construction_of_Bridges_0.pdf
43000441	Advanced analysis and design of concrete structures	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000441_2S_2017-18.pdf
43000438	Bridge dynamics	4.5	1st	2nd	http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000438_2S_2018-19.pdf
43000452	Structural composite materials	4.5	1st	2nd	(Guide only available in Spanish) http://www1.caminos.upm.es/muiecm/wp-content/uploads/2018/07/GA_04AM_43000452_2S_2017-18_0.pdf

Note this is a research oriented master's programme for which for exchange students are generally not eligible



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
MSc in Telecommunication Engineering					
93000792	Signal Analysis for Communications	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000792_Signal_Analysis_for_communications.pdf
93000793	Radio Access Technologies	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000793_Radio_access_technologies.pdf
93000795	User Equipment and Terminals	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000795_user_equipment_and_terminals.pdf
93000798	Applications and Services	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000798_applications_and_services.pdf
93000800	Project Management	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000800_Project_Management.pdf
93000801	Strategic Vision of Technologies and Systems Integration in ICT Sector	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000801_Strategic_vision_of_technologies_and_system_integration_in_ict_sector.pdf
93000791	Communication Systems	6	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000791_Communication_Systems.pdf
93000794	Multimedia Systems and Services	6	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000794_multimedia_systems_and_services.pdf
93000796	Instrumentation Systems Engineering	6	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_1/93000796_instrumentation_and_systems_engineering.pdf
93000803	Advanced Topics on Antenna Technologies	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93000803_1S_2018-19.pdf
93000811	Satellite Communications	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Signals_and_Communications/93000811_Satellite_Communications_CSAT.pdf
93000820	Vision Analysis and Deep Learning	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93000820_1S_2018-19.pdf
93001071	Data Science Foundations and Applications	2	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93001071_1S_2018-19.pdf
93001070	Predictive and Descriptive Learning	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93001070_1S_2018-19.pdf
93001072	Machine Learning Lab	4.5	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93001072_1S_2018-19.pdf
93000835	Microelectronic Design	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Electronic/93000835_Microelectronic_Design_DIML.pdf
93000844	Neurosensory Engineering	6	2 nd	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Bioengineering/93000844_Neurosensory_Engineering_INRS.pdf
93000812	Advanced Topics on Optical Communications	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Signals_and_Communications/93000812_Fiber_Optics_Communication_CFOF.pdf
93001069	From Array Processing to MIMO Communications	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93001069_2S_2018-19.pdf
93000806	Media Data System Design	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93000806_2S_2018-19.pdf
93000819	Deep Learning for Acoustic Signal Processing	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93000819_2S_2018-19.pdf
93000824	Cybersecurity and Privacy: Operation and Management	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/estudios/master_universitario/Guias_de_Aprendizaje/Curso_2018-19/GA_09A_93000824_2S_2018-19.pdf
93000834	Engineering of Systems with Processors	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Electronic/93000834_Engineering_of_systems_with_processors_ISPR.pdf
93000836	Microelectronic Technology	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Electronic/93000836_Microelectronic_Technology_TMLP.pdf
93000839	Nanoelectronics	6	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Electronic/GA_09A_93000839_2S_2017-18_1_.pdf
93000850	ICT Market Policy and Regulation	3	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Management_Innovation_and ICT_Business/93000850 ICT_Market_Policy_and_Regulation_RTIC.pdf
93000852	Digital Business	3	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Management_Innovation_and ICT_Business/93000852_Information_Systems_for_Business_Management_II_SIG2.pdf
93000855	ICT Business Analysis	3	2 nd	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIT_2/Management_Innovation_and ICT_Business/93000855 ICT_Business_Analysis_NTIC.pdf
93000870	Master Thesis	30	2 nd	1 st /2 nd	
MSc in Signal Theory and Communications					
93000920	Optimization Fundamentals	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_Optimization_BigData.pdf
93000921	Radiofrequency Optimization Techniques	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/radiofrequency_optimization_techniques.pdf
93000922	Radiofrequency Technologies	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/radiofrequency_technologies.pdf
93000923	Advanced Topics on Antenna Technologies	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/advanced_topics_on_antenna_technologies.pdf
93000924	Mobile Communications: 4G and Beyond	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/mobile_communications.pdf
93000925	Design of Communication Systems and Equipment	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/design_of_communication_systems_and_equipment.pdf
93000938	Optimization Techniques for Big-Data Analysis	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_Optimization_BigData.pdf
93000939	Statistical Modeling	3	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_StatisticalModeling.pdf
93000940	Time Series Analysis	4.5	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_TimeSeriesAnalysis.pdf
93000941	Predictive and Descriptive Learning	6	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_PredictiveandDescriptiveLearning.pdf
93000942	Data Science Foundations and Applications	2	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_DataScienceFoundations.pdf
93000943	Machine Learning Lab	4.5	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_MachineLearningLab.pdf
93000926	From Array Processing to MIMO Communications	6	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/FromArrayProcessingtoMIMO.pdf
93000927	Secure RF Communications	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/SecureRFCommunications.pdf
93000928	Laboratory Course on RF Communications	6	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/RF_Technologies_and_systems/FromArrayProcessingtoMIMO.pdf
93000944	Large Scale Media Analytics	4	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_LargeScaleMediaAnalytics.pdf
93000945	Signal Processing for Big Data	4	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_SignalProcessingforBigData.pdf
93000946	Big Data for Image and Video Signals	4	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_BigDataforImageandVideoSignals.pdf
93000947	Bio-Inspired Learning	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_Bio-inspiredLearning.pdf
93000948	Reinforcement Learning	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_ReinforcementLearning.pdf
93000949	Application Projects	4	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/MSTC/signal_processing_and_machine_learning/Courseinfo_ApplicationProjects.pdf
MSc in Photovoltaic Solar Energy					
93001034	Solar Cell Fundamentals	4	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000651_MUESFV.pdf
93001035	Energy and Society	5	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000652_MUESFV.pdf
93001036	Solar Cell Characterization Lab	4	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000654_MUESFV.pdf
93001039	Solar Cell Technology Laboratory	5	1 st	1 st	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000657_MUESFV.pdf
93001046	New Generation Solar Cells	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000663_MUESFV.pdf
93001049	Simulation Laboratory of Cells and Systems	4	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MSFV/93000666_MUESFV.pdf
93001043	Master Thesis	15	1 st	2 nd	
MSc in Biomedical Engineering					
93000960	Health Technology Business Management	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000960_1S_2017-18.pdf
93000961	Biomedical Technologies Design	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000961_1S_2017-18.pdf
93000962	Biomedical Engineering Research and Development Projects	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000962_1S_2017-18.pdf
93000964	Telemedicine	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000964_1S_2017-18.pdf
93000966	Bioinstrumentation	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000966_1S_2017-18.pdf
93000967	Biomedical Images	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000967_1S_2017-18.pdf
93000968	Biomedical Signals	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000968_1S_2017-18.pdf
93000969	Biomechanics	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000969_1S_2017-18.pdf
93000970	Entrepreneurship and Innovation in Biomedical Engineering	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000970_1S_2017-18.pdf
93000971	Medical Data Intelligent Analysis	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09A_93000971_1S_2017-18.pdf

93000972	Control and Robotics in Medicine	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000972_1S_2017-18.pdf
93000973	Personalized Medicine	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000973_1S_2017-18.pdf
93000974	Advanced Methods in Signal and Medical Images	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000974_1S_2017-18.pdf
93000975	Nanomedicine Technologies	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000975_1S_2017-18.pdf
93000990	Clinical Seminars	3	1 st	1 st	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000990_1S_2017-18.pdf
93000963	Biomedical Engineering Professional Projects	3	1 st	2 nd	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000963_2S_2017-18.pdf
93000978	Biomedical Signals Laboratory	3	1 st	2 nd	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000978_2S_2017-18.pdf
93000979	Medical Imaging Laboratory	3	1 st	2 nd	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000979_2S_2017-18.pdf
93000980	Ambient Intelligence	3	1 st	2 nd	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000980_2S_2017-18.pdf
93000982	Telemedicine Laboratory	3	1 st	2 nd	http://docencia.gbt.tfo.upm.es/wp-content/uploads/2018/04/GA_09AU_93000982_2S_2017-18.pdf
93000976	Image-Guided Surgery	3	1 st	2 nd	
93000981	Assistive Technologies	3	1 st	2 nd	
93000977	Advanced Methods in Biomedical Images	3	1 st	2 nd	
93000987	Biomechanics Laboratory	3	1 st	2 nd	
93000988	Regenerative Medicine	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIB/93000988_MUIB_Regenerative_medicine.pdf
93000986	Numerical Models for Tissue and Blood flow Biomechanics	3	1 st	2 nd	
93000984	Bioelectromagnetism	3	1 st	2 nd	
93000985	Bioinstrumentation Laboratory	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIB/93000985_MUIB_Bioinstrumentation_Lab.pdf
93000983	Biophotonics	3	1 st	2 nd	http://www.etsit.upm.es/fileadmin/documentos/servicios/internacionales/extranjeros/Syllabus_MUIB/93000983_MUIB_Biophotonics.pdf
93000989	External Practical Work	3/6/9	1 st	2 nd	
93000991	Master Thesis	15	1 st	2 nd	



POLITÉCNICA

Universidad Politécnica de Madrid
School of Civil Engineering
BSc in Civil Engineering
2019-2020 academic year



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
585005124	Geotecnia y Cimientos en Obras de Construcciones Civiles y Transportes y Servicios Urbanos <i>Geotechnical and Foundations</i>	6	3rd	1st/Fall	(Itinerario I : Construcciones Civiles y Transportes y Servicios Urbanos) (Degree Itinerary I: Civil Works and Transports and Urban Services) http://www.ingenieriacivil.upm.es/index.php?option=com_docman&task=doc_download&gid=1229&Itemid=
585005133	Ingeniería Marítima <i>Maritime Engineering</i>	6	3rd	2nd/Spring	(Itinerario I: Construcciones Civiles y Transportes y Servicios Urbanos) (Degree Itinerary I: Civil Works and Transports and Urban Services) (Itinerario II: Construcciones Civiles e Hidrología) (Degree Itinerary II: Civil Works and Hydrology) http://www.ingenieriacivil.upm.es/index.php?option=com_docman&task=doc_download&gid=1239&Itemid=
585005143	Geotecnia y Cimientos en Obras de Construcciones Civiles e Hidrología <i>Geotechnical and Foundations</i>	6	3rd	1st /Fall	(Itinerario II: Construcciones Civiles e Hidrología) (Degree Itinerary II: Civil Works and Hydrology) http://www.ingenieriacivil.upm.es/index.php?option=com_docman&task=doc_download&gid=1234&Itemid=



Master on Industrial Electronics

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
53001534	Energy Management in Electronic Systems	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001534_1S_2018-19.pdf
53001535	Electronic Lab	6	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001535_1S_2018-19.pdf
53001536	Seminar 1	1.5	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001536_2S_2018-19.pdf
53001537	Seminar 2	1.5	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001537_2S_2018-19.pdf
53001538	Advanced Power Supply Systems	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001538_1S_2018-19.pdf
53001539	Design of Magnetic Components	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001539_1S_2018-19.pdf
53001540	Grid Connected Converters: AC/DC and DC/AC	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001540_2S_2018-19.pdf
53001541	Modelling and Control of Power Converters	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001541_1S_2018-19.pdf
53001542	Smart Grids	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001542_2S_2018-19.pdf
53001543	Three Phase Rectifiers and Inverters	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001543_1S_2018-19.pdf
53001545	Wireless Sensor Networks	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001545_1S_2018-19.pdf
53001546	DSP: Methods and Algorithms	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001546_2S_2018-19.pdf
53001547	Design of Embedded Systems	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001547_1S_2018-19.pdf
53001548	Embedded Processing Architectures	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001548_2S_2018-19.pdf
53001549	High Level Description of Systems	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001549_2S_2018-19.pdf
53001550	Integrated Circuits and Reconfigurable Computing	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001550_1S_2018-19.pdf
53001552	Communication Networks	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001552_1S_2018-19.pdf
53001554	Electronic Design for Reliability	3	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_05BG_53001554_2S_2018-19.pdf
53001556	Analog and Power Electronics	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001556_1S_2018-19.pdf
53001557	Digital Electronics and Microprocessors	3	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BG_53001557_1S_2018-19.pdf

MSc in Management Engineering

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
53001516	Introduction to Complexity Economics	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001516_1S_2018-19.pdf
53001517	Capital Markets and Corporate Finance	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001517_1S_2018-19.pdf
53001521	Tools for Big Data Analytics	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001521_1S_2018-19.pdf
53001523	Financial and Managerial Accounting	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001523_1S_2018-19.pdf
53001524	Industrial and International Marketing	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001524_1S_2018-19.pdf
53001525	ICT Management	3	2	3	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_05BD_53001525_1S_2018-19.pdf



Universidad Politécnica de Madrid
School of Computer Engineering



2019-2020 academic year

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
BACHELOR DEGREE IN INFORMATICS (COMPUTER) ENGINEERING					
105000005	Calculus	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10II_105000005_2S_2018-19.pdf
105000012	Digital Systems	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10II_105000012_2S_2018-19.pdf
105000011	English for Professional and Academic Communications	6	4	7	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000011_1S_2018-19.pdf
105000001	Physical and Technological Foundations of computer science	6	1	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000001_1S_2018-19.pdf
105000159	Human-Computer Interaction	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000024_1S_2018-19.pdf
105000046	Building up communications skills	3	3	5	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000046_1S_2018-19.pdf
105000394	Programming project	3	3	5	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000394_1S_2018-19.pdf
105000057	Web of linked data and semantic web	3	4	7	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000057_1S_2018-19.pdf
105000396	Programming for mobile devices	3	4	8	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10II_105000396_2S_2018-19.pdf
105000395	Introduction to bioinformatics and biocomputing	3	4	7	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_10II_105000395_1S_2018-19.pdf
EUROPEAN MASTER DEGREE IN SOFTWARE ENGINEERING					
103000482	Requirements Engineering	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000482_1S_2018-19.pdf
103000483	Software Design	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000483_2S_2018-19.pdf
103000484	Software Architecture	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000484_2S_2018-19.pdf
103000485	Software Project Management	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000485_1S_2018-19.pdf
103000486	Models and Methods for Process Improvement and Assessment	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000486_1S_2018-19.pdf
103000487	Software Quality Management	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000487_2S_2018-19.pdf
103000488	Software Metrics	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000488_1S_2018-19.pdf
103000489	Verification and Validation	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000489_1S_2018-19.pdf
103000547	Software Engineering Economics	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000547_1S_2018-19.pdf
103000540	Critical Software	3	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000540_1S_2018-19.pdf
103000541	Data Engineering	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000541_1S_2018-19.pdf
103000546	Rigorous Software Development	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000546_1S_2018-19.pdf
103000603	Challenges for accessible computing for people with functional diversity	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000603_1S_2018-19.pdf
103000544	Management, Relationships and Communication in Working Groups	4	1	1	https://www.upm.es/comun_gauss/publico/guias/2015-16/2S/GA_10AM_103000544_2S_2015-16.pdf
103000545	Agile Software Development: Agile Practices and Agile Usability	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AM_103000545_1S_2018-19.pdf
103000542	Experimental Software Engineering	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000542_2S_2018-19.pdf
103000538	Agent Based Software Engineering	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000538_2S_2018-19.pdf
103000538	Interaction Design	6	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AM_103000543_2S_2018-19.pdf
103000680	Fundamentals of Business Administration	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2017-18/2S/GA_10AM_103000680_2S_2017-18.pdf
MASTER IN SOFTWARE AND SYSTEMS					
103000380	Non-classical Project Management Strategies and Development Methodologies	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000380_1S_2018-19.pdf
103000379	Experimental Software Engineering	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000379_2S_2018-19.pdf
103000381	21st Century Challenges for Software Engineering	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000381_2S_2018-19.pdf
103000580	Software Construction: Analysis of Requirements	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000580_1S_2018-19.pdf
103000599	Foundations for programming languages	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000599_1S_2018-19.pdf
103000631	Weekly Presentation Series: Fall Term	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000631_1S_2018-19.pdf
103000385	Software Verification and Validation	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000385_1S_2018-19.pdf
103000383	Rigorous Software Development	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000383_1S_2018-19.pdf
103000583	Abstract Interpretation	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2017-18/2S/GA_10AK_103000583_2S_2017-18.pdf
103000632	Formal Methods for Concurrent and Reactive Systems	4	1	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000632_2S_2018-19.pdf

103000584	Reading Group on Basic Analysis of Non-Functional Global Properties	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000584_1S_2018-19.pdf
103000585	Reading Group on Advanced Analysis of Non-Functional Global Properties	4	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000585_2S_2018-19.pdf
103000634	Software Construction: Implementation Issues	6	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000634_2S_2018-19.pdf
103000387	New Trends in Distributed Systems	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000387_1S_2018-19.pdf
Cancelada	Analysis of Concurrent Systems				https://www.upm.es//comun_gauss/publico/guias/2017-18/2S/GA_10AK_103000587_2S_2017-18.pdf
103000635	Independent Study with Adviser	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000635_1S_2018-19.pdf
103000389	Concepts, practice and research challenges in data mining	4	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000389_2S_2018-19.pdf
103000390	Image Processing and Analysis	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000390_1S_2018-19.pdf
103000590	Computer Security	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000590_1S_2018-19.pdf
103000592	Advanced Topics On Computer Security	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2017-18/2S/GA_10AK_103000592_2S_2017-18.pdf
103000636	Directed Study with Adviser	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000636_1S_2018-19.pdf
103000633	Weekly Presentation Series: Spring Term	4	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AK_103000633_2S_2018-19.pdf
103000392	Intelligent Virtual Environments: Technologies, Architectures and Applications	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000392_1S_2018-19.pdf
103000393	Challenges of Accessible Computing for People with Functional Diversity	4	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000393_1S_2018-19.pdf
103000630	Software Construction: Architecture and Interface Design Issues	6	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AK_103000630_1S_2018-19.pdf
MASTER OF SCIENCE IN ARTIFICIAL INTELLIGENCE (DESCRIPTIONS) All the courses that are offered in English are taught in Spanish if ALL the enrolled students speak Spanish					
103000372	Research Methodology	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000372	Project Management and Risk Control	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000372	Decision Analysis	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000358	Participatory Decision Making and Negotiation	5	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000358_1S_2018-19.pdf
103000372	Data Mining	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000359	Bayesian Networks	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000359_1S_2018-19.pdf
103000360	Machine Learning	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000360_1S_2018-19.pdf
103000372	Natural Computing	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000363	Programmable Biology: DNA Computing and Biocircuits Engineering	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000363_1S_2018-19.pdf
103000372	Logic Computing	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000364	Logic Programming	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000364_1S_2018-19.pdf
103000372	Knowledge Representation and Reasoning	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000372	Cognitive Computation	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000366	Intelligent Agents and Multi-Agent Systems	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000366_1S_2018-19.pdf
103000367	Ontological Engineering	5	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000367_1S_2018-19.pdf
103000368	Models of Reasoning	5	1	1	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000368_1S_2018-19.pdf
103000372	Robotics and Computational Perception	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000372	Principals of Robotics Locomotion	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000372	Applications of Artificial Intelligence	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf
103000371	Biomedical Informatics	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/1S/GA_10AJ_103000371_1S_2018-19.pdf
103000372	Web science	10	1	2	https://www.upm.es//comun_gauss/publico/guias/2018-19/2S/GA_10AJ_103000372_2S_2018-19.pdf



POLITÉCNICA

Universidad Politécnica de Madrid
School of Computer Systems Engineering

Bachelor of Science in Software Engineering / Computer Engineering / Information Systems / Information Society Technologies

2019-2020 academic year



CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS	
615000332 615000257 615000731 615000367	English for Professional and Academic Communication	6		1st/2nd	http://www.etsisi.upm.es/sites/default/files/english-courses_3.pdf	
615000520 615000532 615000740 615000547	Information Coding	6		1st		
615000310 615000247 615000722 615000356	Legal and Professional Issues	3		1st		
615000733	Linux System Administration	6		1st		
615000259	Software Quality	6		1st		
615000260	Verification and Validation	6		1st		
615000253	Software Architecture and Design	6		2nd		
	Spanish for Science and Technology	3		1st/2nd		http://www.upm.es/internacional/Students/ExchangeMobilityPrograms/Languages%20for%20Internationalization/Spanish%20Language%20Area



POLITÉCNICA

Universidad Politécnica de Madrid
SCHOOL OF INDUSTRIAL DESIGN AND ENGINEERING (ETSIDI)

escuela técnica superior de
diseño industrial

2019-20 academic year

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
INTERNATIONAL SEMESTER					
	COMPUTER AIDED MANUFACTURING WORKSHOP	3	2019-20	1	http://www.etsidi.upm.es/International/Estudiantes/International%20Semester%20in%20English
	INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT	6	2019-20	1	
	PRACTICAL INTERNET OF THINGS WITH RASPBERRY PI	6	2019-20	1	
	SPANISH LANGUAGE COURSE	3	2019-20	1	
	FINAL DEGREE PROJECT	15	2019-20	1	
	BIODEGRADABLE POLYMERS FOR FOOD PACKAGING	3	2019-20	2	
	DRAWING AND SKETCHING	3	2019-20	2	
	FINITE ELEMENT BASED SIMULATION MODEL FOR FLUID DYNAMICS	3	2019-20	2	
	FUNDAMENTALS OF PHOTOVOLTAIC ENGINEERING	3	2019-20	2	
	INTRODUCTION TO CHAOS IN SCIENCE AND TECHNOLOGY	3	2019-20	2	
	NUMERICAL CALCULATIONS FOR ENGINEERING	6	2019-20	2	
	SOLVING ELECTRICAL ENGINEERING PROBLEMS USING SOFTWARE TOOLS	3	2019-20	2	
	SUSTAINABLE DESIGN	3	2019-20	2	
	TOPICS IN ENGINEERING MATHEMATICS	6	2019-20	2	
Master of Science in Industrial Design Engineering					
563000068	Materials and processes selection	3	2019-20	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_56AC_563000068_1S_2018-19.pdf
563000071	Design and manufacturing based on assembly	4.5	2019-20	1	https://www.upm.es/comun_gauss/publico/guias/2018-19/1S/GA_56AC_563000071_1S_2018-19.pdf
563000072	Manufacturing projects development in cam environments	4.5	2019-20	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_56AC_563000072_2S_2018-19.pdf
563000074	Ecoefficiency and ecoinnovation	3	2019-20	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_56AC_563000074_2S_2018-19.pdf
563000078	Polymer materials and nanocomposites applied on packaging	3	2019-20	2	https://www.upm.es/comun_gauss/publico/guias/2018-19/2S/GA_56AC_563000078_2S_2018-19.pdf
	Master's thesis -TFM-	12	2019-20	2	



POLITÉCNICA

Universidad Politécnica de Madrid
SCHOOL OF TELECOMMUNICATIONS SYSTEMS AND ENGINEERING



2019-2020 academic year

CODE	COURSE TAUGHT IN ENGLISH	ECTS	YEAR	SEMESTER	INFORMATION AND CONTENTS
COMMUNICATIONS ELECTRONIC ENGINEERING B. ENG.					
(multiple)	English for Professional and Academic Communication	6	4 th	1 st /2 nd	https://www.upm.es/comun_gauss/publico/guias/2018-19/15/GA_59EC_595000034_1S_2018-19.pdf
(multiple)	Introduction to Professional and Academic Communication I	3	3 rd	1 st /2 nd	https://www.upm.es/comun_gauss/publico/guias/2018-19/15/GA_59EC_595030063_1S_2018-19.pdf
(multiple)	Introduction to Professional and Academic Communication II	3	3 rd	1 st /2 nd	https://www.upm.es/comun_gauss/publico/guias/2018-19/15/GA_59EC_595030071_1S_2018-19.pdf
(multiple)	Smart Home	3	4 th	1 st	https://www.upm.es/comun_gauss/publico/guias/2018-19/15/GA_59EC_595030061_1S_2018-19.pdf
(multiple)	Final Degree Project	12	4 th	1 st /2 nd	https://www.etsist.upm.es/uploaded/65/English/syllabus/BE-CEE_Syllabus_semester-8.pdf
MSc IN SYSTEMS AND SERVICES ENGINEERING FOR THE INFORMATION SOCIETY (1-year program)					
593000400	Wireless Communications	5		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000401	Advanced Digital Architectures	5		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000402	Audio and Video Signal Processing	5		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000403	Ubiquitous and Secure Networks and Services	5		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000404	ICT Management in the Organizatios	2		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000405	ICT and the Information Society	3		1 st	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000406	Data Modelling and Analysis in Engineering	5		1 st	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000407	Advanced Research Seminars I	5		1 st	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000412	RF Electronic Design	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000409	Signal Processing Techniques for Communications	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000410	Advanced Virtual Instrumentation Systems	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000411	Embedded Systems	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000417	Signal Recognition Techniques	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000413	Advanced Audiovisual Coding	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000416	Telematic Services for the Information Society	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000414	Services and Protocols Engineering	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000415	Advanced Research Seminars II	5		2 nd	Elective https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
593000419	Master Thesis	15		2 nd	https://www.etsist.upm.es/estudios-ingenieria-sistemas-telecomunicaciones-madrid/masters-ingenieria-madrid/master-sistemas-y-servicios-sociedad-informacion/curso-actual/gu-as-de-aprendizaje
MSc in INTERNET OF THINGS (1-year program)*					
593000501	Embedded Platforms and Communications for IoT	4.5		1 st	Together http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000503	Sensor Networks	4.5		1 st	http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000506	Distributed Systems for IoT	4.5		1 st	Together http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000500	Architectures and Service Platforms	4.5		1 st	http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000504	Information Models	3		1 st	http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000509	Big Data Applications for IoT	4.5		2 nd	Together http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000510	Cloud Computing for IoT	4.5		2 nd	http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000508	Security for IoT Applications	4.5		2 nd	Prerequisite: security fundamentals mandatory for students without Android background http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf
593000502	Mobile Devices Programming	4.5		1 st	http://masteriot.etsist.upm.es/wp-content/uploads/2018/05/Informacion-Master-IoT-v4.pdf

* Only master-level students are eligible to take MSc in Internet of Things courses