Universidad Autónoma de Madrid

ACADEMIC YEAR 2024/2025

ENGINEERING IN TELECOMMUNICATION TECHNOLOGY AND SERVICES DEGREE

International accreditation EUR-ACE

European Accreditation of Engineering Programmes EUR-ACE®

ECTS CREDITS	
Basic training (FB)	72
Compulsory (OB)	72
Optional (OP)	84
End-of-degree Project (TFG)	12
Total	**240**

Centre (see)

CLICK ON THE CODE OF EACH SUBJECT TO ACCESS THE COURSE HANDBOOK

FIRST YEAR

Code	Subject	Credits	Type	Semester
18462	MATHEMATICAL ANALYSIS I	6	FB	1
18463	LINEAR ALGEBRA	6	FB	1
18464	PROGRAMMING I	6	FB	1
18465	INTRODUCTION TO PHYSICS	6	FB	1
18469	CIRCUIT ANALYSIS	6	FB	1
18466	INTRODUCTION TO ENGINEERING MANAGEMENT	6	FB	2
18467	MATHEMATICAL ANALYSIS II	6	FB	2
18468	PROGRAMMING II	6	FB	2
18470	ELECTRONIC DEVICE TECHNOLOGY	6	FB	2
18471	DIGITAL ELECTRONIC CIRCUITS	6	OB	2

SECOND YEAR

Code	Subject	Credits	Type	Semester
18472	STATISTICS	6	FB	1
18474	LINEAR SYSTEMS	6	FB	1
18476	NETWORK ARCHITECTURE I	6	OB	1
18478	ANALOGUE CIRCUITS AND POWER ELECTRONICS	6	OB	1
18479	INTRODUCTION TO MICROPROCESSORS	6	OB	1
18473	FUNDAMENTALS OF COMPUTER SYSTEMS	6	FB	2
18475	FUNDAMENTALS OF TRANSMISSION AND WAVE PROPAGATION	6	OB	2
18477	NETWORK ARCHITECTURE II	6	OB	2
18480	FILTER DESIGN	6	OB	2
18481	COMMUNICATION THEORY	6	OB	2

THIRD YEAR

Code	Subject	Credits	Type	Semester
18482	DIGITAL SIGNAL PROCESSING	6	OB	1
18502	TRANSMISSION MEDIA	6	OB	1
18483	SPECIALIZED INTEGRATED DEVICES **(1)**	6	OP	1
18484	CONTROL SYSTEMS **(1)**	6	OP	1
18487	VIDEO AND AUDIO SYSTEMS AND SERVICES **(2)**	6	OP	1
18488	ACOUSTIC ENGINEERING **(2)**	6	OP	1
18485	DIGITAL ELECTRONIC SYSTEMS **(1)**	6	OP	2
18486	COMMUNICATION ELECTRONICS **(1)**	6	OP	2
18489	MULTIMEDIA PROCESSING **(2)**	6	OP	2
19888	IMAGE AND VIDEO TECHNOLOGIES **(2)**	6	OP	2
	ELECTIVE COURSES	24	OP	1 o 2

(1) These subjects must be registered by the students that have chosen “Electronic Systems”.
(2) These subjects must be registered by the students that have chosen “Sound and Image”.
The subjects from the not chosen route can be registered as optional.

FOURTH YEAR

Code	Subject	Credits	Type	Semester
	ELECTIVE COURSES	12	OP	
18493	INSTRUMENTATION AND MEASUREMENT **(1)**	6	OP	1
18494	ELECTRONIC SYSTEMS TECHNOLOGY **(1)**	6	OP	1
18496	ARITHMETICS FOR SIGNAL PROCESSING **(1)**	6	OP	1
18498	VISUAL SIGNAL PROCESSING **(2)**	6	OP	1
18500	DIGITAL TELEVISION **(2)**	6	OP	1
19889	SPEECH AND AUDIO TECHNOLOGIES **(2)**	6	OP	1
18491	TELECOMMUNICATION PROJECTS AND SYSTEMS	6	OB	2
18492	ENGINEERING AND SOCIETY	6	OB	2
18495	ANTENNAS AND ELECTROMAGNETIC COMPATIBILITY **(1)**	6	OP	2
19890	SIGNAL ANALYSIS AND INFORMATION MODELLING **(2)**	6	OP	2
18501	END-OF-DEGREE PROJECT	12	TFG	Annual

(1) These subjects must be registered by the students that have chosen “Electronic Systems”.
(2) These subjects must be registered by the students that have chosen “Sound and Image”.
The subjects from the not chosen route can be registered as optional.

OPTIONAL SUBJECTS

Optional subjects from Design and Implementation of Communications Electronic Systems route, complementary to “Electronic Systems”

Code	Subject	Credits	Type	Semester
18504	MULTIMEDIA NETWORKS	6	OP	1
18489	MULTIMEDIA PROCESSING	6	OP	2

Optional subjects from Audio and Video Processing and Communications route, complementary to "Sound and Image"

Code	Subject	Credits	Type	Semester
18483	SPECIALIZED INTEGRATED DEVICES	6	OP	1
18496	ARITHMETICS FOR SIGNAL PROCESSING	6	OP	1
18504	MULTIMEDIA NETWORKS	6	OP	1
18503	AUDIO AND VIDEO TRANSMISSION SYSTEMS	6	OP	2

COMMON TO ALL ROUTES

Code	Subject	Credits	Type	Semester
18508	DATABASE	6	OP	1
18505	DISTRIBUTED SYSTEMS	6	OP	2
19958	CIBERSECURITY	6	OP	2
20266	FURTHER TOPICS IN TELECOMMUNICATION TECHNOLOGIES AND SERVICES 1	6	OP	1 o 2
20267	FURTHER TOPICS IN TELECOMMUNICATION TECHNOLOGIES AND SERVICES 2	6	OP	1 o 2

CENTRE

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