

## ICT Available Subjects for Incoming Students, 2024-2025



Term	Code /Study*	Subject	Course	ECTS	Language	Conditions
1st	23966 /GEXT	Transmission Media and Circuits	2	5	English	
	24294 /GEI	Functional Design of Programs	2	5	English	
	24933 /GEMCD	Introduction to Network Science	2	5	English	
	24374 /GESA	Acoustic Engineering	3	5	English	
	24943 /GEMCD	Massive Datasets Mining	3	5	English	
	26003 /GEI	Theory of Computing	3	5	English	
	24303 /GEI	Databases	3	5	English	
	23972 /GEXT	Digital Data Transmission	3	5	English	
	24304 /GEI	Artificial Intelligence	3	5	English	
	23973 /GEXT	Network Engineering	3	5	English	
	23974 /GEXT	Network Simulation and Modelling	3	5	English	
	24945 /GEMCD	Statistical Models	3	5	English	
	23979 /GEXT	Project Management	4	5	Catalan	
	23980 /GEXT	Optical Networks	4	5	English	
	23981 /GEXT	Mobile Communications	4	5	English	
	24382 /GESA	Audio Equipment and Systems	4	5	English	
	24383 /GESA	Audio and Video Encoding Systems	4	5	English	
	26474 /GESA	Advanced Computer Graphics	4	5	English	
	24951 /GEMCD	Visual Analytics	4	5	English	
	24948 /GEMCD	Stochastic Processes	4	5	English	
	24952 /GEMCD	Information Retrieval and Web Analytics	4	5	English	
	25230 /GEXT	The Internet of Things	Elective	4	English	
	24313 /GEI	Intelligent Web Applications	Elective	4	English	
25424 /GEMCD	Advances in Speech Technologies	Elective	5	English		
	24296 /GEI	Operating Systems	2	5	English	
	23965 /GEXT	Signals and Systems II	2	5	English	Group 1: English. Group 2: Catalan/Spanish

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Term	Code /Study*	Subject	Course	ECTS	Language	Conditions
2nd	24298 /GEI	Algorithm Design	2	5	English	
	24366 /GESA	Computer Graphics	2	5	English	
	24364 /GESA	Perception and Audiovisual Cognition	2	5	English	
	24308 /GEI	Cryptography and Security	3	5	English	
	24307 /GEI	Large-scale Distributed Systems	3	5	English	Group 1: English. Group 2: English
	24305 /GEI	Compilers	3	5	English	
	23975 /GEXT	Management of IT Companies	3	5	English	
	23977 /GEXT	Radio Communication Systems	3	5	English	
	23978 /GEXT	Telematics Applications	3	5	English	
	24378 /GESA	Optical Engineering	3	5	English	
	24379 /GESA	Video Processing	3	5	English	
	24380 /GESA	Sound, Speech and Music Processing	3	5	English	
	24949 /GEMCD	Probabilistic Graphical Models	3	5	English	
	23982 /GEXT	IT Services and Network Management	4	5	English	
	23983 /GEXT	Networking Lab	4	5	English	
	24408 /GESA	Virtual Communication Environment	Elective	4	English	
	24389 /GESA	Face and Gesture Analysis	Elective	4	English	
	24318 /GEI	Electronic Games	Elective	4	English	
	26518 /GEI	Fairness, Accountability, Transparency and Ethics in Data Processing	Elective	5	English	
	25369 /GEBM	Machine Learning for Biomedical Applications	Elective	4	English	It belongs to Biomedical Engineering.
	23970 /GEXT	Information Theory and Coding	2	5	English	
	23968 /GEXT	Optimization Techniques	2	5	English	
	24301 /GEI	Introduction to Parallel and Distributed Programming	2	5	English	
	24297 /GEI	Software Engineering	2	5	English	
	24300 /GEI	Interaction Engineering	2	5	English	Strict policy on punctuality.

## ICT Available Subjects for Incoming Students, 2024-2025



Term	Code /Study*	Subject	Course	ECTS	Language	Conditions
3rd	24370 /GESA	Image Processing	2	5	English	
	23969 /GEXT	Network Architecture	2	5	English	
	24315 /GEI	Interactive Systems	Elective	4	English	
	24316 /GEI	Person-Machine Interaction	Elective	4	English	
	26655 /GEI	Computer Animation	Elective	4	Catalan	
	25231 /GEXT	Wireless Sensor Networks	Elective	4	English	
	24392 /GESA	3D Audio	Elective	4	English	
	24387 /GESA	Tridimensional Vision	Elective	4	English	
	25261 /GESA	Workshop on Music Technology	Elective	5	English	
	25268 /GEI	Deep Learning	Elective	5	English	
	25375 /GESA	Computer Vision	Elective	5	English	
	25388 /GEI	Real-Time Graphics	Elective	4	English	
	25992 /GEXT	Machine Learning for Networking	Elective	5	English	
26227 /GEBM	Data Science and Computational Models in Biomedicine	Elective	4	English	It belongs to Biomedical Engineering.	

### \*Studies code:

GEI: Bachelor's Degree in Computer Engineering (3377)

GEXT: Bachelor's Degree in Telecommunications Network Engineering (3379)

GESA: Bachelor's Degree in Audiovisual Systems Engineering (3375)

GEMCD: Bachelor's Degree in Mathematical Engineering in Data Science (3370)

GEBM: Bachelor's Degree in Biomedical Engineering (3378)

Barcelona, July 9th 2024