Courses Description
Department of Electrical Engineering
Electronic and Communications
2021-2022

a) Undergraduate

Courses / College of Engineering / University of Mosul / First level for the academic year 2021-2022 / Department of Electrical Engineering

Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
					Fall Semester / First Level			
	UOMC101	-	3	-	3	English Language	Compulsory	University requirements
	UOMC102	-	3	2	2	Computer	Compulsory	University requirements
	UOMC103	-	2	-	2	Rights and Freedoms	Compulsory	University requirements
	ENGC121	-	3	-	3	Calculus I	Compulsory	College requirements
	ENGC123	-	1	3	-	Engineering Drawings	Compulsory	College requirements
Compulsory for Dept. Students	ENGE133	-	2	-	2	Physics	Elective	College requirements
	ELCA100	-	4	2	3	Electrical Circuit Analysis I	Compulsory	Department requirements
			18	7	15	Total Hours		

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Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
					Spring Semester / First Level			
	UOMC 100	-	2	-	2	Arabic Language	Compulsory	University requirements
The student should select one subject only (no. of units =2 only)	-	-	2	-	2	Manufacturing Processes	Elective	University requirements
	-	-				Environmental Pollution	Elective	University requirements
	-	-				Information Technology	Elective	University requirements
	ENGC122	Calculus I	3	-	3	Calculus II	Compulsory	College requirements
	ENGC124	Engineering Drawing	1	3	-	Auto-CAD	Compulsory	College requirements
Compulsory for Dept. Students	ENGE132	-	3	-	3	Engineering Mechanics	Elective	College requirements
	ELCA 150	Electrical Circuit Analysis I	4	2	3	Electrical Circuit Analysis II	Compulsory	Department requirements
	PHEC151	Physics	3	-	3	Electronic Physics	Compulsory	Department requirements
			18	5	16	Total Hours		

Courses / College of Engineering / University of Mosul / Second Level for the academic year 2021-2022 / Department of Electrical Engineering

Fall Semester / Second Level – E&C								
Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
English Subject in this level equal 1 unit because it was 3 units in first level	The name will be standardized by the course unit/college	-	1	-	1	English Language-Pre intermediate	Compulsory	University requirements
Compulsory for Dept. Students	ENGE228	Calculus II	3	-	3	Engineering Mathematics I	Elective	College requirements
	ACOM201	Electrical Circuit Analysis II, Calculus II	4	-	4	Analog Communications	Compulsory	Department requirements
	ENET202	Electrical Circuit Analysis II, Calculus II	4	-	4	Electric Networks	Compulsory	
	COMP206	Computer	3	2	2	Computer Programming	Compulsory	
	ELAB210	Electrical Circuit Analysis II	1	2	-	Electrical Engineering Lab I	Compulsory	
The student should select one subject only (no. of units =2 only)	SOC 203	Physics of Electronics	2	-	2	Solar Cell Systems	Elective	
	ELCI214	Physics of Electronics				Electronic Circuits	Elective	
			18	4	16	Total Hours		

Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
					Spring Semester / Second Level – E&C			
Compulsory for Dept. Students	ENGE 230	Calculus I	3	-	3	Engineering Mathematics II	Elective	College requirements
	PHEC 251	Physics of Electronics	3	-	3	Analog Electronics	Compulsory	Department requirements
	SIGS 252	Electrical Circuit ,Analysis I Calculus II	2	-	2	Systems & Signals	Compulsory	
	EMGT 254	Electrical Circuit ,Analysis II Calculus I	3	-	3	Electromagnetic Theory	Compulsory	
	MAPS 253	Electrical Circuit ,Analysis II Calculus II	2	-	2	& Machines Power Systems	Compulsory	
	DIGT208	-	2	-	2	Digital Techniques	Compulsory	
	ELAB 260	Electrical Engineering Lab I	1	2	-	Electrical Engineering Lab II	Compulsory	
The student should select one subject only (no. of units =2 only)	MODS 262	Computer Programming	2	2	1	Basics of Modeling and Simulation	Elective	
	COAP 264	Computer Programming				Computer Applications		
			18	4	16	Total Hours		

Courses / College of Engineering / University of Mosul / Third level for the academic year 2021-2022/ Department of Electrical Engineering

						Fall Semester / Third Level – E&C		
Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
Compulsory for Dept. Students	ENGE 320	Calculus I, II	2	-	2	Numerical Analysis	Elective	College requirements
	ENGC 327	-	2	-	2	Statistics	Compulsory	
	DCOM 301	Analog Communications	2	-	2	Digital Communications I	Compulsory	Department requirements
	RADP 303	Electromagnetic Theory	3	-	3	& Radiation Propagation	Compulsory	
	ELCD 305	Analog Electronics	3	-	3	Electronic Devices	Compulsory	
	DELC 307	Digital Techniques	3	-	3	Digital Electronics	Compulsory	
	ELAB 309	Electrical Engineering Lab II	2	6	-	& Electronics Communications Lab I	Compulsory	
The student should select one subject only (no. of units =2 only)	PWEL 311	Electrical Circuit Analysis I	2	-	2	Power Electronics	Elective	
	SPTC 357	Analog Communications				Special Topics in Communications		
The student should select one subject only (no. of units =2 only)	RENE 316	Electrical Circuit Analysis I	2	-	2	Renewable Energy	Elective	
	ELCD 312	Electrical Circuit Analysis I				Electrical Circuits Design		
			21	6	19	Total Hours		

Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
						Spring Semester / Third Level – E&C		
	-	-	2	-	2	English Language Intermediate	Compulsory	University requirements
	ENGC 326	-	2	-	2	Engineering Economic	Compulsory	College requirements
	MINC 350	Electrical Circuit Analysis I	3	-	3	Electrical Measurements	Compulsory	Department requirements
	ICOS 352	Signals & Systems	3	-	3	Introduction to Control Systems	Compulsory	
	COME 351	Computer Programming	3	-	3	Computer Architecture	Compulsory	
	DCOM 353	Digital Communications I	3	-	3	II Digital Communications	Compulsory	
	ELAB 355	Electronic & Communication Lab 1	2	6	-	& Electronics Communications Lab II	Compulsory	
The student should select one subject only (no. of units =2 only)	PCON 362	Digital Techniques	2	-	2	Programmable Controller	Elective	
	AINT 364	Digital Techniques				Artificial Intelligence		
			21	6	18	Total Hours		

Note: The student is required to complete the summer training after the end of the second semester of the third level

Annual / College of Engineering / University of Mosul / Fourth class for the academic year 2021-2022 / Department of Electrical Engineering

Course No.	Subject	First Term			Second Term			Units No.
		Theo.	Pract.	App.	Theo.	Pract.	App.	
EEC 401	Engineering Project	1	3	-	1	3	-	4
EEC 402	Engineering Control	3	-	1	3	-	1	6
EEC 403	Communication Engineering	3	-	-	3	-	-	6
EEC 404	Digital Signal Processing (DSP)	2	-	1	2	-	1	4
EEC 405	Microelectronic	2	-	1	2	-	1	4
EEC 406	Computer Networks	2	-	1	2	-	1	4
EEC 407	Elective Subjects (Computer interfacing systems)	2	-	-	2	-	-	4
EEC 408	Laboratories	-	6	-	-	6	-	4
Total		15	9	4	15	9	4	36
		28			28			