Courses Description
Department of Electrical Engineering
Power and Machines
2020-2021

a) Undergraduate

Courses / College of Engineering / University of Mosul / First level for the academic year 2020-2021 / 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		

					Spring Semester / First Level			
Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
	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	
	-	-				Environmental Pollution	Elective	
	-	-				Information Technology	Elective	
	ENGC122	Calculus I	3	-	3	Calculus II	Compulsory	College requirements
	ENGC124	Engineering Drawing	1	3	-	Auto-CAD	Compulsory	
Compulsory for Dept. Students	ENGE132	-	3	-	3	Engineering Mechanics	Elective	
	ELCA 150	Electrical Circuit Analysis I	4	2	3	Electrical Circuit Analysis II	Compulsory	Department requirements
	PHEC151	Physics	3	-	3	Electronic Physics	Compulsory	
			18	5	16	Total Hours		

Courses / College of Engineering / University of Mosul / Second Level for the academic year 2020-2021 / Department of Electrical Engineering

Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
						Fall Semester / Second Level – P&M		
English Subject in this level equal 1 unit because it was 3 units in first level.		-	1	-	1	English Language-Pre intermediate	Compulsory	University requirements
Compulsory for Dept. Students	ENGE228	I, II Calculus	3	-	3	Engineering Mathematics I	Elective	College requirements
	ENET202	Electrical Circuit Analysis II، Calculus I, II	4	-	4	Electric Networks	Compulsory	Department requirements
	ELTR204	Electrical Circuit Analysis II, Calculus II	3	-	3	Electrical Transformers	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)	ECFU 212	Physics of Electronics	2	-	2	Electronics Fundamentals	Elective	
	ELCI214	Physics of Electronics				Electronic Circuits	Elective	
			18	4	16	Total Hours		

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Spring Semester / Second Level – P&M								
Notes	Code	Pre-request	Units	Practical hours	Theoretical hours	Subject	Type	
Compulsory for Dept. Students	ENGE 230	Calculus I	3	-	3	Engineering Mathematics II	Elective	College requirements
	PEXT 250	Electrical Circuit Analysis II	3	-	3	Electronics I Power	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	
	DCMA 256	Electrical Transformers Electrical Circuit Analysis II	3	-	3	DC Machines	Compulsory	
	DISS 258	Electrical Transformers Electrical Circuit Analysis II	2	-	2	Distribution Systems	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		

Annual/ College of Engineering / University of Mosul / Third class for the academic year 2020-2021 / Department of Electrical Engineering

Course No.	Subject	First Term			Second Term			Units No.
		Theo.	Pract.	App.	Theo.	Pract.	App.	
EEP 301	Statistics & Engineering Economics	2	-	-	2	-	-	4
EEP 302	Engineering Analysis	2	-	1	2	-	1	4
EEP 303	Power Electronics	3	-	1	3	-	1	6
EEP 304	Electrical Machines	2	-	1	2	-	1	4
EEP 305	Electrical Powers	2	-	1	2	-	1	4
EEP 306	Measurements	2	-	1	2	-	1	4
EEP 307	Electronic and Communication System	2	-	1	2	-	1	4
EEP 308	Elective Subjects. (Microprocessor and Interfacing Systems)	2	-	-	2	-	-	4
EEP 309	Power & Machines Lab.	-	6	-	-	6	-	4
Total		17	6	6	17	6	6	38
		29			29			

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 2020-2021 / Department of Electrical Engineering

Course No.	Subject	First Term			Second Term			Units No.
		Theo.	Pract	App.	Theo	Pract	App.	
EEP 401	Power System Analysis	2	-	2	2	-	2	4
EEP402	Protection & Operation of PS	2	-	1	2	-	1	4
EEP 403	Advanced Electrical Machines	3	-	1	3	-	1	6
EEP 404	High Voltage Systems	2	-	-	2	-	-	4
EEP 405	Final Year Project	1	3	-	1	3	-	4
EEP 406	Power & Machines Lab.	-	6	-	-	6	-	4
EEP 407	Control Engineering	3	-	1	3	-	1	6
EEP 408	(Generation Systems) Elective Subjects	2	-	-	2	-	-	4
Total		15	9	5	15	9	5	36
		29			29			