COMSATS University Islamabad

Registrar Office, Academic Unit (PS)

No: CUI-Reg/Notif-2809 /23/ 2955

November 15, 2023

NOTIFICATION

Academic Council in its 37th special meeting held on August 22, 2023, on the recommendations of 32nd special meeting of Board of Faculty of Engineering, approved following minors (**List attached**) being offered by the department of Electrical and Computer Engineering (ECE) subject to the following:

A student may opt for undergraduate degree with single major and either one or two additional minors, subject to fulfilling the following conditions for the opted minors:

- A student is required to complete a minimum of 12 credit hours from the same minor cluster to earn that additional minor.
- A course from a minor cluster cannot be registered if the same course is already studied in degree major.
- To register for a course in a minor cluster, any required pre-requisite course which is not listed in minor table, should be completed as non-credit course, if it is not studied in degree major.
- 4. With the consent of the Head of the Department, any other course from the domain of Electrical/Computer Engineering or Computer Science, for which prerequisite courses and abovementioned conditions are satisfied, can also be offered as a minor course.
- 5. The Regulations relating to minors approved by the Competent Authority and amended from time to time shall be applicable.

This is issued in continuation of the notification No. CUI-Reg/Notif-1877/23/1967 dated August 30, 2023, CUI-Reg/Notif-1889/23/1979 dated August 31, 2023, CUI-Reg/Notif-1887/23/1977 dated August 31, 2023, CUI-Reg/Notif-1875/23/1965 dated August 29, 2023, respectively.

Dr. Muhammad Hanif Deputy Registrar

Distribution:

- 1. All Directors, CUI
- 2. All Deans, CUI
- 3. Incharge Islamabad Campus, CUI
- 4. Controller of Examinations, CUI
- 5. All Chairpersons, CUI
- 6. All HoDs/Incharge of Academics/Examinations Sections, CUI Campuses
- 7. Internal distributions, Registrar Office (Academic Unit), CUI

CC:

- 1. PS to Rector CUI
- 2. PS to Registrar CUI

Minor 1: Electrical Engineering

Pre-Requisites: NIL

Sr. No.	Course	Course Title	Credit Hours	Prerequisite(s)
1	EEE121	Electric Circuit Analysis I	4(3, 1)	
2	EEE231	Electronics I	4(3, 1)	EEE121
3	EEE222	Electric Circuit Analysis II	4(3, 1)	EEE121
4	EEE232	Electronics II	4(3, 1)	EEE231
5	EEE241	Digital Logic Design	4(3, 1)	P. C.
6	EEE314	Data Communication and Computer Networks	4(3, 1)	
7	EEE342	Microprocessor Systems and Interfacing	4(3, 1)	EEE241
8	EEE375	Power Distribution and Utilization	4(3, 1)	EEE222
9	EEE456	Broadband Technologies	3(3, 0)	EEE314
10	EEE461	Neural Networks	3(3, 0)	

Minor 2: Electrical Engineering (Telecommunications)

Pre-Requisites: EEE251 (Probability Methods in Engineering)

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite(s)
1	EEE223	Signals and Systems	4(3, 1)	MTH242
2	EEE314	Data Communications and Computer Networks	4(3, 1)	
3	EEE351	Principles of Communication Systems	4(3, 1)	EEE223
4	EEE353	Digital Communication Systems	4(3, 1)	EEE351, EEE251
5	EEE455	Optical Fiber Communications	3(3, 0)	EEE351
6	EEE456	Broadband Technologies	3(3, 0)	EEE314
7	EEE464	Wireless Communication Systems	3(3,0)	EEE351 or EEE353

Minor 3: Electrical Engineering (Robotics and Control)
Pre-Requisites: EEE121 (Electric Circuit Analysis I), EEE231 (Electronics I)

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite(s)
1	EEE223	Signals and Systems	4(3, 1)	MTH242
2	EEE232	Electronics II	4(3, 1)	EEE231
3	EEE325	Control Systems	4(3, 1)	EEE223
4	EEE415	Digital Image Processing	4(3,1)	EEE223
5	EEE421	Introduction to Digital Control Systems	4(3, 1)	EEE325
6	EEE428	Introduction to Non-linear Control	3(3, 0)	EEE325
7	EEE447	Robotics	4(3, 1)	EEE325

Minor 4: Electronics Engineering Pre-Requisites: EEE241 (Digital Logic Design)

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite(s)
1	EEE121	Electric Circuit Analysis I	4(3, 1)	The State of
2	EEE231	Electronics I	4(3, 1)	EEE121
3	° EEE232	Electronics II	4(3, 1)	EEE231
4	EEE338	Power Electronics	4(3, 1)	EEE232
5	EEE342	Microprocessor Systems and Interfacing	4(3, 1)	EEE241
6	EEE344	Digital System Design	4(3, 1)	EEE241
7	EEE434	VLSI Design	4(3, 1)	EEE241, EEE232

Minor 5: Computer Engineering
Pre-Requisites: CSC103 (Programming Fundamentals), CPE241 (Digital Logic Design)

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite(s)
1	CPE223	Signals and Systems	4(3, 1)	MTH242
2 "	CPE342	Microprocessor Systems and Interfacing	4(3, 1)	CPE241
3	CPE343	Computer Organization and Architecture	4(3, 1)	CPE241
4	CPE344	Digital System Design	4(3,1)	CPE241
5	CPE415	Digital Image Processing	4(3,1)	CPE223
6	CPE445	Internet of Things	3(3,0)	
7	CPE462	Artificial Intelligence	3(2,1)	CSC103

Minor 6: Electrical Power Engineering

Pre-Requisites: EEE121 (Electric Circuit Analysis I), EEE231 Electronics I

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite(s)
1	EEE222	Electric Circuit Analysis II	4(3, 1)	EEE121
2	EEE232	Electronics II	4(3, 1)	EEE231
3	EEE338	Power Electronics	4(3, 1)	EEE232
4	EEE375	Power Distribution and Utilization	4(3,1)	EEE222
5	EEE382	Power Generation	3(3, 0)	L. Landach and C. Landach
6	EEE486	Power System Analysis	3(3, 0)	EEE222
7	EEE488	Renewable and Alternate Energy Systems	3(3, 0)	