

ZAKIR HUSAIN COLLEGE OF ENGINEERING & TECHNOLOGY

LIST OF REGISTERED COURSES (Updated on 24 May, 2022)

B.Tech./B.Arch, Even semester, 2021-22

ALL BRANCHES

S.No.	Course No.	Course Title	Categ.	Credit.	Mode a	Mode b	Mode c	Total
1	ACA2120	Material Science & Engg Materials	ESA	3	18	0	0	18
2	ACO3080	Atmospheric Chemistry	OE	4	42	0	0	42
3	ACS1110	Applied Chemistry	BS	4	239	8	2	249
4	ACS1910	Applied Chemistry Lab	BS	1.5	239	2	0	241
5	ACS2110	Engineering Chemistry	BS	3	18	0	0	18
6	ACS2910	Food Chemistry Lab	BS	1	17	0	0	17
7	AMO4430	Advanced Numerical Methods	OE	4	18	0	0	18
8	AMS1120	Applied Mathematics-II	BS	4	494	7	1	502
9	AMS2120	Mathematics-IV	BS	3	59	1	0	60
10	AMS2320	Numerical Methods & Optimization	BS	4	88	0	0	88
11	AMS2420	Applied Numerical Methods	BS	4	15	0	0	15
12	AMS2440	Numerical Methods	BS	3	17	0	0	17
13	AMS2620	Numerical Analysis, Transforms and Probability	BS	4	59	0	0	59
14	AMS2630	Discrete Structures	BS	4	59	0	1	60
15	AP304	Bio-physics	OE	4	1	0	0	1
16	APO3040	Biophysics	OE	4	44	0	0	44
17	APS1110	Applied Physics	BS	4	257	3	0	260
18	APS1910	Applied Physics Lab	BS	1.5	257	7	1	265
19	ARC1320	Construction and Materials - I	DC	5	22	0	0	22
20	ARC1340	Architectural Drawing-II	DC	5	22	1	0	23
21	ARC1360	Arts and Graphics	DC	4	22	1	0	23
22	ARC1620	Architecture Design - I	DC	7	22	0	0	22
23	ARC2040	Pre-Modern/Western Architecture	DC	3	20	0	0	20
24	ARC2060	Building Services-II (Electrical, Illumination and Acoustics)	DC	3	20	0	0	20
25	ARC2380	Construction and Materials-III	DC	5	20	0	0	20
26	ARC2640	Architecture Design - III	DC	7	20	0	0	20
27	ARC2940	Computer Application in Architecture-II	DC	2	20	0	0	20
28	ARC3080	Town Planning	DC	4	22	0	0	22

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29	ARC3400	Construction & Materials - IV	DC	5	22	0	0	22
30	ARC3420	Interior Design	DC	4	22	0	0	22
31	ARC3660	Architectural Design - V	DC	7	22	0	1	23
32	ARC3960	Working Drawing	DC	2	22	0	0	22
33	ARC4180	Urban Design	DC	4	21	0	0	21
34	ARC4680	Architectural Design - VII	DC	7	21	0	0	21
35	ARC4980	Special Study	DC	2	21	0	0	21
36	ARC5820	Professional Training	DC	8	23	0	0	23
37	ARE4260	Design for Disaster Mitigation	DE	4	21	0	0	21
38	ARH1020	Man Society & Buildings	HM	2	22	0	0	22
39	ARH4200	Building Construction Management & Economics	HM	4	21	0	0	21
40	ARO4280	Urban and Regional Planning	OE	4	35	0	0	35
41	CEA1110	Environmental Studies	ESA	3	261	1	1	263
42	CEA1120	Strength of Materials	ESA	3	255	5	0	260
43	CEA2180	Surveying	ESA	4	20	0	0	20
44	CEA2950	Surveying Lab	ESA	2	20	0	1	21
45	CEA3180	Structural Design-II	ESA	4	22	0	0	22
46	CEC2170	Environmental Engineering I	DC	4	59	1	0	60
47	CEC2180	Surveying	DC	4	59	0	0	59
48	CEC2190	Hydrology	DC	4	59	1	0	60
49	CEC2200	Structural Mechanics	DC	4	59	4	0	63
50	CEC2940	Structural Mechanics Lab	DC	2	59	1	0	60
51	CEC2950	Surveying Lab	DC	2	59	0	1	60
52	CEC3160	Design of Concrete Structure-II	DC	4	75	0	0	75
53	CEC3170	Transportation Engineering	DC	4	75	0	0	75
54	CEC3180	Design of Steel Structures	DC	4	75	0	0	75
55	CEC3190	Engineering Hydraulics-II	DC	4	75	1	0	76
56	CEC3200	Structural Analysis-II	DC	4	75	1	0	76

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57	CEC3810	Survey Camp	DC	1	75	0	0	75
58	CEC3950	Cad Lab-I	DC	2	75	0	0	75
59	CEC3960	Transportation Engineering Lab	DC	2	75	0	0	75
60	CEC4990	Project Phase II	DC	4	77	0	0	77
61	CEE4510	Concrete Technology	DE	4	40	0	0	40
62	CEE4530	Traffic Engineering	DE	4	33	0	0	33
63	CEE4570	Rock Engineering	DE	4	42	0	0	42
64	CEE4630	Bridge Engineering	DE	4	60	0	0	60
65	CEE4660	Pre-Stressed Concrete	DE	4	46	0	0	46
66	CEE4730	Elements of Earthquake & Wind Engineering	DE	4	56	0	0	56
67	CEH2210	Construction Management I	HM	3	59	0	1	60
68	CEO4720	Advanced Environmental Engineering	OE	4	53	0	0	53
69	CEO4740	Water Resources & Watershed Management	OE	4	61	0	0	61
70	CHA2920	Unit Operations Laboratory-I	ESA	2	15	0	0	15
71	CHA3930	Unit Operation Laboratory-II	ESA	2	12	0	0	12
72	CHC2050	Chemical Engineering Thermodynamics	DC	4	18	1	0	19
73	CHC2060	Heat Transfer Operations	DC	4	18	0	0	18
74	CHC2070	Numerical Methods in Chemical Engg.	DC	4	18	0	0	18
75	CHC2910	Computer Programming Lab	DC	1.5	18	1	0	19
76	CHC2920	Fluid Mechanics Lab	DC	1.5	18	1	0	19
77	CHC2930	Mechanical Operations Lab	DC	1.5	18	1	0	19
78	CHC3130	Chemical Process Industries-I	DC	3	33	0	0	33
79	CHC3140	Process Equipment Design	DC	4	33	0	0	33
80	CHC3150	Process Dynamics and Control	DC	4	33	0	0	33
81	CHC3160	Energy Engineering and Management	DC	4	33	0	0	33
82	CHC3170	Chemical Reaction Engineering -II	DC	3	33	0	0	33
83	CHC3180	Transport Phenomena	DC	4	33	0	0	33
84	CHC3960	Mass Transfer Lab	DC	1.5	33	1	0	34

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85	CHC3970	Chemical Engineering Design & Drawing	DC	1.5	33	0	0	33
86	CHC3980	Energy and Technology Lab	DC	1.5	33	0	0	33
87	CHC4230	Process Safety and Risk Analysis	DC	3	25	0	0	25
88	CHC4240	Modeling ,Simulation and Optimization	DC	3	25	1	0	26
89	CHC4910	Industrial Visit/ Training	DC	1.5	25	1	0	26
90	CHC4960	Project(Experimental/Computational)	DC	2	25	0	0	25
91	CHC4980	Plant Design Project B	DC	3	25	1	0	26
92	CHE4560	Industrial Pollution Control	DE	4	25	1	0	26
93	CHE4610	Colloidal and Surface Science	DE	4	3	0	0	3
94	CHE4710	CAD of Process Equipments	DE	4	23	0	0	23
95	CHH2130	Social,Cultural & Educational Movements of India	HM	3	18	0	0	18
96	COA1910	Computer Programming Lab	ESA	1.5	261	5	0	266
97	COA3600	Data Structure and Programming	ESA	3	55	1	0	56
98	COC2080	Computer Architecture	DC	4	59	0	0	59
99	COC2090	Software Engineering	DC	4	59	1	0	60
100	COC2140	Design & Analysis of Algorithm	DC	4	59	0	0	59
101	COC2920	Digital Design & Simulation Lab	DC	2	59	1	0	60
102	COC3110	Theory of Computation	DC	4	66	0	0	66
103	COC3120	Database Management System	DC	4	66	0	0	66
104	COC3130	Computer Networks	DC	4	66	0	0	66
105	COC3150	Computer Graphics	DC	4	66	0	0	66
106	COC3800	Colloquium	DC	2	66	1	0	67
107	COC3940	Microprocessor Lab	DC	2	66	1	0	67
108	COC3960	Advanced Computing Lab	DC	2	66	0	0	66
109	COC4990	B.Tech Project Part-II	DC	6	64	0	0	64
110	COE4320	Image Processing	DE	4	8	0	0	8
111	COE4380	Selected Topics in Computer Applications	DE	4	74	0	0	74
112	COE4420	VLSI Design Tool Techniques	DE	4	10	0	0	10

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113	COE4520	Mobile Computing	DE	4	60	0	0	60
114	COE4590	Distributed and Parallel Systems	DE	4	89	0	0	89
115	COO4470	Selected Topics in Computer Engineering II	OE	4	73	0	0	73
116	EEA1110	Principles of Electrical Engineering	ESA	3	239	6	1	246
117	EEA2010	Electrical Engineering	ESA	4	59	1	0	60
118	EEA2020	Electrical Technology	ESA	3	88	0	0	88
119	EEA2970	Electrical Technology Lab	ESA	1.5	88	0	0	88
120	EEC2120	Electrical Machines II	DC	4	67	1	0	68
121	EEC2210	Power Electronics-I	DC	4	67	0	0	67
122	EEC2310	Power System Engineering	DC	4	67	1	0	68
123	EEC2510	Electrical Measurement	DC	4	67	0	0	67
124	EEC2920	Electrical Machines Lab II	DC	2	67	0	0	67
125	EEC2930	Circuits and Measurements Lab	DC	2	67	0	0	67
126	EEC3110	Electrical Drives	DC	4	72	0	0	72
127	EEC3220	New and Renewable Energy Sources	DC	4	72	0	0	72
128	EEC3320	Electrical Power Gen. & Utilization	DC	4	72	0	0	72
129	EEC3410	Dynamic System Analysis	DC	4	72	1	0	73
130	EEC3710	Microcontroller Systems and Appl.	DC	4	72	0	0	72
131	EEC3920	Power System and High Voltage Lab	DC	2	72	0	0	72
132	EEC3930	Instrumentation Lab	DC	2	72	0	0	72
133	EEC4990	Project Phase-II	DC	4	72	0	0	72
134	EEE4120	Electric Vehicles & Traction	DE	3	72	0	0	72
135	EEE4230	Solar Photovoltaic Systems	DE	3	75	0	0	75
136	EEE4320	Power Quality	DE	3	63	0	0	63
137	EEE4740	Digital Signal Processing	DE	3	72	0	0	72
138	EEO4210	Renewable Energy Sources	OE	4	60	0	0	60
139	ELA1110	Principles of Electronics Engineering	ESA	3	255	2	0	257
140	ELA2010	Logic & Digital Circuit	ESA	4	67	0	0	67

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141	ELA2410	Signals & Systems	ESA	4	59	0	0	59
142	ELA2510	Electromagnetics	ESA	4	59	1	0	60
143	ELA2900	Electronics Laboratory	ESA	2	59	0	0	59
144	ELC2130	Digital Electronics	DC	4	59	2	0	61
145	ELC2140	Electronic Circuits	DC	4	59	3	1	63
146	ELC2210	Measurement and Instrumentation	DC	4	59	0	0	59
147	ELC2420	Principles of Communication Engineering I	DC	4	59	0	3	62
148	ELC2920	Electronics Lab II	DC	1.5	59	2	0	61
149	ELC2930	Instrumentation Lab	DC	1.5	59	0	0	59
150	ELC3420	Digital Communication	DC	4	55	0	0	55
151	ELC3430	Digital Signal Processing	DC	4	55	1	0	56
152	ELC3620	Digital System Design	DC	4	55	1	1	57
153	ELC3930	Embedded Systems Lab	DC	2	55	0	1	56
154	ELC3940	Communication Lab - II	DC	2	55	0	0	55
155	ELC3990	Mini Project	DC	2	55	0	0	55
156	ELC4990	Project Phase II	DC	4	62	0	0	62
157	ELE4120	Semiconductor Device Modelling	DE	4	70	0	0	70
158	ELE4410	Multimedia Systems & Networks	DE	4	62	0	0	62
159	ELE4510	Fibreoptic Communication	DE	4	69	0	0	69
160	EZH1110	English	HM	3	255	5	0	260
161	EZH2910	Communication Skills Lab	HM	2	163	0	0	163
162	EZH3010	Fundamentals of Entrepreneurship	HM	3	54	0	0	54
163	EZH3020	Intellectual Property Rights for Engineers	HM	3	84	0	0	84
164	FTC2030	Food Microbiology	DC	3	17	0	0	17
165	FTC2040	Food Bio-Chemistry	DC	3	17	0	0	17
166	FTC2050	Chemical Engg Thermodynamics	DC	4	17	0	0	17
167	FTC2060	Heat Transfer Operations	DC	4	17	0	0	17
168	FTC2070	Post Harvest Engineering	DC	3	17	0	0	17

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169	FTC2910	Microbiology Lab	DC	1.5	17	0	0	17
170	FTC2920	Unit Operations Lab I	DC	1.5	17	0	0	17
171	FTC2930	Bio-Chemistry Lab	DC	1.5	17	0	0	17
172	ME325	Manufacturing Technology II	DC	4	1	0	0	1
173	ME421	Energy Audit Conservation & Management	DE	4	2	0	0	2
174	ME447	Facilities Planning & Plant Engg.	DE	4	2	0	0	2
175	ME451	Computer Aided Design	DE	4	1	0	0	1
176	ME491B	Project Phase-II	DC	3	2	0	0	2
177	MEA1110	Engineering Thermodynamics	ESA	4	240	3	1	244
178	MEA1120	Engineering Mechanics	ESA	3	255	4	0	259
179	MEA1910	Engineering Graphics Lab	ESA	2	239	3	0	242
180	MEA1920	Manufacturing Process Lab	ESA	1.5	257	6	1	264
181	MEC2130	Machine Design I	DC	3	88	0	0	88
182	MEC2210	Applied Thermodynamics	DC	4	88	1	0	89
183	MEC2430	Material Science	DC	4	88	0	0	88
184	MEC2440	Manufacturing Technology-II	DC	4	88	0	0	88
185	MEC2940	Thermodynamics Lab	DC	2	88	0	0	88
186	MEC3120	Machinery Dynamics	DC	4	89	1	0	90
187	MEC3220	I.C. Engines	DC	4	90	5	0	95
188	MEC3230	Energy Conversion System	DC	3	90	0	0	90
189	MEC3320	Fluid Machinery	DC	4	89	1	0	90
190	MEC3930	Manufacturing Technology Lab-II	DC	2	92	1	0	93
191	MEC3940	Solid Modelling & Analysis	DC	2	89	1	0	90
192	MEC3950	Kinematics & Stress Analysis Lab	DC	2	89	1	0	90
193	MEC3960	Fluid Mechanics & Machinery Lab	DC	2	89	1	0	90
194	MEC4920	Project (Phase II)	DC	3	90	0	0	90
195	MEE4120	Introduction to FEM	DE	4	26	0	0	26
196	MEE4150	Computer Aided Design	DE	4	28	0	0	28

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197	MEE4220	Power plant Engineering	DE	4	42	0	0	42
198	MEE4250	Energy Audit Conservation & Management	DE	4	57	0	0	57
199	MEE4260	Alternative fuels for Transportation	DE	4	13	0	0	13
200	MEE4280	Nano Fluid & its Application	DE	4	13	0	0	13
201	MEE4340	Applied Comp. Fluid Dynamics	DE	4	33	0	0	33
202	MEE4350	Propulsion Technology	DE	4	14	0	0	14
203	MEE4440	Non Traditional Machining	DE	4	35	0	0	35
204	MEE4710	Facility Planing & Plant Engg	DE	4	10	0	0	10
205	MEH2450	Engineering Economy & Management	HM	4	67	0	0	67
206	MEH3450	Engineering Economy & Management	HM	4	145	0	0	145
207	MEO4220	Non Conventional Energy	OE	4	60	0	0	60
208	PKC2020	Chemical Engineering Thermodynamics	DC	4	15	0	0	15
209	PKC2040	Separation Proc. in Hydrocarbon Industries	DC	4	15	0	0	15
210	PKC2080	Alternate Fuels and Energy Resources	DC	3	15	0	0	15
211	PKC2920	Petroleum Testing Laboratory	DC	2	15	0	0	15
212	PKC3020	Petrochemical Technology - I	DC	3	12	0	0	12
213	PKC3040	Transport Phenomena	DC	4	12	0	0	12
214	PKC3060	Process Engineering and Equipment Design	DC	4	12	0	0	12
215	PKC3080	Natural Gas Processing	DC	4	12	0	0	12
216	PKC3920	Reaction Engg. Laboratory	DC	2	12	0	0	12
217	PKC3940	Process Equipment Design	DC	2	12	0	0	12
218	PKC4020	Process Utilities and Energy Management	DC	4	16	1	0	17
219	PKC4820	Industrial Visit/Training	DC	1	16	1	0	17
220	PKC4920	Instrumentation and Process Control Laboratory	DC	2	16	1	0	17
221	PKC4940	Polymer Laboratory	DC	2	16	1	0	17
222	PKC4980	Project Phase II	DC	3	16	1	0	17
223	PKE2510	Introduction To Petroleum Engg.	DE	4	15	0	0	15
224	PKE3510	Heterogeneous Reaction Engineering	DE	4	12	0	0	12

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225	PKE4510	Process Instrumentation	DE	4	16	1	0	17
226	PKE4540	Fertilizer Technology	DE	4	16	1	0	17
227	PKH2060	Health, Safety and Environment management	HM	3	15	0	0	15
228	EL490B	Project Phase-II	DC	4	0	1	0	1
229	ELC4810	Colloquium	DC	2	0	1	0	1
230	CEC4910	Cad Lab-II	DC	2	0	0	2	2
231	CHO4260	MATLAB for Scientist & Engineers	OE	4	0	0	1	1