

Curriculum
for
B.Sc. Electronics Engineering
Technology
(2022)



Nazeer Hussain University
Karachi

Semester-wise Scheme of Studies

Semester-wise scheme of studies for the Bachelor of Electronics Engineering Technology program spanning 4 years, spread over 8 semesters, and encompassing 129 credit hours is presented below:

SEMESTER I				
Suggested Course Codes	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)	Contact Hrs. (Th+Lab)
ECH-111	Communication Skills	Humanities	3+0	3+0
ECN -111	Calculus and Analytical Geometry	Natural Sciences	2+0	2+0
ECH-112 ECH-113	Islamic Studies / Social Ethics	Humanities	3+0	3+0
ECN-112	Applied Physics	Natural Sciences	3+1	3+3
ECC-111	Information and Communication Technology	Computing	1+1	1+3
ECT-111	Workshop Practices	Foundation	0+1	0+3
Subtotal			12+3=15	12+9=21
SEMESTER-II				
ECT-121	Linear Circuit Analysis	Foundation	2+1	2+3
ECN-121	Differential Equations	Natural Sciences	2+0	2+0
ECH-121	Pakistan Studies	Humanities	3+0	3+0
ECT-122	Solid State Electronics	Foundation	2+0	2+0
ECC-121	Computer Programing	Computing	0+1	0+3
ECM-121	Management Sciences Elective-I	Management Sciences	3+0	3+0
ECS-121	Social Sciences Elective-I	Social Sciences	3+0	3+0
Subtotal			15+2=17	15+6=21

SEMESTER-III				
Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Contact Hrs. (Th+Lab)
ECT-211	Electrical Network Analysis	Foundation	2+1	2+3
ECN-211	Linear Algebra	Natural Sciences	2+0	2+0
ECT-212	Digital Electronics	Foundation	1+1	1+3
ECS-212	Social Sciences Elective-II	Social Sciences	3+0	3+0
ECC-211	Technical Drawing	Computing	0+1	0+3
ECT-213	Electronic Devices	Foundation	2+1	2+3
ECI-211	IDTE-I	IDTE	2+1	2+3
Subtotal			12+5=17	12+15=27
SEMESTER-IV				
ECT-221	Electrical Machines	Breadth	2+1	2+3
ECH-221	Technical Report Writing	Humanities	3+0	3+0
ECT-222	Instrumentations and Measurements	Breadth	2+1	2+3
ECT-223	Amplifiers and Oscillators	Breadth	2+1	2+3
ECT-224	Microprocessors and Microcontrollers	Breadth	2+1	2+3
ECT-225	Signal and Systems	Foundation	0+1	0+3
Subtotal			11+5 =16	11+15=26
SEMESTER-V				
Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Contact Hrs. (Th+Lab)
ECT-311	Communication Systems	Breadth	1+1	1+3
ECT-312	Control Systems	Breadth	2+1	2+3
ECN-311	Numerical Analysis (Elective-1)	Natural Sciences	3+1	3+3
ECM-311	Management Sciences Elective-II	Management Sciences	3+0	3+0
ECT-312	Industrial Electronics	Depth	2+1	2+3
ECT-313	Project-I	Project	0+3	0+9
Subtotal			11+7 =18	11+21=32

SEMESTER-VI				
ECT-321	Power Electronics	Breadth	2+1	2+3
ECT-322	Industrial Automation	Depth	1+1	1+3
ECT-323	VLSI Technology	Depth	2+1	2+3
ECT-324	Elective-I	Depth	1+0	1+0
ECT-325	Elective-II	Depth	1+0	1+0
ECS-321	Social Sciences Elective-III	Social Sciences	3+0	3+0
ECT-326	Project-II	Project	0+3	0+9
	Subtotal		10+6 =16	10+18=28

SEMESTER-VII				
Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Contact Hrs. (Th+Lab)
ECT-411	Supervised Industrial Training (Optional)	Electronics Engineering Technology Domain Industrial Training	16	40 (per Week)
ECM-411	Management Sciences Elective-III	Management Sciences	2+0	2+0
ECT-412	Elective-III	Depth	2+1	2+3
ECT-413	Elective-IV	Depth	2+1	2+3
ECT-414	Elective-V	Depth	2+1	2+3
ECT-415	Electronics Troubleshooting and Testing	Depth	0+2	0+6
ECI-411	IDTE-II	IDTE	2+1	2+3
	Subtotal		10+6=16 6	10+18=28 /40



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SEMESTER- VIII				
ECT-421	Supervised Industrial Training(Compulsory)	Electronics Engineering TechnologyDomain Industrial Training	16	40 (per Week)
	Subtotal		0+16= 16	0+40= 40
Total Credit Hours & Contact Hours in Four Years (When SIT conducted in both 7 th and 8 th Semesters)			147	263
Theory vs Practical with respect to Contact Hours			Theory	(35.85%)
			Practical	(64.14%)
Total Credit Hours & Contact Hours in Four Years (When optional courses conducted instead of SIT in 7 th Semester)			131	223
Theory vs Practical with respect to Contact Hours			Theory	(37.00%)
			Practical	(63%)