

**Revised Curriculum of B.Sc. Engineering Honours Degree Programme**  
**Electronic & Telecommunication Engineering Specialization**  
**Department of Electronic & Telecommunication Engineering**

Module Code	Module Name	Category	Lectures hrs/week	Lab/ Assignments hrs/weeks	Credits		Norm		
					GPA	NGPA	GPA	NGPA	Total
Semester 1									
MA1012	Mathematics	C	3.0	1/1	3.0				
CS1032	Programming Fundamentals	C	2.0	3/1	3.0				
ME1032	Mechanics	C	2.0	3/4	2.0				
MT1022	Properties of Materials	C	2.0	3/4	2.0				
CE1022	Fluid Mechanics	C	2.0	3/4	2.0				
EE1012	Electrical Engineering	C	2.0	3/4	2.0				
EL1012	Language Skill Enhancement I	C	-	3/1	1.0		15.0	0.0	15.0
Total for Semester 1					15.0	0.0	15.0	0.0	15.0
Term A									
EL1022	Language Skill Enhancement II	C	-	6/1	1.0				
MN1012	Engineering in Context	C	2.0	-		1.0			
EN1952	Engineering Design	C	2.0	3/1		1.5			
EN1962	Engineering Skill Development	C	1.0	6/1		1.5			
DE1xx2	Non-Technical Elective I <sup>+</sup>	E			2.0		2.0	0.0	2.0
Total for Term A					3.0	4.0	3.0	4.0	7.0
Semester 2									
MA1022	Methods of Mathematics	C	3.0	1/1	3.0				
EL2952	Language Skill Enhancement III	C	2.0	-		2.0			
EN1012	Electronic Devices and Circuits	C	2.0	-	2.0				
EN2042	Electronic Product Manufacturing Processes	C	2.0	-	2.0				
EN1052	Introduction to Telecommunications	C	2.0	-	2.0				
EN1102	Introduction to Computer Systems	C	2.0	-	2.0				
EN1092	Laboratory Practice	C	-	6/1	2.0				
EN2972	Communication Skills	C	1.0	-		1.0	13.0	3.0	16.0
Total for Semester 2					13.0	3.0	13.0	3.0	16.0

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Semester 3									
MA2012	Differential Equations	C	2.0	-	2.0		16.5	0.0	16.5
MA2022	Calculus	C	2.0	-	2.0				
EN2012	Analog Electronics	C	2.0	3/2	2.5				
EN2022	Digital Electronics	C	2.0	3/2	2.5				
EN2052	Communication Systems	C	2.0	3/2	2.5				
EN2062	Signals and Systems	C	2.0	3/2	2.5				
EE2092	Theory of Electricity	C	2.0	3/2	2.5		2.5	0.0	2.5
EN2452	Computer Organization	E	2.0	3/2	2.5				
EN2532	Robotics Design and Competition	E	2.0	3/2	2.5				
ME1822	Basic Engineering Thermodynamics	E	1.5	3/2	2.0		2.0	0.0	2.0
ME2122	Engineering Drawing and Computer Aided Modeling	E	2.0	3/1	3.0				
CE1812	Mechanics of Materials	E	2.0	-	2.0				
Total for Semester 3					28.5	0.0	21.0	0.0	21.0
Semester 4									
MA2032	Linear Algebra	C	2.0	-	2.0		14.0	2.0	16.0
MA2042	Discrete Mathematics	C	2.0	-	2.0				
EN3022	Electronic Design and Realization	C	2.0	3/2	2.5				
EN2072	Communications I	C	2.0	3/2	2.5				
EN2082	Electromagnetics	C	2.0	3/2	2.5				
EN2142	Electronic Control Systems	C	2.0	3/2	2.5				
EN2962	Presentation Skills	C	1.0	-		1.0			
EN2902	Field Visit	C				1.0			
CS2022	Data Structures and Algorithms	E	2.0	3/2	2.5		2.5	0.0	2.5
CS2832	Modular Software Development	E	1.0	6/1	3.0				
CS2042	Operating Systems	E	2.0	3/2	2.5				
EN2542	Introduction to Biomedical Engineering	E	2.0	-	2.0		2.0	0.0	2.0
EE2022	Electrical Machines & Drives I	E	2.0	-	2.0				
EE2062	Electrical Installation I	E	2.0	-	2.0				
Total for Semester 4					28.0	2.0	18.5	2.0	20.5

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Semester 5									
EN3012	Analog Circuit Design	C	2.0	3/2	2.5		13.0	0.0	13.0
EN3052	Communications II	C	2.0	3/2	2.5				
EN3322	Digital Signal Processing	C	2.0	3/2	2.5				
EN3542	Digital Systems Design	C	2.0	3/2	2.5				
CS3022	Computer Networks	C	2.0	3/1	3.0				
EN3312	Antennas and Propagation	E	2.0	3/2	2.5		5.0	0.0	5.0
EN3532	Electronic Instrumentation	E	2.0	3/2	2.5				
EN3552	Fundamentals of Machine Vision & Image Processing	E	2.0	3/2	2.5				
EN3562	Robotics	E	2.0	3/2	2.5				
EN3572	Biomedical Signal Processing	E	2.0	3/2	2.5				
MA3012	Applied Statistics	E	2.0	-	2.0		2.0	0.0	2.0
MA3022	Numerical Methods	E	2.0	-	2.0				
MN3042	Business Economics & Financial Accounting	E	3.0	-	3.0		3.0	0.0	3.0
MN3052	Industrial Management & Marketing	E	3.0	-	3.0				
Total for Semester 5					35.5	0.0	23.0	0.0	23.0
Term B & Semester 6									
EN3992	Industrial Training	C	-	-		6.0	0.0	6.0	6.0
Total for Term B & Semester 6					0.0	6.0	0.0	6.0	6.0

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					GPA	NGPA	GPA	NGPA	Total
Semester 7									
EN4012	Advanced Electronics	C	2.0	3/2	2.5		7.5	0.0	7.5
EN4052	Communication III	C	2.0	3/2	2.5				
EN4202	Project***	C			2.5				
EN4212	Power Electronics	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4222	Electronic Manufacturing Systems	E	2.0	3/2	2.5				
EN4232	Industrial Electronics	E	2.0	3/2	2.5				
EN4312	Telecommunication Core Networks	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4322	Optical Fiber Communications	E	2.0	3/2	2.5				
EN4332	Microwave Engineering	E	2.0	3/2	2.5				
CS3612	Intelligent Systems	E	2.0	3/2	2.5		2.0	0.0	2.0
EN4532	Advance Digital System Laboratory	E	1.0	3/1	2.0				
EN4542	Medical Electronics and Instrumentation	E	2.0	3/2	2.5				
MA4022	Operational Research	E	3.0	-	3.0		3.0	0.0	3.0
MA4042	Neural Network and Fuzzy Logic	E	3.0	-	3.0				
MN 3042	Business Economics & Financial Accounting	E	3.0	-	3.0		2.0	0.0	2.0
MN 3052	Industrial Management & Marketing	E	3.0	-	3.0				
MN 4062	Organizational Behavior and Management	E	2.0	-	2.0				
MN4132	Consumer and Industrial Marketing	E	2.0	-	2.0				
MN4122	Human Resource Management and Industrial Relations*	E	2.0	-	2.0				
MN4042	Technology Management*	E	2.0	-	2.0		2.0	0.0	2.0
MN4022	Engineering Economics*	E	2.0	-	2.0				
EN4922	Research Project**	O			2.5		0.0	0.0	0.0
EN4932	Technical & Scientific Writing	O			-	1.0			
Total for Semester 7					54.0	1.0	19.5	0.0	19.5

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					GPA	NGPA	GPA	NGPA	Total
Term C									
EN4202	Project***	C	-	-	2.0		2.0	0.0	2.0
DE3xx2	Non-Technical Elective II <sup>+</sup>	E			2.0		2.0	0.0	2.0
Total for Term C					4.0	0.0	4.0	0.0	4.0
Semester 8									
EN4202	Project***	C	-	-	5.5		5.5	0.0	5.5
EN4242	Consumer Electronics	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4252	Industrial Motor Control	E	2.0	3/2	2.5				
EN4262	Automobile Electronics	E	2.0	3/2	2.5				
EN4272	Agricultural Electronics	E	2.0	3/2	2.5				
EN4282	Electronic Applications in Renewable Energy	E	2.0	3/2	2.5				
EN4292	Industrial Automation	E	2.0	3/2	2.5				
EN4342	Broadcast Technologies	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4352	Radar and Navigation	E	2.0	3/2	2.5				
EN4362	Microwave Communications	E	2.0	3/2	2.5				
EN4372	Teletraffic Theory and Switching	E	2.0	3/2	2.5				
EN4382	Wireless and Mobile Communications	E	2.0	3/2	2.5				
EN4392	Information Theory	E	2.0	3/2	2.5				
EN4402	Mobile Computing	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4552	Nanotechnology for ICT	E	2.0	3/2	2.5		2.5	0.0	2.5
EN4562	Autonomous Systems	E	2.0	3/2	2.5				
EN4572	Pattern Recognition and Machine Intelligence	E	2.0	3/2	2.5				
EN4582	Advances in Machine Vision	E	2.0	3/2	2.5				
EN4592	Medical Imaging and Image Processing	E	2.0	3/2	2.5				

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					GPA	NGPA	GPA	NGPA	Total	
Semester 8 (Cont..)										
MN4122	Human Resource Management and Industrial Relations*	E	2.0	-	2.0		2.0	0.0	2.0	
MN4042	Technology Management*	E	2.0	-	2.0					
MN4082	Small Business Management and Entrepreneurship	E	2.0	-	2.0					
MN4022	Engineering Economics*	E	2.0	-	2.0					
MN4092	Management Skills Development	E	2.0	-	2.0					
MN4112	Production and Operations Management	E	2.0	-	2.0					
MA4012	Linear Models and Multivariate Statistics	E	3.0	-	3.0		3.0	0.0	3.0	
MA4032	Time Series and Stochastic Processes	E	3.0	-	3.0					
EN4922	Research Project**	O			2.5		0.0	0.0	0.0	
Total for Semester 8					68.0	0.0	18.0	0.0	18.0	
Total for the Programme						248.5	15.0	135.0	15.0	150.0

+ - Weekly load of lectures and lab/Assignment hrs vary among different Non-technical modules.

\* - Offered in both Semester 7 & Semester 8

\*\* - A total of 5 credits for Research Project over Semester 7 and Semester 8.

\*\*\* - A total of 10 credits for Project over Semester 7, Term C and Semester 8.

**Modules Offered to Other Fields of Specialization**

Module Code	Module Name	Category	Lectures hrs/week	Lab/ Assignments hrs/weeks	Credits	
					GPA	NGPA
Semester 2						
EN1802	Basic Electronics	-	2.0	3/4	2.0	
Semester 3						
EN2852	Applied Electronics	-	1.5	3/2	2.0	