

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**B.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING**

**I YEAR COURSE STRUCTURE**

<b>Code</b>	<b>Subject</b>	<b>L</b>	<b>T/P/D</b>	<b>C</b>
51001	English	2	-	4
51002	Mathematics-1	3	1	6
51008	Mathematical Methods	3	1	6
51004	Engineering Physics	2	1	4
51005	Engineering Chemistry	2	-	4
51006	Computer Programming & Data Structures	3*	-	6
51007	Engineering Drawing	2	3	4
51612	Computer Programming Lab.	-	3	4
51613	Engineering Physics & Engineering Chemistry Lab	-	3	4
51614	English Language Communication Skills Lab.	-	3	4
51615	Engineering Workshop/ IT Workshop	-	3	4
	<b>Total</b>	<b>17</b>	<b>18</b>	<b>50</b>

**II YEAR I SEMESTER COURSE STRUCTURE**

<b>Code</b>	<b>Subject</b>	<b>L</b>	<b>T/P/D</b>	<b>C</b>
53007	Mathematics-II	3	1	3
53019	Probability Theory & Stochastic Processes	3	1	3
53013	Environmental Studies	3	1	3
53020	Electric Circuits	4	1	4
53009	Electronic Devices ^Circuits	4		4
53021	Signals & Systems	4	1	4
53606	Electronic Devices & Circuits Lab		3	2
53607	Basic Simulation Lab.		3	0
	<b>Total</b>	<b>21</b>	<b>11</b>	<b>25</b>

**II YEAR II SEMESTER COURSE STRUCTURE**

<b>Code</b>	<b>Subject</b>	<b>L</b>	<b>T/P/D</b>	<b>C</b>
54019	Principles of Electrical Engineering	3	1	3
54020	Electronic Circuit Analysis	4		4
54021	Pulse & Digital Circuits	4	1	4
54010	Switching Theory & Logic Design	4	1	4
54011	Electromagnetic Theory & Transmission Lines	4	1	4
54006	Electrical Engineering Lab.		3	2
54607	Electronic Circuit Analysis Lab.		3	2
54608	Pulse & Digital Circuits Lab.		3	2
	<b>Total</b>	<b>19</b>	<b>13</b>	<b>25</b>

**III YEAR I SEMESTER COURSE STRUCTURE**

Code	Subject	L	T/P/D	C
55012	Control Systems	4	-	4
55021	Computer Organization	4	1	4
55022	Antennas & Wave Propagation	3	1	3
55023	Electronic Measurements & Instrumentation	4	1	4
55024	Analog Communications	3	1	3
55009	IC Applications	3	1	3
55606	Analog Communications Lab.	-	3	2
55607	IC Applications Lab.	-	3	2
	<b>Total</b>	<b>21</b>	<b>11</b>	<b>25</b>

**III YEAR II SEMESTER COURSE STRUCTURE**

Code	Subject	L	T/P/D	C
56023	Managerial Economics & Financial Analysis	4	-	4
56024	<b>OPEN ELECTIVE</b>	4	1	4
56025	Operating Systems Object Oriented Programming			
56014	Nano technology			
56026	Digital Communications	3	1	3
56012	Microprocessors & Microcontrollers	4	1	4
56027	Digital Signal Processing	4	1	4
56606	Microprocessors & Microcontrollers Lab.	-	3	2
56607	Digital Signal Processing Lab.	-	3	2
56608	Advanced English Communication Skills Lab.	-	3	2
	<b>Total</b>	<b>19</b>	<b>13</b>	<b>25</b>

**IV YEAR I SEMESTER COURSE STRUCTURE**

Code	Subject	L	T/P/D	C
57034	Management Science	3	1	3
57035	VLSI Design	4	-	4
57036	Microwave Engineering	3	1	3
57037	Computer Networks	4	1	4
57038	<b>ELECTIVE-I</b>	3	1	3
57039	EMKEMC			
57040	DSP Processors & Architectures Telecommunication			
57041	Switching Systems Digital Image Processing			
57042	<b>ELECTIVE-II</b>	4	1	4
57043	Optical Communications Embedded Systems			
57044	Television Engineering Multimedia and Signal			
57045	coding			
57607	e-CAD & VLSI Lab.		3	2
57608	Microwave Engg. & Digital Comms. Lab.		3	2
	<b>Total</b>	<b>21</b>	<b>11</b>	<b>25</b>

**IV YEAR II SEMESTER COURSE STRUCTURE**

Code	Subject	L	T/P/D	C
58024	<b>ELECTIVE-III</b>	3	1	3
58025	Cellular & Mobile Communications			
58026	Satellite Communications			
58016	Biomedical Instrumentation			
	Artificial Neural Networks			
58027	<b>ELECTIVE-IV</b>	3	1	3
58028	Internetworking Radar Systems			
58029	Spread Spectrum Communications			
58030	Network Security			
58031	<b>ELECTIVE-V</b>	3	1	3
58032	RF Circuit Design			
58033	Wireless Communications & Networks Digital			
58034	Design through Verilog HDL Pattern Recognition			
58613	Industry Oriented Mini Project	-	-	2
58614	Seminar	-	6	2
58615	Major Project	-	15	10
58616	Comprehensive Viva	-	-	2
	<b>Total</b>	<b>9</b>	<b>24</b>	<b>25</b>

**Note:** All End Examinations (Theory and Practical) are of three hours duration.

**T-Tutorial P - Practical D – Drawing L - Theory C - Credits**