Jawaharlal Nehru Technological University Anantapur

(Established by Govt. of A.P., Act. No. 30 of 2008)

Ananthapuramu–515 002 (A.P) India

Four Year B.Tech.

Course Structure and Syllabi under R20 Regulations

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
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ANANTAPUR – 515 002 (A.P) INDIA
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Semester-0

Induction Program: 3 weeks
(Common for All Branches of Engineering)

S.No	Course Name	Category	L-T-P-C
1	Physical Activities -- Sports, Yoga and Meditation, Plantation	MC	0-0-6-0
2	Career Counselling	MC	2-0-2-0
3	Orientation to all branches -- career options, tools, etc.	MC	3-0-0-0
4	Orientation on admitted Branch -- corresponding labs, tools and platforms	EC	2-0-3-0
5	Proficiency Modules & Productivity Tools	ES	2-1-2-0
6	Assessment on basic aptitude and mathematical skills	MC	2-0-3-0
7	Remedial Training in Foundation Courses	MC	2-1-2-0
8	Human Values & Professional Ethics	MC	3-0-0-0
9	Communication Skills -- focus on Listening, Speaking, Reading, Writing skills	BS	2-1-2-0
10	Concepts of Programming	ES	2-0-2-0

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Electronics & Communication Engineering

	Semester - 1 (Theory - 5, Lab - 4)				
S.No	**Course No**	**Course Name**	**Category**	**L-T-P/D**	**Credits**
1.	20A54101	Linear Algebra and Calculus	BS	3-0-0	3
2.	20A56201T	Applied Physics	BS	3-0-0	3
3.	20A52101T	Communicative English	HS	3-0-0	3
4.	20A02102T	Fundamentals of Electrical Circuits	ES	3-0-0	3
5.	20A03101T	Engineering Drawing	ES	1-0-0/2	2
6.	20A03101P	Engineering Graphics Lab	ES	0-0-2	1
7.	20A56201P	Applied Physics Lab	BS	0-0-3	1.5
8.	20A52101P	Communicative English Lab	HS	0-0-3	1.5
9.	20A02102P	Fundamentals of Electrical Circuits Lab	ES	0-0-2	1.5
				Total	**19.5**

	Semester – 2 (Theory – 5, Lab – 5)				
S.No	**Course No**	**Course Name**	**Category**	**L-T-P**	**Credits**
1.	20A54201	Differential Equations and Vector Calculus	BS	3-0-0	3
2.	20A51101T	Chemistry	BS	3-0-0	3
3.	20A05201T	C-Programming & Data Structures	ES	3-0-0	3
4.	20A04101T	Electronic Devices & Circuits	ES	3-0-0	3
5.	20A03202	Engineering Workshop	LC	0-0-3	1.5
6.	20A05202	IT Workshop	LC	0-0-3	1.5
7.	20A05201P	C-Programming & Data Structures Lab	ES	0-0-3	1.5
8.	20A51101P	Chemistry Lab	BS	0-0-3	1.5
9.	20A04101P	Electronic Devices & Circuits Lab	ES	0-0-3	1.5
				Total	**19.5**

S.No.	Course Code	Course Name	Category	Hours per week			Credits
		Semester-III		L	T	P	
1.	20A54302	Complex Variables and Transforms	BS	3	0	0	3
2.	20A04301T	Signals and Systems	PC	3	0	0	3
3.	20A02303T	Electrical Engineering	ES	3	0	0	3
4.	20A04302T	Analog Circuits	PC	3	0	0	3
5.	20A52301 20A52302 20A52303	**Humanities Elective– I** Managerial Economics & Financial Analysis Organizational Behaviour Business Environment	HS	3	0	0	3
6.	20A04301P	Simulation Lab	PC	0	0	3	1.5
7.	20A02303P	Electrical Engineering Lab	ES	0	0	3	1.5
8.	20A04302P	Analog Circuits Lab	PC	0	0	3	1.5
9.	20A05305	**Skill oriented course – I** Application Development with Python	SC	1	0	2	2
10.	20A52201	Universal Human Values	MC	3	0	0	3
11.	20A99301	**NSS/NCC/NSO Activities**	MC	0	0	2	0
						Total	**24.5**

S.No.	Course Code	Course Name	Category	Hours per week			Credits
		Semester-IV		L	T	P	
1.	20A54403	Probability Theory & Stochastic Processes	BS	3	0	0	3
2.	20A04303T	Digital Logic Design	PC	3	0	0	3
3.	20A04401	EM Waves and Transmission Lines	PC	3	0	0	3
4.	20A04402T	Communication Systems	PC	3	0	0	3
5.	20A04403T	Linear and Digital IC Applications	PC	3	0	0	3
6.	20A04303P	Digital Logic Design Lab	PC	0	0	3	1.5
7.	20A04402P	Communication Systems Lab	PC	0	0	3	1.5
8.	20A04403P	Linear and Digital IC Applications Lab	PC	0	0	3	1.5
9.	20A52401	**Skill Oriented Course –II** Soft Skills	SC	1	0	2	2
10.	20A99401	**Mandatory Non-credit Course** Design Thinking for Innovation	MC	2	1	0	0
						Total	**21.5**
	Community Service Internship (Mandatory) for 6 weeks duration during summer vacation						

Note:
1. Eligible and interested students can register either for Honors or for a Minor in IV Semester as per the guidelines issued by the University
2. Students shall register for NCC/NSS/NSO activities and will be required to participate in an activity for two hours in a week during third semester.
3. Lateral entry students shall undergo a bridge course in Mathematics during third semester