



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

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

Kakinada – 533003, Andhra Pradesh, India, www.jntuk.edu.in

PROPOSED COURSE STRUCTURE – B.TECH. - R23 (Applicable from the academic year 2023-24 onwards)

INDUCTION PROGRAMME

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

B.Tech. – I Year I Semester (for Group-A Branches)

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Communicative English	2	0	0	2
2	BS&H	Engineering Physics	3	0	0	3
4	BS&H	Linear Algebra & Calculus	3	0	0	3
5	Engineering Science	Basic Civil & Mechanical Engineering	3	0	0	3
6	Engineering Science	IT Workshop	0	0	2	1
7	Engineering Science	Engineering Graphics	2	0	2	3
8	BS&H	Communicative English Lab	0	0	2	1
9	BS&H	Engineering Physics Lab	0	0	2	1
10	Engineering Science	Engineering Workshop	0	0	3	1.5
11	Audit	Health and wellness, Yoga and sports	-	-	-	0.5
Total			13	00	11	19

B.Tech. – I Year I Semester (for Group-B Branches)

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Communicative English	2	0	0	2
2	BS&H	Chemistry	3	0	0	3
4	BS&H	Linear Algebra & Calculus	3	0	0	3
5	Engineering Science	Basic Civil & Mechanical Engineering	3	0	0	3
6	Engineering Science	IT Workshop	0	0	2	1
7	Engineering Science	Introduction to Programming	3	0	0	3
8	BS&H	Communicative English Lab	0	0	2	1
9	BS&H	Chemistry Lab	0	0	2	1
10	Engineering Science	Computer Programming Lab	0	0	3	1.5
11	Audit	Health and wellness, Yoga and sports	-	-	-	0.5
Total			13	00	11	19

B.Tech. – I Year II Semester (for Group-A Branches)

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Chemistry	3	0	0	3
2	BS & H	Differential Equations & Vector Calculus	3	0	0	3
3	Engineering Science	Basic Electrical and Electronics Engineering	3	0	0	3
4	Engineering Science	Introduction to Programming	3	0	0	3
5	Professional Core	Program core (Branch specific)	3	0	0	3
6	BS&H	Chemistry Lab	0	0	2	1
7	Engineering Science	Electrical and Electronics Engineering Workshop	0	0	3	1.5
8	Engineering Science	Computer Programming Lab	0	0	3	1.5
9	Professional Core	Program Core Lab (Branch specific)	0	0	3	1.5
10	Audit	NSS/NCC/Scouts & Guides/Community Service	-	-	-	0.5
Total			14	0	11	21

B.Tech. – I Year II Semester (for Group-B Branches)

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Engineering Physics	3	0	0	3
2	BS & H	Differential Equations & Vector Calculus	3	0	0	3
3	Engineering Science	Basic Electrical and Electronics Engineering	3	0	0	3
4	Engineering Science	Engineering Graphics	2	0	2	3
5	Professional Core	Program core (Branch specific)	3	0	0	3
6	BS&H	Engineering Physics Lab	0	0	2	1
7	Engineering Science	Electrical and Electronics Engineering Workshop	0	0	3	1.5
8	Engineering Science	Engineering Workshop	0	0	3	1.5
9	Professional Core	Program Core Lab (Branch specific)	0	0	3	1.5
10	Audit	NSS/NCC/Scouts & Guides/Community Service	-	-	-	0.5
Total			14	0	11	21

B.Tech. – II Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	BS&H	Engineering Mathematics (Branch specific)	3	0	0	3
2	BS&H	Universal Human Values	2	1	0	3
3	Engineering Science		2	0	0	2
4	Professional Core		3	0	0	3
5	Professional Core		3	0	0	3
6	Engineering Science		0	0	2	1
7	Professional Core		0	0	3	1.5
8	Professional Core		0	0	3	1.5
9	Skill enhancement course		0	1	2	2
10	Audit (Environmental Science)		2	0	0	-
Total			15	2	10	20

B.Tech. – II Year II Semester

S.No.	Category	Title	L	T	P	Credits
1	Management Course - I		2	0	0	2
2	Engineering Science		3	0	0	3
3	Professional Core		3	0	0	3
4	Professional Core		3	0	0	3
5	Professional Core		3	0	0	3
6	Professional Core		0	0	2	1
7	Professional Core		0	0	3	1.5
8	Professional Core		0	0	3	1.5
9	Skill enhancement course		0	1	2	2
10	Design Thinking & Innovation		1	0	2	2
Total			15	1	12	22
Mandatory Community Service Project Internship of 08 weeks duration during summer vacation						

B.Tech. – III Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Professional Elective - I		2	0	0	2
4	Open Elective - I		3	0	0	3
5	Open Elective - II		3	0	0	3
6	Professional Core		0	0	3	1.5
7	Professional Core		0	0	3	1.5
8	Skill enhancement course		0	1	2	2
9	Tinkering Lab		0	0	2	1
10	Evaluation of Community Service Internship		-	-	-	2
Total			14	1	10	22

B.Tech. – III Year II Semester

S.No.	Category	Title	L	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Professional Core		3	0	0	3
4	Professional Elective - II		3	0	0	3
5	Professional Elective - III		2	0	0	2
6	Open Elective - III		3	0	0	3
7	Professional Core		0	0	2	1
8	Professional Core		0	0	2	1
9	Skill enhancement course		0	1	2	2
10	Technical Paper Writing & IPR		2	0	0	-
Total			19	1	06	21
Mandatory Industry Internship of 08 weeks duration during summer vacation						

B.Tech. – IV Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Management Course - II		2	0	0	2
4	Professional Elective - IV		3	0	0	3
5	Professional Elective - V		3	0	0	3
6	Open Elective - IV		3	0	0	3
7	Professional Core		0	0	2	1
8	Professional Core		0	0	2	1
9	Skill enhancement course		0	1	2	2
10	Audit (Constitution of India)		2	0	0	-
11	Internship	Evaluation of Industry Internship	-	-	-	2
Total			19	1	06	23

B.Tech. – IV Year II Semester

S.No.	Category	Title	L	T	P	Credits
1	Internship & Project Work	Full semester Internship & project Work	0	0	24	12