

COURSE STRUCTURE AND SYLLABUS

For

B.Tech.

**Department of
Electronics and Communication Engineering**

(Applicable for batches admitted 2023-24 onwards)



PRAGATI ENGINEERING COLLEGE

(An Autonomous Institution)

ADB Road, Surampalem, Kakinada District, A.P.-533 437

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada)

(Recognized by UGC under sections 2 (f) and 12 (b) of UGC act, 1956)

COURSE STRUCTURE

INDUCTION PROGRAMME

S.No.	Course Name	Category	L	T	P	Credits
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

I YEAR – I SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BE101T	Communicative English	2	0	0	2
2	BS&H	23BM101T	Linear Algebra and Calculus	3	0	0	3
3	BS&H	23BC102T	Chemistry	3	0	0	3
4	Engineering Science	23CM101T	Basic Civil and Mechanical Engineering	3	0	0	3
5	Engineering Science	23CS101T	Introduction to Programming	3	0	0	3
6	Engineering Science	23ME102P	Engineering Workshop	0	0	3	1.5
7	BS&H	23BE101P	Communicative English Laboratory	0	0	2	1
8	Engineering Science	23CS101P	Computer Programming Laboratory	0	0	3	1.5
9	BS&H	23BC102P	Chemistry Laboratory	0	0	2	1
10	BS&H	23MH101P	Health and wellness, Yoga and sports	0	0	1	0.5
Total Credits							19.5

I YEAR – II SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BP201T	Engineering Physics	3	0	0	3
2	BS&H	23BM201T	Differential equations and Vector Calculus	3	0	0	3
3	Engineering Science	23EE201T	Basic Electrical and Electronics Engineering	3	0	0	3
4	Engineering Science	23ME201T	Engineering Graphics	1	0	4	3
5	Professional Core	23EC201T	Network Analysis	3	0	0	3
6	BS&H	23BP201P	Engineering Physics Laboratory	0	0	2	1
7	Engineering Science	23EE201P	Electrical and Electronics Engineering Workshop	0	0	3	1.5
8	Professional Core	23EC201P	Network Analysis and Simulation Laboratory	0	0	3	1.5
9	Engineering Science	23IT201P	IT Workshop	0	0	2	1
10	BS&H	23MH202P	NSS/NCC/Scouts and Guides/Community Service	0	0	1	0.5
Total Credits							20.5

II YEAR – I SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS		Probability theory and stochastic process	3	0	0	3
2	HSMC		Universal Human Values– Understanding Harmony and Ethical Human Conduct	2	1	0	3
3	Engineering Science		Signals and Systems	3	0	0	3
4	Professional Core		Electronic Devices and Circuits	3	0	0	3
5	Professional Core		Switching Theory and Logic Design	3	0	0	3
6	Professional Core		Electronic Devices and Circuits Laboratory	0	0	3	1.5
7	Professional Core		Switching Theory and Logic Design Laboratory	0	0	3	1.5
8	Skill Enhancement Course		Data Structures using Python	0	1	2	2
9	Audit Course		Environmental Science	2	0	0	-
Total Credits							20.5

II YEAR – II SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	Management Course- I		Managerial Economics and Financial Analysis	2	0	0	2
2	Engineering Science		Linear Control Systems	3	0	0	3
3	Professional Core		Electromagnetic Waves and Transmission Lines	3	0	0	3
4	Professional Core		Electronic Circuit Analysis	3	0	0	3
5	Professional Core		Analog Communications	3	0	0	3
6	Professional Core		Signals and Systems Laboratory	0	0	3	1.5
7	Professional Core		Electronic Circuit Analysis Laboratory	0	0	3	1.5
8	Skill Enhancement course		Soft Skills	0	1	2	2
9	Engineering Science		Design Thinking & Innovation	1	0	2	2
Total Credits							21