

COURSE STRUCTURE AND SYLLABUS

**For
B.Tech.**

**Department of
CSE (Data Science)**

(Applicable for batches admitted from 2026-27 onwards)



PRAGATI UNIVERSITY

(Established under Andhra Pradesh State Private Universities (Establishment and regulations) Act. 2016)

Surampalem, Kakinada District, Andhra Pradesh, India -533437

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

COURSE STRUCTURE

B.Tech I Year – I Semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	BSC	26BM101T	Linear Algebra and Calculus	3	0	0	3
2	BSC	26BC101T	Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC	26CS101T	C and Data Structures	4	0	0	4
4	ESC	26EC101T	Digital Logic Design	3	0	0	3
5	ESC	26EE102T	Basic Electrical and Electronics Engineering	3	0	0	3
6	BSC	26BC101P	Applied Chemistry for Emerging Technologies Laboratory	0	0	3	1.5
7	ESC	26CS101P	C and Data Structures Laboratory	0	0	3	1.5
8	ESC	26AM101P	AI Tools and Applications	0	1	3	2.5
9	MNC	26HM102P	NSS/NCC	0	0	2	0
Total				16	1	11	21.5

B.Tech I Year – II Semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM	26BE201T	English for Technical Communication	3	0	0	3
2	BSC	26BM201T	Differential Equations and Vector Calculus	3	0	0	3
3	BSC	26BP201T	Physics for Advanced Computing	3	0	0	3
4	ESC	26DS201T	Computational Thinking and Problem Solving using Python	3	0	0	3
5	HSM	26BE201P	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
6	BSC	26BP201P	Physics for Advanced Computing Laboratory	0	0	3	1.5
7	ESC	26DS201P	Computational Thinking and Problem Solving using Python Laboratory	0	0	3	1.5
8	ESC	26IT202P	IT and Basic Electronics Workshop	0	0	3	1.5
9	ESC	26DS202P	Design Thinking and Innovation	0	1	3	2.5
10	MNC	26HM201T	Universal Human Values	2	0	0	0
Total				14	1	15	20.5