

# COURSE STRUCTURE

For

**B.Tech.**

**Department of Civil Engineering**

*(Applicable for batches admitted from 2024-25 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**

<b>S.No.</b>	<b>Course Name</b>	<b>Category</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
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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## Department of Civil Engineering

### I YEAR – I SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BP101T	Engineering Physics	2	0	0	3
2	BS&H	23BM101T	Linear Algebra and Calculus	3	0	0	3
3	Engineering Science	23EE101T	Basic Electrical and Electronics Engineering	3	0	0	3
4	Engineering Science	23ME101T	Engineering Graphics	3	0	0	3
5	Engineering Science	23CS101T	Introduction to Programming	3	0	0	3
6	BS&H	23BP101P	Engineering Physics Laboratory	0	0	3	1
7	Engineering Science	23EE101P	Electrical and Electronics Engineering Workshop	0	0	2	1.5
8	Engineering Science	23CS101P	Computer Programming Laboratory	0	0	3	1.5
9	Engineering Science	23IT101P	IT Workshop	0	0	2	1
10	BS&H	23MH102P	NSS/NCC/Scouts and Guides/Community Service	0	0	1	0.5
<b>Total Credits</b>							<b>20.5</b>

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## Department of Civil Engineering

### I YEAR – II SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BE201T	Communicative English	3	0	0	3
2	BS&H	23BM201T	Differential equations and Vector Calculus	3	0	0	3
3	BS&H	23BC201T	Engineering Chemistry	3	0	0	3
4	Engineering Science	23CM201T	Basic Civil and Mechanical Engineering	1	0	4	3
5	Professional Core	23ME202T	Engineering Mechanics	3	0	0	3
6	Engineering Science	23ME202P	Engineering Workshop	0	0	2	1.5
7	BS&H	23BE201P	Communicative English Laboratory	0	0	3	1
8	Professional Core	23CE201P	Engineering Mechanics and Building practices Laboratory	0	0	3	1.5
9	BS&H	23BC201P	Engineering Chemistry Laboratory	0	0	2	1
10	BS&H	23MH201P	Health and wellness, Yoga and sports	0	0	1	0.5
<b>Total Credits</b>							<b>19.5</b>

### II Year I Sem

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H		Numerical Techniques And Statistical Methods	3	0	0	3
2	HSMC		Universal human values –understanding harmony and Ethical human conduct	2	1	0	3
3	Engineering Science		Surveying	3	0	0	3
4	Professional Core		Strength of Materials	3	0	0	3
5	Professional Core		Fluid Mechanics	3	0	0	3
6	Professional Core		Surveying Laboratory	0	0	3	1.5
7	Professional Core		Strength of Materials Laboratory	0	0	3	1.5
8	Skill Enhancement Course		Building Planning and Drawing	0	1	2	2
<b>Total</b>				<b>14</b>	<b>2</b>	<b>8</b>	<b>20</b>
9	Audit Course		Environmental Science	2	0	0	-

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### 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 / Basic Science		Engineering Geology	3	0	0	3
3	Professional Core		Concrete Technology	3	0	0	3
4	Professional Core		Structural Analysis	3	0	0	3
5	Professional Core		Hydraulics & Hydraulic Machinery	3	0	0	3
6	Professional Core		Concrete Technology Laboratory	0	0	3	1.5
7	Professional Core		Engineering Geology Laboratory	0	0	3	1.5
8	Skill Enhancement course		Remote Sensing & Geographical Information Systems	0	1	2	2
9	Engineering Science		Design Thinking & Innovation	1	0	2	2
			<b>Total</b>	<b>15</b>	<b>1</b>	<b>10</b>	<b>21</b>
10	Mandatory course		Building materials and Construction	3	0	0	-
Mandatory Community Service Project Internship of 08 weeks duration during summer vacation							