

## **Course Structure of B.Tech. Programme With effect from Academic Year 2025-2026**

### **B.Tech. Programme Course Structure**

- i. The Minimum Credit Point requirement for the basic B.Tech. degree shall be 170. However, a department may add extra credit point(s) with 170 for adjusting the courses, if needed.
- ii. The total credit point requirements for the Semester I and Semester II shall be 19 credit points each.

**Semester-wise Course Structure :: (i) Semester – I and Semester – II**

<b><u>SEMESTER – I</u></b> <i>[for Civil Engg., Computer Science &amp; Engg., and Mechanical Engg.]</i>				
<b>Course Code</b>	<b>Courses Name</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Teaching Department(s)</b>
MA-11001	Mathematics – I	3-0-0	3	Mathematics
PH-11001	Physics	3-0-0	3	Physics
CS-11001	Programming and Data Structures	2-0-2	3	Computer Sc. & Engg.
HS-11001	English for Technical Communication	2-0-2	3	Hum. & Soc. Sc.
XX-1100Y	Professional Core 1	3-0-0	3	Respective discipline
CE-12001	Computer Aided Drawing & Graphics	1-0-2	2	Civil Engg.
PH-12001	Physics Laboratory	0-0-2	1	Physics
EA1700P	To be opted from the EAA Basket		1	Dean (Acad) / Dean (SW)
	<b>Total Credits</b>		<b>19</b>	

<b><u>SEMESTER – I</u></b> <i>[for Electrical Engg., Electronics &amp; Communication Engg., and Electronics &amp; Instrumentation Engg.]</i>				
<b>Course Code</b>	<b>Courses Name</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Teaching Department(s)</b>
MA-11001	Mathematics – I	3-0-0	3	Mathematics
CY-11001	Chemistry	3-0-0	3	Chemistry
ME-11001	Engineering Mechanics	2-1-0	3	Mechanical Engg.
XX-1100Y	Professional Core 1	3-0-0	3	Respective discipline
EC- 11001	Electrical and Electronic Technology	3-0-0	3	Electr. & Comm. Engg. (Coordinator)
				Electr. & Comm. Engg.
EC- 12001	Electrical and Electronic Technology Lab.	0-0-2	1	Elec. Engg. (Coordinator)
				Electr. & Comm. Engg.
ME-12001	Workshop Practice	0-0-3	1	Mechanical Engg.
CY-12001	Chemistry Laboratory	0-0-2	1	Chemistry
EA-1700P	To be opted from the EAA Basket		1	Dean (Acad) / Dean (SW)
	<b>Total Credits</b>		<b>19</b>	

<b><u>SEMESTER – II</u></b> <b><i>[for Electrical Engg., Electronics &amp; Communication Engg., and Electronics &amp; Instrumentation Engg.]</i></b>				
Course Code	Courses Name	L-T-P	Credits	Teaching Department(s)
MA-11002	Mathematics – II	3-0-0	3	Mathematics
PH-11002	Physics	3-0-0	3	Physics
CS-11001	Programming and Data Structures	2-0-2	3	Computer Sc. & Engg.
HS-11001	English for Technical Communication	2-0-2	3	Hum. & Soc. Sc.
XX-1100Z	Professional Core 2	3-0-0	3	Respective discipline
CE-12001	Computer Aided Drawing & Graphics	1-0-2	2	Civil Engg.
PH-12001	Physics Laboratory	0-0-2	1	Physics
EA-1700P	To be opted from the EAA Basket		1	Dean (Acad) / Dean (SW)
	<b>Total Credits</b>		<b>19</b>	

<b><u>SEMESTER – II</u></b> <b><i>[for Civil Engg., Computer Science &amp; Engg., and Mechanical Engg.]</i></b>				
Course Code	Courses Name	L-T-P	Credits	Teaching Department(s)
MA 11003	Mathematics – II	3-0-0	3	Mathematics
CY-11002	Chemistry	3-0-0	3	Chemistry
ME-11001	Engineering Mechanics	2-1-0	3	Mechanical Engg.
XX-1100Z	Professional Core 2	3-0-0	3	Respective discipline
EE-11001	Electrical & Electronics Science	3-0-0	3	Elec. Engg. (Coordinator)
				Elec. Engg.
EE12001	Electrical & Electronics Science Lab.	0-0-2	1	Elec. Engg. (Coordinator)
				Elec. Engg.
ME-12002	Workshop Practice	0-0-3	1	Mechanical Engg.
CY12002	Chemistry Laboratory	0-0-2	1	Chemistry
EA1700P	To be opted from the EAA Basket		1	Dean (Acad) / Dean (SW)
	<b>Total Credits</b>		<b>19</b>	

### Extra Academic Activity Basket

EAA Basket ( Codes)	Credits
Intellectual Property Rights	
Professional Culture and Lifestyle in Healthcare	
Personality Development	
Self-Defence ( EA17003)	
Dance and Theatre	
Music	
Foreign Language (German/ Spanish/ etc.)	
Sustainable Living	
Indian Knowledge System	
Indian Language (Sanskrit)	
Entrepreneurship	
Games & Sports	
Arts	
Indian Constitution	
NCC ( EA-17001)	
NSS ( EA-17002)	
Yoga (EA17004)	
Value Education	
Professional Ethics	

***The maximum and the minimum credit for the above courses shall be 1.0 and 0.5, respectively.***

Details of professional Core 1 and professional Core 2  
:

### **Dept. of Civil Engineering**

Professional Core 1: Building Materials and Construction: Code: CE11002  
Professional Core 2 : Engineering Survey : Code CE 11003

### **Dept. of Computer Science & Engineering**

Professional Core 1 : Data Science : Code : CS11002  
Professional Core 2 : Discrete Structure : Code CS11003

### **Dept. of Electronics and Communication Engineering**

Professional Core 1 : Semiconductor Devices and Applications : EC11002  
Professional Core 2 : Fundamentals of Analog and Digital Circuit : EC11003

### **Dept. of Electrical Engineering**

Professional Core 1 : Fundamentals of Electrical Engineering and Practices : EE11002  
Professional Core 2 : Electrical Measurement and Measuring Instruments : EE11003

### **Dept. of Electronics and Instrumentation Engineering**

Professional Core 1: Measurement I : EI11001  
Professional Core 2 : Measurement II: EI11002

### **Dept. of Mechanical Engineering**

Professional Core 1: Fundamentals of Mechanical Engineering: ME11002  
Professional Core 2 : Engineering Thermodynamics: ME11003