



**TECHNO INDIA UNIVERSITY**

W E S T B E N G A L

## **Curriculum for B. Tech in Civil Engineering**



**DEPARTMENT OF CIVIL ENGINEERING**

**Techno India University, West Bengal  
EM-4, EM Block, Sector V, Bidhannagar,  
Kolkata -700091, West Bengal**

**1<sup>st</sup> Semester**

Sl. No.	Course Code	Course Title	Hours per week			Credits
			L	T	P	C
1	TIU-ES-UCS-T11101	INTRODUCTION TO PROGRAMMING	3	0	0	3
2	TIU-BS-UMA-T11101	MATHEMATICS I	3	1	0	4
3	TIU-BS-UCH-T11101	CHEMISTRY	3	1	0	4
4	TIU-PC-UCE-S11101	Valuation & Estimation - I	2	0	0	2
5	TIU-ES-UCS-L11191	BASIC COMPUTING LAB	0	0	2	1
6	TIU-ES-UCS-L11101	INTRODUCTION TO PROGRAMMING LABORATORY	0	0	3	1.5
7	TIU-BS-UCH-L11101	CHEMISTRY LAB	0	0	3	1.5
8	TIU-ES-UME-L11192	WORKSHOP PRACTICE	0	0	3	1.5
9	TIU-HSM-UEN S11191	CAREER ADVANCEMENT & SKILL DEVELOPMENT – I COMMUNICATION SKILL	2	0	0	2
10	TIU-HSM-UES-S11191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>21.5</b>

**2<sup>nd</sup> Semester**

S. No.	Course Code	Course Title	L	T	P	C
1	TIU-ES-UEE-T12101	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	4	0	0	4
2	TIU-ES-UCS-T12101	PROBLEM SOLVING USING DATA STRUCTURE	3	0	0	3
3	TIU-BS-UMAT12101B	MATHEMATICS II B	4	0	0	4
4	TIU-BS-UPH-T12101	PHYSICS	4	0	0	4
5	TIU-ES-UME-T12101	ENGINEERING MECHANICS	3	0	0	3
6	TIU-PC-UCE-S12101	VALUATION & ESTIMATION - II	2	0	0	2
7	TIU-ES-UCS-L12101	PROBLEM SOLVING USING DATA STRUCTURES LAB	0	0	3	1.5
8	TIU-ES-UEE-L12101	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LAB AND SIMULATION	0	0	3	1.5
9	TIU-ES-UME-L12191	ENGINEERING DRAWING AND GRAPHICS	0	0	3	1.5
10	TIU-BS-UPH-L12101	PHYSICS LAB	0	0	3	1.5
11	TIU-HSM-UEN-S12191	CAREER ADVANCEMENT & SKILL DEVELOPMENT – II COMMUNICATION SKILL	0	0	2	1
12	TIU-HSM-UES-S12191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>28</b>

**3rd Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	TIU-BS-UMA-T21103	TRANSFORM CALCULUS	3	0	0	3
2	TIU-PC-UCE-T21103A	SOLID MECHNAICS	3	1	0	4
3	TIU-PC-UCE-T21104A	CONCRETE TECHNOLOGY	3	1	0	4
4	TIU-PC-UCE-T21105A	ENERGY, ENVIRONMENT & ECOLOGY	2	1	0	3
5	TIU-PC-UCE-T22106	FLUID MECHANICS	3	1	0	4
6	TIU-PC-UCE-L21103A	SOLID MECHNAICS LAB	0	0	3	1.5
7	TIU-PC-UCE-L21104	CONCRETE TECHNOLOGY LAB	0	0	3	1.5
8	TIU-PC-UCE-L22106	FLUID MECHANICS LAB	0	0	3	1.5
9	TIU-ES-UCE-S21101	VALUATION & ESTIMATION - III	0	0	2	1
10	TIU-CASD-UCE-S21101	CAREER ADVANCEMENT & SKILL DEVELOPMENT - (HERITAGE AND SUSTAINABLE INFRASTRUCTURE ENGINEERING)	0	0	2	1
11	TIU-HSM-UES-S21191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>25.5</b>

**4<sup>th</sup> Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	TIU-BS-UMA-T22101	PROBABILITY & STATISTICS	3	0	0	3
2	TIU-PC-UCE-T22102	SURVEYING & GEOMATICS	2	1	0	3
3	TIU-PC-UCE-T22103	TRANSPORTATION ENGINEERING	2	1	0	3
4	TIU-PC-UCE-T22105	ENVIRONMENTAL ENGINEERING	2	1	0	3
5	TIU-PC-UCE-T22106	STRUCTURAL ANALYSIS-1	3	1	0	4
6	TIU-PC-UCE-T22107	CONSTRUCTION ENGINEERING & PROJECT MANAGEMENT	3	0	0	3
7	TIU-PC-UCE-L22102	SURVEYING & GEOMETICS LAB	0	0	3	1.5
8	TIU-PC-UCE-L22103	TRANSPORTATION ENGINEERING LAB	0	0	3	1.5
9	TIU-PC-UCE-L22105	ENVIRONMENTAL ENGINEERING LAB	0	0	3	1.5
10	TIU-PC-UCE-S22101	BUILDING PLANNING AND COMPUTER AIDED DRAWINGS	0	0	4	2
11	TIU-ES-UCE-S22101	VALUATION & ESTIMATION - IV	0	0	2	1
12	TIU-CASD-UCE-S22192A	CASD-CIVIL ENGINEERING SOCIETAL AND GLOBAL IMPACT	0	0	2	1
13	TIU-HSM-UES-S22192	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>28.5</b>

**5<sup>th</sup> Semester**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	TIU-PC-UCE-T31101	DESIGN OF RCC STRUCTURES	3	1	0	4
2	TIU-PC-UCE-T31102	STRUCTURAL ANALYSIS-II	3	1	0	4
3	TIU-PC-UCE-T31103	GEOTECHNICAL ENGINEERING	3	0	0	3
4	TIU-PC-UCE-T31104	ENGINEERING ECONOMICS, ESTIMATION & COSTING	3	1	0	4
5	TIU-PC-UCE-L31103	GEOTECHNICAL ENGINEERING LAB	0	0	3	1.5
6	TIU-PC-UCE-S31101	RCC DESIGN SESSIONAL	0	0	4	2
7	TIU-ES-UCE-S31101	VALUATION & ESTIMATION - V	0	0	2	1
8	TIU-CASD-UCE-S31101	CAREER ADVANCEMENT & SKILL DEVELOPMENT - (DISASTER PREPAREDNESS & PLANNING)	0	1	2	2
9	TIU-HSM-UES-S31191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>22.5</b>

**6<sup>th</sup> Semester**

Sl. No.	Course Code	Course Title	L	T	P	C
1	TIU-PC-UCE-T32101	DESIGN OF STEEL STRUCTURES	3	1	0	4
2	TIU-UCS-E308A	ELECTIVE I - INTRODUCTION TO AI & MACHINE LEARNING	2	0	0	2
3	TIU-UCS-L308A	ELECTIVE IA - LAB ON INTRODUCTION TO AI & MACHINE LEARNING	0	0	4	2
4	TIU-PC-UCE-E32101	ELECTIVE II - PRESTRESSED CONCRETE	4	0	0	4
5	TIU-PC-UCE-E32102	ELECTIVE III - REPAIRS & REHABILITATION OF STRUCTURES	4	0	0	4
6	TIU-PC-UCE-E32103	ELECTIVE IV - STRUCTURAL DYNAMICS & EARTHQUAKE ENGINEERING	3	0	0	3
7	TIU-PC-UCE-P32101	ELECTIVE V - PROJECT - STRUCTURAL ENGINEERING	0	0	6	3
8	TIU-PC-UCE-S32102	STEEL STRUCTURE DESIGN SESSIONAL	0	0	4	2
9	TIU-ES-UCE-S32101	VALUATION & ESTIMATION - VI	0	0	2	1
10	TIU-CASD-UCE-S32101	CAREER ADVANCEMENT & SKILL DEVELOPMENT-(STAAD)	0	0	2	1
11	TIU-HSM-UES-S32191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>27</b>

**7<sup>th</sup> Semester**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	TIU-PC-UCE-T41101	METRO SYSTEMS & ENGINEERING	3	0	0	3
2	TIU-PC-UCE-T41102	HYDROLOGY & WATER RESOURCES ENGINEERING	3	0	0	3
3	TIU-PC-UCE-I41101	INTERNSHIP-I	0	0	0	3
4	TIU-PC-UCE-P41101	PROJECT - I	0	0	1 0	5
5	TIU-PC-UCE-S41101	COMPUTER AIDED DESIGN	0	0	4	2
6	TIU-CASD-UMG-S41101	CAREER ADVANCEMENT AND SKILL DEVELOPMENT (ORGANIZATIONAL BEHAVIOUR)	0	0	2	1
7	TIU-HSM-UES-41191	ENTREPRENEURSHIP SKILL DEVELOPMENT - INDIAN KNOWLEDGE SYSTEM	0	0	2	1
<b>Total Credit</b>						<b>18</b>

**8<sup>th</sup> Semester**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	TIU-ULW-T450	CONSTITUTION OF INDIA	0	0	0	0
2	TIU-PC-UCE-I42101	INTERSHIP-II	0	0	0	3
3	TIU-PC-UCE-P42101	PROJECT - II	0	0	1 0	5
4	TIU-CASD-UMG-S412	CAREER ADVANCEMENT & SKILL DEVELOPMENT-(PROFESSIONAL PRACTICE, LAW- ETHICS)	0	0	2	1
5	TIU-HSM-UES-42191	ENTREPRENEURSHIP SKILL DEVELOPMENT	0	0	2	1
<b>Total Credit</b>						<b>10</b>