

Indian Institute of Technology Tirupati

B.Tech. Curriculum: Civil Engineering for students Admitted from Academic Year 2019-2020 onwards

Semester-I

S.No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	ES103M/ EA101M	Introduction to Programming/ Engineering Drawing	BET/ BES	2-0-3-4 1-0-3-3	ES1101/ EA1101	14 4
2.	CY101L/ CY102L	Physical and Theoretical Chemistry/ Organic and Inorganic Chemistry	SCY	2-1-0-3	CY1101/ CY1202	4 4
3.	ES101M	Concepts in Engineering and Design	BET	1-0-2-2	ID1101	4
4.	MA101L	Calculus	SMA	3-1-0-4	MA1101	4
5.	PH101L	Introduction to Classical Mechanics	SPH	2-1-0-3	PH1101	4
6.	PH103P/ CY103P	Physics Laboratory/ Chemistry Laboratory	SPH/ SCY	0-0-3-2	PH1103/ CY1204	4 4
7.	EA101P	Workshop-I	BES	0-0-3-2	EA1103	4
8.	HS10XN	Language Course (Pass/Fail)	HPF	2-0-0-2	HS110X	
Total Credits				22/21		

Approved Language Courses

Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
HS101N	Proficiency in English	HPF	2-0-0-2	HS1101	4
HS102N	Basic Course in German			HS1103	6
HS103N	Basic Course in Japanese			HS1105	6
HS104N	Basic Course in Sanskrit			HS1107	6
HS105N	Basic Course in Spanish Language			HS1109	9

Semester-II

S.No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	ES103M/ EA101M	Introduction to Programming/ Engineering Drawing	BET/ BES	2-0-3-4 1-0-3-3	ES1101/ EA1101	14 4
2.	CY101L/ CY102L	Physical and Theoretical Chemistry/ Organic and Inorganic Chemistry	SCY	2-1-0-3	CY1101/ CY1202	4 4
3.	ES201L	Engineering Mechanics	BET	3-1-0-4	ES2101	4
4.	MA102L	Differential Equations and Matrices	SMA	3-1-0-4	MA1202	4
5.	PH102L	Introduction to Electrodynamics and Quantum Mechanics	SPH	2-1-0-3	PH1202	4
6.	PH103P/ CY103P	Physics Laboratory/ Chemistry Laboratory	SPH/SCY	0-0-3-2	PH1103/ CY1204	4 4
7.	EA102P	Workshop-II	BES	0-0-3-2	EA1202	4
Total Credits				21/22		

Indian Institute of Technology Tirupati

B.Tech. Curriculum: Civil Engineering for students Admitted from Academic Year 2019-2020 onwards

Semester-III

S. No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	CE201L	Strength of Materials	PMT	3-1-0-4	CE2101	8
2.	CE203L	Surveying	PMT	3-0-0-3	CE2103	8
3.	CE202L	Civil Engineering Materials and Construction	PMT	3-0-0-3	CE2105	8
4.	CE203P	Surveying Practical	PML	0-0-3-2	CE2191	8
5.	ES102L	Basic Electrical Engineering	BET	3-1-0-4	ES1201	8
6.	ES202L/ ES203L	Ecology and Environment/ Life Sciences	BET/ SLS	2-0-0-2/ 2-0-0-2	ES2103/ BS2101	8 9
7.	HSE1	Humanities Elective-1	HSS	3-0-0-3		
8.	MAE1	Mathematics Elective-1	SMA	3-0-0-3		
Total Credits				24		

Semester-IV

S.No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	ES203L/ ES202L	Life Sciences/ Ecology and Environment	SLS/ BET	2-0-0-2/ 2-0-0-2	BS2101/ ES2103	9 8
2.	CE206L	Structural Analysis	PMT	3-1-0-4	CE2202	8
3.	CE204L	Geology and Soil Mechanics	PMT	3-1-0-4	CE2204	8
4.	CE207L	Fluid Mechanics and Hydraulics	PMT	3-1-0-4	CE2206	8
5.	CE206P	Structural Engineering Laboratory	PML	0-0-3-2	CE2292	8
6.	CE205P	Building Drawing	PML	0-0-3-2	CE2294	8
7.	HSE2	Humanities Elective-2	HSS	3-0-0-3		
8.	MAE2	Mathematics Elective-2	SMA	3-0-0-3		
Total Credits				24		

Indian Institute of Technology Tirupati

B.Tech. Curriculum: Civil Engineering for students Admitted from Academic Year 2019-2020 onwards

Semester-V

S. No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	CE301L	Basic Structural Steel Design	PMT	3-1-0-4	CE3101	8
2.	CE302L	Water Resources Engineering	PMT	3-1-0-4	CE3103	8
3.	CE303L	Environmental Engineering	PMT	3-1-0-4	CE3105	8
4.	CE305P	Hydraulics and Environmental Engineering Laboratory	PML	0-0-3-2	CE3191	8
5.	CE304P	Building Materials Laboratory	PML	0-0-3-2	CE3193	8
6.	FRE1	Free Elective 1	FRE	3-0-0-3		
7.	FRE2	Free Elective 2	FRE	3-0-0-3		
Total Credits				22		

Semester-VI

S.No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	CE306L	Basic Reinforced Concrete Design	PMT	3-1-0-4	CE3202	8
2.	CE307L	Geotechnical Engineering	PMT	3-1-0-4	CE3204	8
3.	CE308L	Transportation Engineering	PMT	3-1-0-4	CE3206	8
4.	CE308P	Transportation Engineering Laboratory	PML	0-0-3-2	CE3292	8
5.	DPE1	Department Elective-1	PMT	3-0-0-3		
6.	HSE3	Humanities Elective-3	HSS	3-0-0-3		
SUMMER						
7.	CE391G	Industrial/Research Internship	PIT	---2	IT3202	1
Total Credits				22		

Indian Institute of Technology Tirupati

B.Tech. Curriculum: Civil Engineering for students Admitted from Academic Year 2019-2020 onwards

Semester-VII

S. No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	CE401L	Estimation and Construction Management	PMT	3-1-0-4	CE4101	8
2.	CE402L	Functional Design of Buildings	PMT	2-0-0-2	CE4103	8
3.	CE491G	Project Phase-I	PMP	---3	CE4150	1
4.	DPE2	Department Elective-2	PMT	3-0-0-3		
5.	DPE3	Department Elective-3	PMT	3-0-0-3		
6.	CE493N	Industrial Lecture	PIL	1-0-0-1	IL4101	1
Total Credits				16		

Semester-VIII

S. No.	Course Code	Course Name	Category	L-T-P-C	Course Code (prior to Jul 2022)	Senate
1.	DPE4	Department Elective-4	PMT	3-0-0-3		
2.	CE492G/ DPE5 DPE6	Project Phase-II/ Department Elective-5 Department Elective-6	PMP PMT PMT	---6/ 3-0-0-3 3-0-0-3	CE4250/ DPE5 DPE6	1 22
3.	FRE3	Free Elective-3	FRE	3-0-0-3		
4.	HS401L	Professional Ethics	HPE	2-0-0-2	HS4202	7
Total Credits				14		

TOTAL CREDITS: 165

Senate in the last column of the table refers to the Senate in which contents of the course were approved.