

B.Tech (Civil Engineering) OVERALL CREDIT STRUCTURE

Undergraduate Core (UC)		Undergraduate Elective (UE)	
Category	Credit	Category	Credit
DC	118	DE	50 (Minimum)
BS	38	HM	12(Minimum)
ES	40	OC	50 (Balance)
HM	12	UN	00 (Courses)
Total	208	Total	112
Grand Total	UC+UE		320

Course Code	Course	L-T-P	Credit
Basic Sciences (BS)			
SCL102	Applied Mathematics-I	3-2-0	8
SCL103	Applied Mathematics-II	3-2-0	8
SCL201	Applied Mathematics-III*	3-0-0	6
SCL104	Applied Physics	3-0-2	8
SCL105	Applied Chemistry	3-0-2	8
Total			38

Engineering Arts and Sciences (ES)		L-T-P	Credit
CEL101	Engineering Mechanics	3-0-2	8
EEL101	Elementary Electrical Engineering	3-0-2	8
MEL101	Engineering Drawing	3-0-2	8
CSL101	Computer Programming	3-0-2	8
MEP101	Mechanical Workshop	0-0-2	2
EEL101	Electrical Workshop	0-0-2	2
CEL102	Environmental Science	2-0-0	4
Total			40

Humanities and Management (Core) (HM)		L-T-P	Credit
HMP102	Spoken English	1-0-2	4
HMP103	Written English	1-2-0	4
HML101	Social Science	2-0-0	4
Total			12

Non Credit Requirement		L-T-P	Credit
NCN101	NCC#	-	0
NCN102	NSS#	-	0
NCN103	NSO#	-	0
SPB101	Sports-I#	0-0-4	0
SPB102	Sports-II#	0-0-4	0
CED201	Project	-	0
CED301	Literature Review Paper Writing	-	0
CET201	Practical Training	-	0
HMD201	Community Project	-	0

Departmental Core (DC)		L-T-P	Credit
CEL201	Strength of Materials*	3-2/2-2/2	8
CEL202	Fluid Mechanics*	3-2/2-2/2	8
CEL203	Engineering Geology*	2-0-2	6
CEL204	Building Materials and construction Technology*	3-0-2	8
CEL205	Environmental Engineering-I**	3-0-2	8
CEL206	Transportation Engineering-I**	3-0-2	8
CEL207	Surveying*	3-0-2	8
CEL301	Structural Analysis-I*	3-2/2-2/2	8
CEL302	Geotechnical Engineering-I*	3-0-2	8
CEL303	Hydrology and Irrigation Engineering**	3-0-2	8
CEL304	Environmental Engineering-II**	3-0-2	8
CEL305	Structural Analysis-II **	3-2-0	8
CEL306	Geotechnical Engineering-II***	3-0-2	8
CEL307	Design of RCC Structure***	3-2/2-2/2	8
CEL308	Design of Steel Structures***	3-2/2-2/2	8

Departmental Elective (DE)		L-T-P	Credit
SCL403	Probability Theory and Statistics	3-0-0	6
CEL401	Ground Improvement Techniques	3-0-0	6
CEL402	Transportation Engineering-II	3-0-0	6
CEL403	Design of Hydraulic structure	3-2-0	8
CEL404	Rock Engineering	3-0-0	6
CEL405	Industrial Waste Management	3-0-0	6
CEL406	Finite Element Method	3-2-0	8
CEL407	Transportation Planning	3-0-0	6
CEL408	Environmental Impact and Risk Assessment	3-0-0	6
CEL409	Advanced Concrete Design	3-2-0	8
CEL410	River Mechanics	3-0-0	6
CEL411	Traffic Engineering	3-0-0	6
CEL412	Construction Planning and management	3-0-0	6
CEL413	Advanced Foundation Engineering	3-0-0	6
CEL414	Geomatics Engineering	3-0-2	8
CEL415	Non-Destructive Testing of Materials	3-0-2	8
CEL416	Design of Prestressed concrete and Industrial Structures	3-0-2	8
CEL417	Urban Water and Environmental Management	3-0-0	6
CEL418	Estimation and Costing	3-0-0	6
CEL419	Software Lab	0-0-6	6
CEL420	Structure Dynamics	3-0-2	8
CED401	Major Project Part- I	-	2
CED402	Major Project Part -II	-	6

#A student has to opt at least one from NCC, NSS, NSO and sports (I & II both).

Note: Students are required to opt the core courses in the order (*, **, ***)

Students are advised that they may give preference to DE courses
CEL 402, CEL 414 and CEL 418.