

**DEPARTMENT OF CIVIL ENGINEERING
M.M.M. UNIVERSITY OF TECHNOLOGY
GORAKHPUR**

Semester wise Credit Structure for B. Tech. (Civil Engineering)

Category / Semesters	I	II	III	IV	V	VI	VII	VIII	Total
Basic Sciences & Maths (BSM)	4	10	0	3					17
Engineering Fundamentals (EF)	7	6	5						18
Professional Skill (PS)	2	2							4
Program Core (PC)			13	19	13	12	12		69
Management (M)					2	2			4
Humanities & Social Science (HSS)	2		2						4
Humanities & Social Science Elective (HSSE)		2							2
Project (P)						2	3		5
Seminar (S)						2			2
Industrial Practice (IP)/ Without Industrial Practices (Minor project +2 Industrial Elective (IE))								12	12
Program link basic science and engineering courses (PLBSE)	3	4	3	4	4				18
Program Electives (PE)					4	4	4		12
Open Electives (OE)							3		3
Total	18	24	23	26	23	22	22	12	170

First Year, Semester I

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM	BSM-101	Calculus and Linear Algebra	3	1	0	4
2.	EF	BCE-102	Mechanics of Structures	3	1	2	5
3.	PS	BCS-107	Computer Programming in Civil Engineering	1	0	2	2
4.	EF	BCE-101	Engineering Graphics	0	0	4	2
5.	PLBSE	BSM-143	Environmental Chemistry	2	1	0	3
6.	HSSE	BHM-111	Technical Writing	2	0	0	2
			Total	11	3	8	18
7.	ECA-I	ECA-100	Induction Program	-	-	-	0

First Year, Semester II

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	PLBSE	BSM-152	Ordinary and Partial Differential Equations	3	1	0	4
2.	EF	BEE-152	Principles of Electrical Engineering	3	1	0	4
3.	BSM	BSM-191	Engineering Chemistry	3	1	2	5
4.	PS	BCE-152	Engineering Geology & Building Material	0	0	4	2
5.	EF	BCE-153	Building Planning and Drawing	1	0	2	2
6.	BSM	BSM-178	Physics of Engineering Materials	3	1	2	5
7.	HSS	BHM-151	Professional Communication	2	0	0	2
			Total	15	4	10	24
8.	ECA-II		Induction Program	-	-	-	0

Second Year, Semester III

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	PLBSE	BCE-201	Numerical Methods in Civil Engineering	2	1	0	3
2.	EF	BCE-202	Basic Surveying	3	1	2	5
3.	HSS	BHM-201	Scientific and Technical Writing	2	0	0	2
4.	PC	BCE-203	Structural Mechanics-I	3	1	2	5
5.	PC	BCE-204	Construction Technology and Estimation & Costing	3	0	0	3
6.	PC	BCE-205	Fluid Mechanics	3	1	2	5
			Total	16	4	6	23
7.	ECA-III			-	-	-	0
8.	AC	AUC-01- AUC-15		1/2	-	-	1/2

Second Year, Semester IV

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM	BSM-255	Probability & Statistics	2	1	0	3
2.	PC	BCE-251	Hydraulic and Hydraulic Machines	3	1	2	5
3.	PC	BCE-252	Structural Mechanics-II	3	1	0	4
4.	PLBSE	BCE-253	Advance Surveying	3	0	2	4
5.	PC	BCE-254	Concrete and Concrete Structures	3	1	2	5

6.	PC	BCE-255	Environmental Engineering-I	3	1	2	5
			Total	17	5	8	26
7.	ECA-IV			-	-	-	0
8.	AC	AUC-01- AUC-15		1/2	-	-	½

Third Year, Semester V

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	M	BHM-301	Industrial Management	2	0	0	2
2.	PC	BCE-301	Geotechnical Engineering-I	3	1	2	5
3.	PC	BCE-302	Transportation Engineering-I	3	0	2	4
4.	PC	BCE-303	Design of Concrete Structures	3	0	2	4
5.	PLBSE	BCE-304	Environmental Engineering-II	3	1	0	4
6.	PE1	BCE-326- BCE-331	Program Elective-1	3	1	0	4
			Total	17	3	6	23
7.	ECA-V			-	-	-	0

Third Year, Semester VI

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	M	BHM-351	Engineering & Managerial Economics	2	0	0	2
2.	PC	BCE-351	Geotechnical Engineering-II	3	0	2	4
3.	PC	BCE-352	Transportation Engineering-II	3	1	0	4
4.	PC	BCE-353	Water Resources Engineering	3	1	0	4
5.	PE2	BCE-376 – BCE-383	Program Elective-2	3	1	0	4
6.	P	BCE-370	Project Part-I	0	0	4	2
7.	S	BCE-380	Seminar	0	0	4	2
			Total	14	3	10	22
8.	ECA-VI			-	-	-	0

Final Year, Semester VII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	PC	BCE-401	Earthquake Resistant Design	3	1	0	4
2.	PC	BCE-402	Steel Structures	3	1	0	4
3.	PC	BCE-403	Analysis and Design of Hydraulic Structures	3	1	0	4
4.	PE3	BCE-426 - BCE-432	Program Elective-3	3	1	0	4
5.	OE	OCE-401-402	Open Elective	2	1	0	3
6.	P	BCE-440	Project Part-II	0	0	6	3
			Total	14	5	6	22
7.	ECA-VII			-	-	-	0

Final Year, Semester VIII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	IP	ICE-400	Industrial Practices	0	0	24	12
			Without Industrial Practices (IP)				
2.	MP	BCE-480	Minor project	0	0	8	4
3.	IE	ICE-401	Industrial Elective-1	3	1	0	4
4.	IE	ICE-405	Industrial Elective-2	3	1	0	4
			Total	0/6	0/2	8/24	12

Programme Elective-1 (PE1)

S. N.	Paper Code	Subject	L	T	P	Credits
1.	BCE-326	Solid Waste Management	3	1	0	4
2.	BCE-327	Environmental Impact Assessment	3	1	0	4
3.	BCE-328	Rock Mechanics	3	1	0	4
4.	BCE-329	Bridge Engineering	3	1	0	4
5.	BCE-330	Disaster Management	3	1	0	4
6.	BCE-331	Advanced Engineering Hydrology	3	1	0	4

Programme Elective-2 (PE2)

S.N.	Paper Code	Subject	L	T	P	Credits
1.	BCE-376	Geo-environmental Engineering	3	1	0	4
2.	BCE-377	Advanced Structural Engineering	3	1	0	4