

B. Tech. COURSE STRUCTURE

CIVIL ENGINEERING
NIT SILCHAR

3rd Semester

Code	Subjects	L-T-P	Credit
CE 211	Strength of Materials	3-1-0	8
HU 201	Humanities-II (Industrial Sociology and Accountancy)	3-0-0	6
MA 201	Mathematics-III	3-1-0	8
EC 201	Electrical Science-II	3-1-0	8
CE 201	Building Materials & Construction	2-1-0	6
CE 202	Surveying-I	2-1-0	6
CE 203	Surveying Practical-I	0-0-2	2
EC 202*	Electrical Science Laboratory	0-0-2	2
TOTAL		16-5-4	46

4th Semester

Code	Subjects	L-T-P	Credit
CE 212	Fluid Mechanics	3-0-0	6
CE 204	Engineering Geology	3-0-0	6
MA 204	Mathematics - IV	2-1-0	6
CE 205	Transportation Engg-I	2-1-0	6
CE 206	Surveying - II	2-1-0	6
CE 207	Engineering Geology Practical	0-0-4	4
CE 208	Structural Analysis - I	3-1-0	8
CE 209	Transportation Engg. Practical-I	0-0-2	2
CE 210	Surveying Practical-II	0-0-2	2
TOTAL		15-4-8	46

5th Semester

Code	Subjects	L-T-P	Credit
CE 301	Estimation & Valuation	2-1-0	6
CE 302	Environmental Engg-I	3-1-0	8
CE 303	Geotechnical Engg.	3-1-0	8
CE 304	Structural Analysis-II	3-1-0	8
CE 305	Structural Design-I	3-1-0	8
CE 306	Geotechnical Engg. Practical	0-0-2	2
CE 307	Environmental Engg. Practical	0-0-2	2
CE 308	Functional Planning of Buildings	2-0-2	6
TOTAL		16-5-6	48

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6th Semester

Code	Subjects	L-T-P	Credit
HU 301	Humanities-III (Managerial Economics)	3-1-0	8
CE 314	Hydraulic Engg.	3-0-0	6
CE 309	Foundation Engg.	3-1-0	8
CE 310	Structural Analysis-III	3-1-0	8
CE 311	Structural Design-II	3-1-0	8
CE 315	Hydraulic Engg. Lab	0-0-2	2
CE 312	Concrete & Structure Lab	0-0-2	2
CE 313	Environmental Engg-II	2-1-0	6
TOTAL		17-5-4	48

7th Semester

Code	Subjects	L-T-P	Credit
CE 401	Structural Design-III	3-1-0	8
CE 402	Numerical Analysis and Computer Application in Civil Engg.	3-0-0	6
CE 403	Hydrology & Flood Control	3-1-0	8
CE XXX	Elective -I	3-1-0	8
CE 405	Project-I	0-0-7	7
CE 406	Industrial Training	-	2
CE 407	Numerical Analysis and Computer Application in Civil Engg. Practical	0-0-2	2
CE XXX	Elective-II	3-1-0	8
TOTAL		15-4-9	49

8th Semester:

Code	Subjects	L-T-P	Credit
HU 401	Management and Economics of Globalisation	3-0-0	6
CE 409	Professional Practice & Construction Management	3-0-0	6
CE 410	Irrigation Engineering	3-1-0	8
CE 411	Transportation Engg-II	2-1-0	6
CE XXX	Elective III (Open)	2-1-0	6
CE 413	Project-II	0-0-13	13
CE 414	Environmental Studies	3-0-0	6
TOTAL		16-3-13	51

Total Credit in B. Tech (Civil Engg) course = **386**

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Electives : 7th and 8th Semesters

Elective-I (Any one)

1. CE 421 Concrete Technology
2. CE 422 Advanced Foundation Engg.
3. CE 423 Advanced Environmental Engineering
4. CE 424 Matrix Method of Structural Analysis
5. CE 425 Introduction to Remote Sensing
6. CE 426 Advanced Surveying
7. CE 427 Computer Aided Civil Engg. Drawings
8. CE 428 Ground Improvement and Rock Mechanics

Elective-II (Any one)

1. CE 429 Energy Efficient Building Design
2. CE 430 Bridge Engineering
3. CE 431 CAD in Civil Engg.
4. CE 432 Water Resources Development
5. CE 433 Ground Water System Management
6. CE 434 Urban Transportation System
7. CE 435 Elements of Remote Sensing and GIS
8. CE 436 Advanced Hydrology
9. CE 437 Traffic Engineering
10. CE 438 Advanced Structural Engineering
11. CE 439 Elements of Earthquake Engineering
12. CE 440 Open Channel Flow

Elective-III (Open) (Any one)

1. CE 441 Finite Element Methods in Engg.
2. CE 442 Optimisation Methods in Engg. Design
3. CE 443 Evolutionary Algorithm in Search and Optimisation
4. CE 444 Artificial Neural Networks in Engg.
5. CE 445 Elementary Performance-Based Seismic Design
6. CE 446 Hydraulic Structures
7. CE 447 Hydraulic Machines