

DEPARTMENT OF CIVIL ENGINEERING

**SCHEME FOR B.TECH (Civil Engineering)
(Revised December 2020)**

Third Semester:

Course Number	Subject	Scheme of Studies Periods per week			Total Credits
		L	T	P	
MTH 1301	Mathematics-3	3	1	-	4
HUM 1302	Fundamentals of Entrepreneurship	3	1	-	4
CE 1303	Surveying	3	-	-	3
CE 1304	Structural Analysis-1	3	-	-	3
CE 1305	Fluid Mechanics-1	3	-	-	3
CE 1306	Fluid Mechanics Lab	-	-	2	1
CE 1307	Engineering Geology Lab	-	-	2	1
CE 1308	Project Based Lab (Applied Geology)	-	2	-	2
CE 1309	Professional Practice-1		1		1
Total Hours = 24		15	5	4	22
Total Credits (Cumulative)					67

Fourth Semester:

Course Number	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
ME 1401	Fundamentals of Design Methods	3	-	-	3
CE 1402	Environmental Engineering-1	3	1	-	4
CE 1403	Water Resources Engineering-1	3	1	-	4
CE 1404	Structural Design & Drawing-1	3	1	-	4
CE 1405	Geotechnical Engineering -1	3	-	-	3
CE 1406	Surveying Lab	-	-	3	1
CE 1407	Civil Engineering Materials Lab	-	-	2	1
CE 1408	Project based Lab (Building Planning and Drawing Studio)	-	2	-	2
CE 1409	Professional Practice-2		1		1
Total Hours = 26		15	6	5	23
Total Credits (Cumulative)					90

Fifth Semester:

Course Number	Subject	Scheme of Studies Periods per week			Total Credits
		L	T	P	
ME 1501	Engineering Management	3	1	-	4
ARC 1502	Construction Planning and Management	3	1	-	4
CE 1503	Structural Design & Drawing-2	3	1	-	4
CE 1504	Transportation Engineering-1	3	-	-	3
CE 1505	Geotechnical Engineering-2	3	-	-	3
CE 1506	Geotechnical Engineering Lab	-	-	2	1
CE 1507	Computational Lab-1	-	-	2	1
CE 1508	Project based Lab (Structural Analysis & Design Studio)	-	2	-	2
CE 1509	Internship/Training / Tours	-	2	-	1
Total Hours = 26		15	7	4	23
Total Credits (Cumulative)					113

Sixth Semester:

Course Number	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
CS 1601	Data Structures	3	1	-	4
CE 1602	Fluid Mechanics-2	3	1	-	4
CE 1603	Water Resources Engineering-2	3	1	-	4
CE 1604	Transportation Engineering-2	3	1	-	4
CE 1605	Departmental Elective-1 (A)	3	1	-	4
CE 1606	Transportation Engineering Lab	-	-	2	1
CE 1607	Computational Lab-2	-	-	2	1
CE 1608	Project-1	-	-	4	2
Total Hours = 28		15	5	8	24
Total Credits (Cumulative)					137

**MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY
BHOPAL – 462003**

REVISED SCHEME FOR BATCH ADMITTED IN 2020

(49th Senate, Item S-49.2022-I-2.7)

Department of Civil Engineering

B. Tech. (Civil Engineering)

SEVENTH SEMESTER

Course Code	Course Name	Scheme of Studies Periods per week			Credits
		L	T	P	
HUM 1701	Engineering Economics & IPR	3	-		3
CE 1702	Computational Geodesy	3	-	-	3
CE 1703	Environmental Engineering - 2	3	-	-	3
	Department Elective-2(A)	3	-	-	3
	Department Elective-3(A)	3	-	-	3
	Open Elective-1(C)	3	-	-	3
CE 1704	Environmental Engineering Lab	-	-	2	1
CE 1705	Project 2 Phase 1	-	1	2	2
CE 1706	Educational Tour & Training	-	-	2	1
Total Hours =25		18	1	6	22

EIGHTH SEMESTER

Course Code	Course Name	Scheme of Studies Periods per week			Credits
		L	T	P	
	Department Elective-4(A)	3	-	-	3
	Department Elective-5(A)	3	-	-	3
	Department Elective-6(A)	3	-	-	3
CE 1801 / CE 1802	Project 2 Phase 2 / Internship	-	-	12	6
CE 1803	General Proficiency	-	-	-	1
Total Hours =21		9	-	12	16

**MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY
BHOPAL – 462003**

REVISED SCHEME FOR BATCH ADMITTED IN 2020

(49th Senate, Item S-49.2022-I-2.7)

List of Electives
Group A - Department Electives
CE 501 GPS Surveying and its Applications
CE 502 Digital Processing of Remotely Sensed Data
CE 503 Remote Sensing and GIS
CE 504 Digital Mapping and Cartography
CE 505 Pre-stressed Concrete
CE 506 Concrete Technology
CE 507 Advanced Structural Analysis
CE 508 Design of Steel Concrete Composite Structures
CE 509 Bridge Design
CE 510 Earthquake Resistant Design of Structures
CE 511 Finite Element Method
CE 512 Ground Water Hydrology
CE 513 Open Channel Hydraulics
CE 514 Hydro Power Engineering
CE 515 Hydraulic Structures
CE 516 Analysis & Design of Piping System
CE 517 Sediment Transport Engineering
CE 518 Computational Fluid Dynamics
CE 519 Fluid Measurement Systems
CE 520 Water Resources Systems
CE 521 Watershed Management
CE 522 Flood Measurement and Management
CE 523 Geotechnical Investigations for Civil Engineering Structures
CE 524 Modern Foundations
CE 525 Soil Dynamics & Machine Foundation
CE 526 Ground Improvement Techniques
CE 527 Reinforced Earth and Geo-synthetics Engineering
CE 528 Advanced Technologies in Transport Infrastructure
CE 529 Highway Geometric Design
CE 530 Road Safety Engineering
CE 531 Intelligent Transport Systems

**MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY
BHOPAL – 462003**

REVISED SCHEME FOR BATCH ADMITTED IN 2020

(49th Senate, Item S-49.2022-I-2.7)

CE 532 Analysis and Design of Pavement
CE 533 Traffic Engineering and Management
CE 534 Road Safety Audit CE 535 Traffic Flow Theory
CE 536 Highway Maintenance Management System
CE 537 Environmental Impact Assessment and Legislation
CE 538 Sustainable Development and Global Environmental Issues
CE 539 Hazardous Waste Management & Risk Analysis
CE 540 Industrial Waste Treatment and Disposal
CE 541 Advanced Treatment Methods
CE 542 Air Pollution and Control
CE 543 Noise Pollution & Its Control
CE 544 Environmental Quality Monitoring
CE 545 Solid Waste Management
CE 546 Global Warming and Climate Change
CE 547 Environmental Chemistry