



University of Engineering & Management, Jaipur
Syllabus to be implemented from the Academic Year 2014-15

Civil Engineering

First Year First Semester: Civil Engineering

A. THEORY							
Sl. No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	HU101	English Language & Technical Communication-I	2	0	0	2	2
2	PH101	Physics-I	3	1	0	4	3
3	M101	Mathematics-I	3	1	0	4	3
4	ES101	Basic Electrical & Electronic Engineering-I	3	0	0	3	4
5	ME101	Engineering Mechanics	3	0	0	3	3
6	CS101	Basic Computation & Principles of Computer Programming-I	3	0	0	3	3
Total of Theory						19	18
B. PRACTICAL							
7	PH191	Physics-I Lab	0	0	3	3	2
8	ES191	Basic Electrical & Electronic Engineering-I Lab	0	0	3	3	2
9	ME191	Engineering Drawing & Computer Graphics Lab	1	0	3	4	3
10	CS191	Basic Computation & Principles of Computer Programming-I Lab	0	0	3	3	2
Total of Practical						13	9
C. SESSIONAL							
11	HU181	Language Laboratory-I	0	0	2	2	2
12	XC181	Extra Curricular Activities(NSS/NCC/NSO etc)	0	0	2	2	1
Total of Sessional						4	3
Total of Semester						36	30



University of Engineering & Management, Jaipur
First Year Second Semester: Civil Engineering

A. THEORY							
Sl. No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	CS201	Principles of Computer Programming-(C++)	3	1	0	4	4
2	PH201	Physics-II	3	1	0	4	3
3	M201	Mathematics-II	3	1	0	4	3
4	ES201	Basic Electrical & Electronic Engineering-II	3	1	0	4	4
5	ME201	Engineering Thermodynamics & Fluid Mechanics	3	1	0	4	3
6	HU201	English Language & Technical Communication-II	2	0	0	2	2
Total of Theory						22	19
B. PRACTICAL							
7	CS291	Principles of Computer Programming-II Lab	0	0	3	3	2
8	PH291	Physics-II Lab	0	0	3	3	2
9	ES291	Basic Electrical & Electronic Engineering-II	0	0	3	3	2
10	ME291	Workshop Practice Lab	1	0	3	4	3
Total of Practical						13	9
C. SESSIONAL							
11	HU281	Language Laboratory-II	0	0	2	2	2
Total of Sessional						2	2
Total of Semester						37	30



University of Engineering & Management, Jaipur
Second Year Third Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	M301	Mathematics-III	3	1	0	4	4
2	CS(CE)301	Data Structure & Algorithm	3	1	0	4	3
3	CH301	Basic Environmental Engineering	2	1	0	3	3
4	CE301	Solid Mechanics	3	0	0	3	3
5	CE302	Surveying	3	1	0	4	4
6	CE303	Building Material & Construction	3	1	0	4	4
Total Theory						22	21
B. PRACTICAL							
7	CS(CE)391	Data Structure & Algorithm Lab	0	0	3	3	2
8	CE391	Solid Mechanics Lab	0	0	3	3	2
9	CE392	Surveying Practice-I Lab	0	0	3	3	2
10	CE393	Building Design & Drawing Lab	0	0	3	3	2
Total of Practical						12	8
Total of Semester						34	29

Second Year Fourth Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	M(CS)401	Numerical Methods	2	1	0	3	3
2	HU401	Values & Ethics in Profession	3	1	0	4	3
3	CE401	Fluid Mechanics	3	0	0	3	3
4	CE402	Structural Analysis	3	1	0	4	4
5	CE403	Soil Mechanics	3	1	0	4	4
Total Theory						18	17
B. PRACTICAL							
6	HU481	Technical Report Writing & Language Lab	0	0	3	3	1
7	M(CS)491	Numerical Methods Lab	0	0	3	3	2
8	CE491	Fluid Mechanics Lab	0	0	3	3	2
9	CE492	Surveying Practice-II Lab	0	0	3	3	2
10	CE493	Soil Mechanics-I Lab	0	0	3	3	2
Total of Practical						15	9
Total of Semester						33	26



University of Engineering & Management, Jaipur
Third Year Fifth Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	HU501	Organizational Behavior	3	0	0	3	3
2	CE501	Foundation Engineering	3	1	0	4	4
3	CE502	Design of RC Structures	3	1	0	4	4
4	CE503	Concrete Technology	3	0	0	3	3
5	CE504	Engineering Geology	3	0	0	3	3
Total Theory						17	17
B. PRACTICAL							
6	CE591	Soil Mechanics Lab-II	0	0	3	3	2
7	CE592	Concrete Lab	0	0	3	3	2
8	CE593	Quantity Surveying, Specifications & Valuation Lab	0	0	3	3	2
9	CE594	Engineering Geology Lab	0	0	3	3	2
Total Practical						12	8
Total of Semester						29	25



University of Engineering & Management, Jaipur
Third Year Sixth Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	HU601	Principles of Management	2	1	0	3	2
2	CE601	Highway & Transportation Engineering	3	0	0	3	3
3	CE602	Design of Steel Structure	3	0	0	3	3
4	CE603	Construction Planning & Management	3	0	0	3	3
5	CE604	Professional Elective-I	3	0	0	3	3
6	CE605	Free Elective-I	3	0	0	3	3
Total Theory						18	17
B. PRACTICAL							
7	CE691	Highway & Transportation Engg. Lab	0	0	3	3	2
8	CE692	Detailing of RC & Steel Structures Lab	0	0	3	3	2
9	CE693	CAD Lab	0	0	3	3	2
10	CE681	Seminar	0	0	3	3	2
Total Practical						12	8
Total of Semester						30	25

List of Electives:

Professional Elective-I

1. CE604A: Bridge Engineering
2. CE604B: Pre-stressed Concrete
3. CE604C: Structural Dynamics & Earthquake Engineering

Free Elective-I

1. CE605A: Operations Research
2. CE605B: Human Resource Management
3. CE605C: Materials Handling
4. CE605D: Solid Waste Management



University of Engineering & Management, Jaipur
Fourth Year Seventh Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	CE701	Environmental Engineering	3	0	0	3	3
2	CE702	Water Resource Engineering	3	0	0	3	3
3	CE703	Professional Elective-II	3	0	0	3	3
4	CE704	Professional Elective-III	3	0	0	3	3
5	CE705	Free Elective-II	3	0	0	3	3
Total Theory						15	15
B. PRACTICAL							
6	CE791	Environmental Engg. Lab	0	0	3	3	2
7	CE795	Free Elective Lab	0	0	3	3	2
8	CE781	Seminar on Industrial Training	4 weeks duration during 6th-7th Semester break				2
9	HU781	Group Discussion					2
10	CE782	Project Part-I			6	6	4
Total Practical						12	12
Total of Semester						27	27

List of Electives:

Free Elective-II

1. CE705A: Engineering Materials
2. CE705B: Electrical & Electronic Measurement

Free Elective Lab

1. CE795A: Material Testing Lab
2. CE795B: Electrical & Electronic Measurement Lab

Professional Elective-II

1. CE703A: Advanced Foundation Engineering
2. CE703B: Soil Stabilization & Ground Improvement Techniques
3. CE703C: Advanced Highway & Transportation Engineering

Professional Elective-III

1. CE704A: Advanced Structural Engineering
2. CE704B: Hydraulic Structures



University of Engineering & Management, Jaipur
Fourth Year Eighth Semester: Civil Engineering

A. THEORY							
Sl. No	Course Code	Theory	Contact hours per week				Credit Points
			L	T	P	Total	
1	HU802	Economics for Engineers	2	0	0	2	2
2	CE801	Professional Elective-IV	3	0	0	3	3
3	CE802	Professional Elective-V	3	0	0	3	3
Total Theory						8	8
B. PRACTICAL							
4	CE891	Structural Engineering Design Lab	0	0	3	3	3
5	CE881	Grand Viva	0	0	0	0	4
6	CE882	Project Part-II			12	12	6
Total Practical						21	13
Total of Semester						29	21

List of Electives:

Professional Elective-IV

1. CE801A: Environmental Pollution & Control
2. CE801B: Water Resource Management & Planning
3. CE801C: Remote Sensing & GIS

Professional Elective-V

1. CE802A: Finite Element Method
2. CE802B: Dynamics of Soils & Foundations
3. CE802C: Design of Tall Buildings
4. CE802D: Pavement Design