

ANNEXURE-V

REVISED SCHEME OF COURSES
FOR 4-YEAR B.TECH. PROGRAMME
IN CIVIL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
SRINAGAR
(FOR 2016 BATCH ONWARDS)

(BOS, September-2015)

REVISED SHCEME

For

UNDER GRADUATE PROGRAMME

(Bachelor of Technology)

IN

CIVIL ENGINEERING

(EFFECTIVE FROM: 2016 BATCH)

DEPARTMENT OF CIVIL ENGINEERING

NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR

**HAZRATBAL, SRINAGAR, KASHMIR, J&K, INDIA -
190006**

B. TECH. 1st SEMESTER

<u>Course No.</u>	<u>Course title</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
CIV-102	Engg.Drawing	2	0	4	4

B. TECH. 2nd SEMESTER

<u>Course No.</u>	<u>Course title</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
CIV-201	Strength of Materials	3	1	0	4

B.TECH. 3RD SEMESTER (CIVIL)

Course No.	Course title	L	T	P	C
CIV-301	Structural Analysis- I	2	2	0	4
CIV-301(P)	Structural Engineering Lab- I	0	0	2	1
CIV-302	Fluid Mechanics	2	1	0	3
CIV-302(P)	Fluid Mechanics Lab-I	0	0	2	1
CIV-303	Surveying-I	2	1	0	3
CIV- 303(P)	Surveying Lab-I	0	0	4	2
MTH-303	Mathematics-I	2	1	0	3
ELE-304	Basic Electrical Engineering	2	1	0	3
ELE-304(P)	Basic Electrical Engineering Lab.	0	0	2	1
HSS-301	Humanities & Social Science-I	2	1	0	3
CIV-300	Professional Development Activities	0	0	2	1
Total Lecture Hours and Credits		31			25
COURSES OFFERED TO OTHERS DEPARTMENTS (METALLURGY)					
CIV- 304	Geology & Mineralogy	2	2	0	4
CE-304(P)	Geology & Mineraology Lab.	0	0	2	1

B.TECH. 4th SEMESTER (CIVIL)

Course No.	Course title	L	T	P	C	Remarks	
CIV-401	Structural Analysis- II	2	1	0	3	* Two weeks survey camp immediately after exam. of 4 th semester (July)	
CIV-402	Fluid Flow in Pipes and Channels	2	1	0	3		
CIV-402(P)	Fluid Mechanics Lab-II	0	0	2	1		
CIV-403	Surveying-II	2	1	0	3		
CIV-403(P)	Surveying Lab-II	0	0	2	1		
CIV-403(SC)	Surveying Camp [*]	0	0	4	2		
CIV-404	Engineering Geology and Materials	2	1	0	3		
CIV-404(P)	Geology Lab.	0	0	2	1		
CIV-405	Building Drawing and Construction	3	1	0	4		
MTH-406	Mathematics-II	2	1	0	3		
CIV-400	Professional Development Activities	0	0	2	1		
Total Lecture Hours and Credits		31			25		

BTECH. 5th- SEMESTER (Civil)

Course No.	Course title	L	T	P	C
CIV-501	Design of Structures-I	2	2	0	4
CIV-501(P)	Concrete Laboratory	0	0	2	1
CIV-502	Highway Engineering and PMS	2	1	0	3
CIV-502(P)	Highway Laboratory	0	0	2	1
CIV-503	Geotechnical Engineering-I	2	2	0	4
CIV-503 (P)	Geotechnical Laboratory-I	0	0	2	1
CIV-504	Water Resources Engineering	2	2	0	4
CIV-505	Structural Analysis-III	2	1	0	3
CIV-500	Professional Development Activities	0	0	2	1
Elective Courses					
CIV-506: E1	Architecture and Town Planning	2	1	0	3
	Concrete Technology				
	Engineering Seismology				
Total Lecture Hours and Credits		35			25
COURSES OFFERED TO OTHERS DEPARTMENTS (ELECTRICAL)					
CIV-507	Hydraulics and Hydraulic Machines	3	1	0	4

B.TECH. 6th SEMESTER (Civil)

Course No.	Course title	L	T	P	C
CIV-601	Design of Structures-II	2	2	0	4
CIV-601(P)	Structural Engineering Lab.-II	0	0	2	1
CIV-602	Traffic Engineering and Road Facilities	2	2	0	4
CIV-602(P)	Traffic Engineering Laboratory	0	0	2	1
CIV-603	Geotechnical Engineering-II	2	2	0	4
CIV-603 (P)	Geotechnical Laboratory-II	0	0	2	1
CIV-604	Irrigation and Hydraulic Structures	2	1	0	3
CIV-600	Professional Development Activities	0	0	2	1
Elective Courses					
CIV-611:E1	Water Shed Management	2	1	0	3
MTH-611:E1	Operations Research				
PHY-ELE:E1	Solar Architecture				
CIV-612:E2	Computer Aided Design	2	1	0	3
	Disaster Management				
	Applied Hydrology				
	Advanced Structural Analysis				
Total Lecture Hours and Credits		29			25

B.TECH. 7th SEMESTER (Civil)

Course No.	Course title	L	T	P	C
CIV-701	Environmental Engineering-I	2	1	0	3
CIV-701(P)	Water Quality Lab	0	0	2	1
CIV-702	Structural Dynamics	2	1	0	3
CIV-703	Construction Technology & Management	2	1	0	3
CIV-704	Design of Structures-III	2	2	0	4
CIV-705	Quantity Surveying and Cost Evaluation	2	1	0	3
CIV-706	Seminar	0	2	0	2
CIV-707	Project Pre-Work	0	0	4	2
CIV-700	Professional Development Activities	0	0	2	1
Elective courses					
CIV-711:E1	Railway and Airport Engineering	2	1	0	3
	Fluvial Hydraulics				
	Advanced Geotechnical Engineering				
Total Lecture Hours and Credits		29			25

B.TECH. 8th SEMESTER (Civil):

Course No.	Course title	L	T	P	C
CIV-801	Hydropower Engineering	2	2	0	4
CIV-802	Bridge Engineering	2	1	0	3
CIV-803	Project*	0	5	10	10
CIV-804	Practical Training & Viva-Voce	0	0	0	2
ELECTIVE COURSES					
CIV-811:E1	Rock Mechanics and Tunneling Technology	2	1	0	3
	Transportation Planning and Economics				
MTH-811	Numerical Methods in Civil Engineering				
CIV-812:E2	Ground Improvement Techniques	2	1	0	3
	Earthquake Resistant Design				
	Environmental Engineering-II				
Total Lecture Hours and Credits		28			25

*The evaluation will be done as per statutes.

10. Suggested Books:

Sr. No	Name of Books/authors/Publishers	Year of Publication
1.	Davis M. L. and Cornwell D. A., "Introduction to Environmental Engineering", McGraw Hill, New York 4/e	2008
2.	Masters G. M., Joseph K. and Nagendran R. "Introduction to Environmental Engineering and Science", Pearson Education, New Delhi. 2/e	2007
3.	Peavy H. S., Rowe D.R. and Tchobanoglous G., "Environmental Engineering", McGraw Hill, New York	1986
4.	Mines R. O. and Lackey L. W. "Introduction to Environmental Engineering", Prentice Hall, New York	2009
5.	Miheicic J. R. and Zimmerman J. B. "Environmental Engineering: Fundamentals, Sustainability, Design" John Wiley and Sons, Inc.	2010