

DEPARTMENT OF CIVIL ENGINEERING

Minutes of Board of Studies Meeting

The following members were present for the Board of Studies meeting, held on 08.02.2013 under the chairmanship of Dr. M. Murali at Vignan's University, Vadlamudi, for approval of the proposed course structure and syllabus of B.Tech (Civil Engineering) course from 2013-14 batch onwards.

1. Dr. M. Murali, Professor & Head, Department of Civil Engineering, Vignan's University, Vadlamudi.
2. Dr. K. Anantha Narayan, Professor, Dept. of Civil Engineering, IIT Chennai.
3. DR. D. Ramaseshu, Professor, Department of Civil Engineering, NIT Warangal.
4. Dr. S. Vijaya Kumar, Scientist: F, National Institute of Hydrology, Kakinada.
5. Dr. V. Anjaneya Prasad, VAP Engineers (I) Pvt. Ltd. Madapur, Hyderabad
6. Dr. A. Srinivasa Prasad, Head, Department of Civil Engineering, Vignan's University, Vadlamudi.
7. Mr. M. V. Raju, Asst. Professor, Department of Civil Engineering, Vignan's University, Vadlamudi.

AGENDA

1. To finalize B.Tech (Civil Engineering) Course structure
2. Syllabus review and Modifications
3. Inclusions/Modification of Department Electives
4. Identification of Inter Departmental subjects

The following are the changes proposed in the existing course structure:

1. Seminar having one credit is introduced in each semester of 2nd and 3rd years. A mini project is proposed in 3rd year 2nd semester.
2. Two groups of elective subjects consisting of 4 subjects in each group are offered in each semester of final year.
3. Data structures subject is introduced in 2nd year for all branches of engineering as a common subject as decided in common BOS meeting.
4. Environmental Engineering-I and Building Drawing Lab are shifted to III-I from II-II
5. Environmental Engineering-II and Environmental Engineering Lab are shifted to III-II from III-I.
6. Transportation Engineering is placed in IV-I and Structural Analysis-III and water Resources Engineering-II are shifted to III-II from IV-I.
7. Operational Research and Remote sensing & GIS subjects are shifted to elective groups from core group.
8. Earthquake resistant Design of Structures is introduced in elective group in place of structural dynamics.
9. Construction Methods & Equipments and Repair & Rehabilitation of structures are added in the elective group.

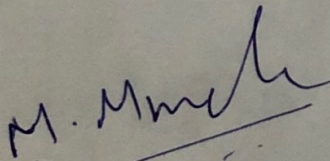
The following modifications were suggested in the proposed course structure by the members of BoS:

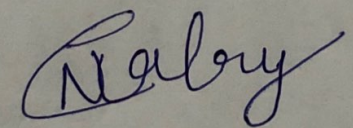
1. The members of BoS felt that Data Structures subject should be shifted to elective group so that a core subject can be accommodated in its place.
2. Engineering Geology Theory and Practicals should be shifted to IV-I so that all the design subjects can be completed before IV year. Hence, according to the suggestions given, Design of reinforced Concrete Structures and Computers Applications in Civil Engineering
3. Laboratory were shifted to III-I from III-II; and Design of Steel Structures and Computer Aided Analysis and Design of Structures Lab were shifted to III-II from IV-I.
4. For the course Design of Reinforced Concrete Structures, a topic named Objectives of Structural Design is to be included in the syllabus and also a new text book Design of Reinforced Concrete Structures by Pillai & Menon is to be added to the list of textbooks.
5. Syllabus is to be split in each unit mentioning clearly the topics to be covered for courses Prestressed Concrete and Finite Element method.
6. No. of subjects in each group of elective may be increased from 3 to 4 to cover the wide spectrum of Civil Engineering.
7. Some experiments namely determination of discharge through V-Notch, Orifice and Mouthpiece were added to the list of experiments of Hydraulics and Hydraulic Machines Laboratory.
8. The list of Textbooks for Surveying-I and Surveying-II was changed with addition of new textbooks.
9. A textbook names Transportation Engineering by L. R. Kadiyali was added to the list of textbooks for Transportation Engineering.
10. Syllabus for Geotechnical Engineering-I and Geotechnical Engineering-II was altered clearly mentioning the topics to be covered in each unit. Few topics from GTE-I were shifted to GTE-II and vice-versa for proper division of the syllabus.
11. The topic names Paints was shifted from Building Construction and Planning to Building Materials and Concrete Technology. Also, the chapters in BCP were rearranged in every unit for proper division of syllabus.

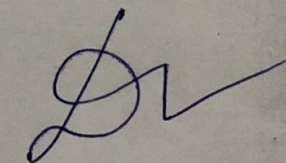
13. Estimation and Costing subject was renamed as Estimation and Construction Planning: and Syllabus was rearranged to accommodate Construction Planning and Scheduling chapters as Unit-V.

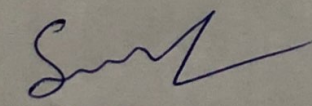
Outcomes:

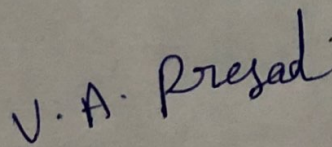
1. BoS members approved the revised curriculum (Structure, Syllabus and regulations) of B.Tech Civil Engineering and it follows Choice Based Credit System. Structure is provided in Appendix A.
2. In all the courses of the revised curriculum (R13) substantial changes are made in the content and the list of new courses are provided in Appendix B.
3. Stakeholders feedback is collected, analyzed and implemented while designing the curriculum.

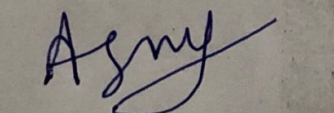

(Dr. M. Murali)


(Dr. K. Anantha Narayan)


(Dr. D. Ramaseshu)


Dr. S. Vijaya Kumar


Dr. V. Anjaneya Prasad


Dr. A. Srinivasa Prasad

APPENDIX A

B.Tech-Civil Engineering

Course Structure-2013 Regulation

I Year		I Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Engineering Mathematics - I	4	-	-	4	4
2.	Engineering Physics	4	-	-	4	4
3.	Engineering Mechanics	4	-	-	4	4
4.	Technical English Communication	3	2	-	5	5
5.	Problem Solving & Computer Programming	5	-	-	5	5
6.	Network security	2	-	-	2	-
Labs :						
7.	Engineering physics Lab	-	-	3	3	2
8.	Introduction to Computer Programming Lab	-	-	3	3	2
9.	Work shop Practice	-	-	3	3	2
Total		22	2	9	33	28

I Year		II Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Engineering Mathematics - II	4	-	-	4	3
2.	Engineering Chemistry	4	-	-	4	4
3.	Fundamentals of Electrical Engineering	3	-	-	4	3
4.	Data Structures	4	-	-	4	4
5.	Environmental Studies	3	-	-	3	3
6.	Professional Ethics, Values and Human Rights	2	-	-	2	-
Labs :						
7.	Data Structures Lab	-	-	3	3	2
8.	Engineering Graphics	1	-	3	4	3
9.	Fundamental of Electrical Engineering Lab	-	-	3	3	2

Total		18	4	9	31	26
II Year		I Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Probability & Statics	3	1	-	4	4
2.	Surveying-I	3	1	-	4	4
3.	Solid Mechanics	3	1	-	4	4
4.	Fluid Mechanics	3	1	-	4	4
5.	Building Materials and Concrete Technology	3	1	-	4	4
6	Minor – 1	3		-	4	4
Labs :						
7.	Material Testing Lab.	-	-	3	3	2
8.	Surveying Field Work-I	-	-	3	3	2
9.	Soft Skills Lab	-	-	3	3	2
Total		18	7	9	34	31

II Year		II Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Data Structures	3	1	-	4	4
2.	Structural Analysis – I	3	1	-	4	4
3.	Building Construction and Planning	3	1	-	4	4
4.	Hydraulics and Hydraulic Machines	3	1	-	4	4
5.	Surveying-II	3	1	-	4	4
6.	Minor – 2	-	1	-	1	1
Labs :						
7.	Surveying Field Work-II	-	-	3	3	2
8.	Fluid Mechanics & Hydraulic Machinery Lab	-	-	3	3	2
9.	Professional Communication Lab	-	-	3	3	2
Total		18	7	9	34	31

III Year		I Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Design of Reinforced Concrete Structures	3	1	-	4	4
2.	Structural Analysis - II	3	1	-	4	4
3.	Geotechnical Engineering - I	3	1	-	4	4
4.	Environmental Engineering - I	3	1	-	4	4
5.	Department Elective – I Water Resources Engineering - I Operation Research Construction methods & Equipments	3	1	-	4	4
6.	Minor – 3	3	1	-	4	4
Labs :						
7.	Geotechnical Engineering Lab	-	-	3	3	2
8.	Computer Application in Civil Engg	-	-	3	3	2
9.	Building Drawing using AUTOCAD	-	-	3	3	2
Total		18	6	10	34	31

III Year		II Semester				
Sl.No.	Subject	L	T	P	To	C
1.	Design of Steel Structures	3	1	-	4	4
2.	Structural Analysis - III	3	1	-	4	4
3.	Geotechnical Engineering - II	3	1	-	4	4
4.	Environmental Engineering - II	3	1	-	4	4
5.	Department Elective – II Water Resources Engineering - II Advanced Design of Reinforced Concrete structures. Prestressed Concrete	3	1	-	4	4
6.	Minor – 4	3	1	-	4	4
Labs :						
7.	Computer Aided Analysis & Design of Structures Lab	-	-	3	3	2
8.	Environmental Engineering Lab	-	-	3	3	2
9.	Mini Project (mandatory)	-	-	3	3	2

Total	18	6	10	34	31
--------------	-----------	----------	-----------	-----------	-----------

IV Year			I Semester				
Sl.No	Code	Subject	L	T	P	To	C
1.		Estimating & Construction Planning	3	1	-	4	4
2.		Transportation Engineering	3	1	-	4	4
3.		Engineering Geology	3	1	-	4	4
4.		Dept. Electives – III Air Pollution & Control Ground Improvement Techniques Railway & Airport Engineering	3	1	-	4	4
5.		Department Elective – IV Design & Drawing of Hydraulic Structures Earthquake Resistant Design of Structures Traffic Engineering	3	1	-	4	4
6.		Managerial Economics	3	1	-	4	4
Labs :							
7.		Engineering Geology Lab	-	-	3	3	2
8.		Quantity Estimation & Project Mgmt. Lab	-	-	3	3	2
9.		Internship (6 months) (mandatory)	-	-	3	3	2
Total			18	6	9	33	30

IV Year			II Semester				
Sl.no	Code	Subject	L	T	P	To	C
1.		Minor- V	3	1	-	4	4
2.		Dept. Electives – IV Design & Drawing of Hydraulic Structures Earthquake Resistant Design of Structures Traffic Engineering	3	1	-	4	4
3.		Dept. Electives – V Environmental impact Assessment Bridge Engineering Repairs & Rehabilitation of Structures	3	1	-	4	4
Labs :							
4.		Project Work/ Internship (6 months) (mandatory)	-	-			20
Total			6	2	-	8	32

APPENDIX-B

LIST OF NEW COURSES

Sl.	Course Name
1	Engineering Mathematics - I
2	Engineering Physics
3	Engineering Mechanics
4	Technical English Communication
5	Problem Solving & Computer Programming
6	Network security
7	Engineering Mathematics - II
8	Engineering Chemistry
9	Fundamentals of Electrical Engineering
10	Data Structures
11	Environmental Studies
12	Professional Ethics, Values and Human Rights
13	Engineering physics Lab
14	Introduction to Computer Programming Lab
15	Work shop Practice
16	Data Structures Lab
17	Engineering Graphics
18	Fundamental of Electrical Engineering Lab
19	Surveying-I
20	Solid Mechanics
21	Fluid Mechanics
22	Building Materials and Concrete Technology
23	Structural Analysis – I
24	Building Construction and Planning
25	Hydraulics and Hydraulic Machines
26	Surveying-II
27	Design of Reinforced Concrete Structures
28	Structural Analysis - II
29	Geotechnical Engineering - I
30	Environmental Engineering - I
31	Design of Steel Structures
32	Structural Analysis - III
33	Geotechnical Engineering - II
34	Environmental Engineering - II
35	Estimating & Construction Planning
36	Transportation Engineering
37	Engineering Geology
38	Air Pollution & Control
39	Ground Improvement Techniques

40 -	Railway & Airport Engineering
41 -	Design & Drawing of Hydraulic Structures
42 -	Earthquake Resistant Design of Structures
43 -	Traffic Engineering
44 -	Environmental impact Assessment
45 -	Bridge Engineering
46 -	Repairs & Rehabilitation of Structures