



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF CIVIL ENGINEERING

Minutes of BoS meeting for M. Tech Structural Engineering held on 01st June 2017

Dt.01.06.2017

Minutes of Board of Studies meeting for M. Tech Structural Engineering held on 01st June 2017 in AFF-10, Gallery Hall, U Block under the Chairmanship of Dr. Alimelu V Hebsur, HoD, Department of Civil Engineering, Vignan's University.

The following members were present:

1. Dr. D. Ramaseshu, Professor, Dept of Civil Engineering, NIT, Warangal.
2. Er. C. Sankarlingam, Vice-President & Head-Special Projects, L&T Construction, Chennai.
3. Dr. G. Venkatachalam, Professor, Department of Civil Engineering, IIT Bombay.
4. Dr. Alimelu V Hebsur - HoD, Civil Engineering.
5. Mr. M Anirudh - Assistant Professor.
6. Mr. P. Satish - Assistant Professor.
7. Mr. B.J.N. Satish - Assistant Professor.

The following are the agenda points:

1. Finalization of Courses
2. Suggestions to be included in R17 Curriculum

The Following are the Observation/Remarks by BoS Members on curriculum

1. Dr. D. Ramaseshu informed that in the place of Numerical methods which was offered earlier in 1st semester, Mathematical Methods will be implemented in the curriculum.
2. Ansys Lab is introduced in Finite Element Analysis Course and Matrix methods of Structural analysis is merged with it and emerged as a new course "MMFEA".
3. Er. C. Sankarlingam, suggested few elective courses which will cater to the needs of students for working in wide range of fields, like Smart cities.
4. They also mentioned that Lab course should be included for Earthquake Resistant Design of Structures and Structural Dynamics on SAP 2000 and MATLAB to enhance the computational knowledge of the students.
5. Syllabi for all the courses are accepted by all the BoS members and included in the curriculum.



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Outcomes:

1. BoS members approved the revised curriculum (Structure, Syllabus and regulations) of M.Tech, Structural Engineering with percentage revision of 22% and it follows Choice Based Credit System. Structure is provided in Appendix A.
2. Major restructuring has taken place in the Curriculum with theory courses integrated with laboratory sessions.
3. All the Courses in the Curriculum are designed to fall under either of the domains of employability (or) skill development (or) Entrepreneurship. The mapping of the courses with employability or skill development is provided in Appendix B.
4. In all the courses of the revised curriculum (R17) substantial changes are made in the and the list of new courses is provided in Appendix C.
5. Stake holder's feedback is collected, analyzed and implemented while designing the curriculum.

(Dr. D. Ramaseshu)

(Er. E. Sankarlingam)

(Dr. G. Venkatachalam)

(Dr. Alimelu V. Hebsur)

(Mr. M. Anirudh)

(Mr. P. Sathish)

(Mr. B. J. N. Satish)



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Appendix A

Course Structure -M. Tech -Structural Engineering 2017 Regulation

I Year-I Semester

S. No.	Course Title	L	T	P	C
1	Theory of Elasticity.	3	1	-	4
2	Structural Dynamics	3	0	3	5
3	Advanced Reinforced Concrete Design	3	0	3	5
4	Mathematical Methods	4	0	-	4
5	Elective - I	3	0	-	3
6	Elective - II	3	0	-	3
Total semester credits					24

I Year-II Semester

S. No.	Course Title	L	T	P	C
1	Research Methodology	3	0	0	3
2	Employment Orientation Program (EOP)	2	0	0	2
3	Matrix Methods and Finite Element Analysis	3	1	2	5
4	Earthquake Resistant Design of Structures	3	1	2	5
5	Theory of Plates and Shells	3	1	0	4
6	Repairs and Rehabilitation of Structures	3	1	0	4
7	Elective - III	3	0	0	3
8	Elective - IV	3	0	0	3
Total Semester Credits					29

II Year- I Semester

S. No.	Course Title	L	T	P	C
1	Industrial Internship (4-6 weeks); Optional	-	-	-	15
Total Semester Credits					15

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II Year- II Semester

S. No.	Course Title	L	T	P	C
1	Project Phase 2	-	-	-	15
Total Semester Credits					15

The courses that are highlighted denote implementation of 'Choice Based Credit System (CBCS)'

POOL OF ELECTIVES

S. No	Course Title	Credits
1	Plastic and Limit State Design of Steel Structures	3
2	Fracture Mechanics	3
3	Construction Planning and Project management	3
4	Advanced Foundation Engineering	3
5	Mechanics of Composite Materials	3
6	Ground Improvement Techniques	3
7	Bridge Engineering	3
8	Design of Tall Structures	3
9	Advanced Pre-stressed Concrete	3
10	Stability of structures	3
11	Structural Optimization	3
12	Advanced Concrete Technology	3
13	Smart Structures and Applications	3
14	Pre Engineered Buildings	3
15	Experimental Stress Analysis	3
16	Soil Structure Interaction	3
17	Advanced steel and Concrete Composite Structures	3

A. V. Hebbar
Chairman, BoS

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DEPARTMENT OF CIVIL ENGINEERING**APPENDIX – B**

List of courses that enable employability or entrepreneurship or skill development in the R-17

M. Tech – Structural Engineering

Sl.	Course Name	Employability / Skill Development/ Entrepreneurship
1	Theory of Elasticity.	Skill development
2	Structural Dynamics	Skill development
3	Advanced Reinforced Concrete Design	Skill development
4	Mathematical Methods	Skill development
5	Research Methodology	Skill development
6	Employment Orientation Program (EOP)	Employability
7	Matrix Methods and Finite Element Analysis	Skill development
8	Earthquake Resistant Design of Structures	Skill development
9	Theory of Plates and Shells	Skill development
10	Repairs and Rehabilitation of Structures	Employability
11	Plastic and Limit State Design of Steel Structures	Skill development
12	Fracture Mechanics	Skill development
13	Construction Planning and Project management	Entrepreneurship
14	Advanced Foundation Engineering	Skill development
15	Mechanics of Composite Materials	Skill development

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16	Ground Improvement Techniques	Employability
17	Bridge Engineering	Employability
18	Design of Tall Structures	Skill development
19	Advanced Pre-stressed Concrete	Skill development
20	Stability of structures	Skill development
21	Structural Optimization	Skill development
22	Advanced Concrete Technology	Skill development
23	Smart Structures and Applications	Skill development
24	Pre Engineered Buildings	Employability
25	Experimental Stress Analysis	Skill development
26	Soil Structure Interaction	Skill development
27	Advanced steel and Concrete Composite Structures	Employability
28	Industrial Internship/Project	Employability

*A.V. Hebbar***Chairman, BoS**

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DEPARTMENT OF CIVIL ENGINEERING**APPENDIX – C****List of new courses in the R-17 Regulations****M. Tech- Structural Engineering**

Sl.	Course Name	Year-Semester
1	Theory of Elasticity.	I-I
2	Structural Dynamics	I-I
3	Advanced Reinforced Concrete Design	I-I
4	Mathematical Methods	I-I
5	Research Methodology	I-I
6	Employment Orientation Program (EOP)	I-I
7	Matrix Methods and Finite Element Analysis	I-II
8	Earthquake Resistant Design of Structures	I-II
9	Theory of Plates and Shells	I-II
10	Repairs and Rehabilitation of Structures	I-II
11	Plastic and Limit State Design of Steel Structures	I-I/I-II
12	Fracture Mechanics	I-I/I-II
13	Construction Planning and Project management	I-I/I-II
14	Advanced Foundation Engineering	I-I/I-II

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15	Mechanics of Composite Materials	I-I/I-II
16	Ground Improvement Techniques	I-I/I-II
17	Bridge Engineering	I-I/I-II
18	Design of Tall Structures	I-I/I-II
19	Advanced Pre-stressed Concrete	I-I/I-II
20	Stability of structures	I-I/I-II
21	Structural Optimization	I-I/I-II
22	Advanced Concrete Technology	I-I/I-II
23	Smart Structures and Applications	I-I/I-II
24	Pre Engineered Buildings	I-I/I-II
25	Experimental Stress Analysis	I-I/I-II
26	Soil Structure Interaction	I-I/I-II
27	Advanced steel and Concrete Composite Structures	I-I/I-II
28	Industrial Internship/Project	II-I/II-II

A. V. Hebbar
Chairman, BoS