SRINIVAS UNIVERSITY
COLLEGE OF ENGINEERING & TECHNOLOGY

Main Campus : Srinivas Nagar, Mukka, Surathkal, Mangalore, - 574 146
Surathkal, Mangalore – 575023, INDIA
Ph. : +91 824 2425966
Email ID: admission@srinivasuniversity.edu.in

DEPARTMENT OF CIVIL ENGINEERING

M. TECH IN STRUCTURAL ENGINEERING

About Course:

Master of Technology in Structural Engineering (M.Tech.) program nurtures and develops students as structural engineers. The program lays emphasis on preparing students to become competent Structural Engineers with latest technological knowledge in Structural Engineering as per global needs by building their capabilities, sound technical knowledge, skills and attitude. Master of Technology in Structural Engineering (M.Tech.) program is a two-year post graduate programme. The aim of the Master of Technology in Structural Engineering (M.Tech.) program is to prepare students for successful careers in the field of Structural Engineering as per international standards and to prepare students to become responsible and contributing members of the community.

Duration : 2 years, Four semesters.

Eligibility: Candidates passing B.E / B.Tech. Examinations in Civil Engineering with minimum marks of 45% from Engineering Colleges affiliated to AICTE New Delhi are eligible for admission to M.Tech program. For SC/ST candidates, the minimum marks percentage required is 40% in B.E / B.Tech.

Course Details :

M.Tech. (Structural Engineering)

Vision and Mission:

Vision
To create Technically sound, Dynamic ,Skilful, Innovative Civil Engineers, imbibed with good entrepreneurial and human virtues, who are quality conscious, efficient and who will be the leaders in building safe, sustainable world for the future generations.

Mission:
Providing Uncompromising Standard of Excellence in Technical Teaching to the students with an excellent Academic Environment to acquire comprehensive knowledge in the Civil Engineering, reinforced with opportunities to develop Skill ,Personality, Entrepreneurship Qualities and Ethical Values.

Special Features of the Programme:

- Study material will be provided from the college for every subject according to the syllabus.
- Industry oriented syllabus with special focus on experimental learning.
- Seminars, Technical Talks and Interactions with industrial experts.
- Innovations in examination system with opportunity for personal seeing of evaluated papers.
- Placement support and research-oriented projects for every student.
- Focus on smart skill development & training on Civil Engineering practices.
- Opportunity to visit Civil / Construction Industry and Project Sites.

Programme Educational Objectives:

- To prepare students to meet the industrial requirements at global level competitiveness.
- To develop the students analytical skills to enable them to understand real world problems and formulate solutions.
- To impart basic education to students in the areas of Structural Design, Proof Checking and Analysis of Structures that will enable them to take up higher studies in these areas.
- To allow students to work in teams through group project works and seminars and thus help them achieve interpersonal and communication skills.
- To inculcate the habit of lifelong learning, adherence to ethics in profession, concern for environmental and regard for good professional practices.

Career Opportunities:

Structural Engineers have opportunities in construction / contracting / consultancy companies, evaluation of life and stability of structures, design of multi-storeyed buildings, dams, ports &harbours, airports, smart cities, government departments like Municipalities, Pubic Work Departments, Ministry of Housing, Ministry of Transportation, Electricity and Water Authority Departments, Urban Development or Town Planning Departments, Real Estate Agencies, National Highway Authority etc.

Unique Features:

The Department has been recognized as Research and Development Centre by Srinivas University for carrying out Research activities leading to Ph.D. Degrees. The department offers PG program namely, M.Tech.(Structural Engineering).

Being under a private university we had a feasibility to form our own syllabus. Thus, we have approached several industrialists and have framed the syllabus according to the industry requirements and prepared an Industrial oriented syllabus.

The students of the department will undergo internship in various reputed organizations all over the country. Students participate in various national and international level competitions regularly. The department possesses the state of the art research facilities to support our academic programs and research. Several projects of the students have been funded by the Government of Karnataka.

Our department has a distinguished record in both teaching and research. Faculty members have excellent academic credentials and are highly regarded. They have publications at national and international levels.

PROGRAMME STRUCTURE

SEMESTER I		SEMESTER II	
Sl. No.	**Subjects**	**Sl. No.**	**Subjects**
1	Mechanics of Deformable Bodies	1	Design of Plates and Shells
2	Advanced Design of RCC Structures	2	Design of Industrial Structures
3	Structural Dynamics	3	Earthquake Resistant Structures
4	Finite Element Method of Analysis	4	Computational Structural Mechanics
5	Design of Concrete Bridges	5	Elective II
6	Elective I	6	Elective III
7	Structural Engineering Lab -I	7	Structural Engineering Lab - II
8	Seminar	8	Seminar
	Elective I Advanced Design of Pre-Stressed Concrete Repair and Rehabilitation of Structures AI & expert system in structural engineering Optimization Techniques Ground Improvement Techniques		Elective II Stability Analysis of Structures Design Concepts of Substructures Reliability Analysis of Structures Masonry Structures Advanced Design of Steel Structures Elective III Design of Tall structures Theory of Plasticity and Fracture Mechanics Special Concrete Design of Precast and Composite Structures
SEMESTER III		**SEMESTER IV**	
Sl. No.	**Subjects**	**Sl. No.**	**Subjects**
1	Seminar/Presentation on Internship (After 8 weeks from the date of commencement)	1	Project Work Phase: 1
2	Report on Internship	2	Report on Project work
3	Evaluation and Viva-Voce	3	Final Evaluation of Project Work and Viva-Voce

Internship

1. **Internship:** All the students shall have to undergo mandatory internship of 16 weeks during III semester and University examination shall be conducted at the end of 16 weeks. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared as failed and have to complete during the subsequent University examination after satisfying the internship requirements.

2. **Seminar /Presentation of Internship:** Students in consultation with the guide/co-guide if any, shall prepare and present a seminar after 8weeks of Internship. IA marks shall be awarded by a committee comprising of HOD as Chairman, Guide/co-guide if any, and a senior faculty of the department. The IA marks awarded for Seminar/Presentation on Internship, shall be based on the evaluation of Internship Report, Presentation skill and Question and Answer session.

3. **Evaluation and Viva-Voce:** Students in consultation with the guide/co-guide if any, shall prepare relevant Internship report, and present a seminar at the end of 16 weeks. IA marks shall be awarded by a committee comprising of HOD as Chairman, Guide/co-guide if any, and a senior faculty of the department based on the evaluation of Internship Report, Presentation skill and Question and Answer session. Examination marks shall be awarded by External Guide sand the Internal Guide/co-guide if any, based on the evaluation of Internship Report, Presentation skill and Question and Answer session.

Project Work

1. **Project Phase-1:** Students in consultation with the guide/co-guide if any, shall pursue literature survey and complete the preliminary requirements of selected Project work. Each student shall prepare relevant introductory project document, and present a seminar. IA marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide if any, and a senior faculty of the department. The IA marks awarded for project work phase:1, shall be based on the evaluation of Project Report, Project Presentation skill and Question and Answer session.

2. **Final Evaluation of Project Work and Viva-Voce:** Students in consultation with the guide/co-guide if any, shall prepare relevant project report, and present a seminar. IA marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide if any, and a senior faculty of the department based on the evaluation of Project Report, Project Presentation skill and Question and Answer session. Examination marks shall be awarded by External Guide and the Internal Guide/co-guide if any, based on the evaluation of Project Report, Project Presentation skill and Question and Answer session