



# SRINIVAS UNIVERSITY

Srinivas Nagar, Mukka– 574 146, Mangalore, Karnataka, Phone: 0824-2477456  
(State Private University Established by Karnataka Govt. ACT No.42 of 2013, Recognized by  
UGC, New Delhi, & Member of Association of Indian Universities, New Delhi)

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**Administrative Office:GHS Road, Mangalore-01, Phone 0824-2425966**

## COLLEGE OF ENGINEERING & TECHNOLOGY

### Bachelor of Technology(CS- Data Science)

**Duration:** 4 years, Eight semesters. (Admissions open for the batch 2018-19)

**Eligibility:** Pass in the 10+2 examination (Pre-University Board Examination) with Physics, Chemistry & Mathematics that is recognised by any state board / central board as per norms. Admissions to the programs to be done on the basis of the JEE / University Entrance Exams.

**The classes will be held at Srinivas College of Engineering**

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#### About B Tech(CS- Data Science):

This unique program provides dual career options for the students in the fast-growing technology sectors of Data Science. In addition to all the mandatory subjects of a traditional engineering program, this specialized program offers in-depth practical know-how of the current trend Technology – Data Science. These sectors have the potential to grow exponentially and they provide challenging job opportunities for young professionals with the right skill sets.

On the Data Science front, the program will provide students with the fundamental knowledge of all aspects of Statistics and Analytics. The program focuses on Probability and Statistics, Server Inferential Statistics, Machine Learning Techniques, Exploratory Data Analysis, Visualization Techniques and other related Data Science concepts.

On the Big Data Analytics front, this program equips the students with the concepts and the technical skills needed to secure knowledge on Big Data analytics concepts and real time practical knowledge. The focus of the program is on the models, tools and techniques for enforcement of Big Data Analytics, Big data Analytics on Cloud, Real time data Processing and NoSQL data base concepts.

#### Special Features of the Program:

- Duration of the course is 4 years with 8 semesters.
- Classes are conducted between 9:00 AM and 4:30 PM for 5 days a week and between 9:00 AM and 1:00 PM on Saturdays.
- Spacious multimedia classrooms and well equipped laboratories with sufficient number of computer systems with latest updated software.
- Dynamic, qualified, dedicated and research oriented teaching faculty who work towards the overall betterment of the students.
- Excellent technical faculty to provide technical assistance to the students during practical sessions.
- E-Study material will be provided from the college for every subject according to the syllabus.
- Industry oriented syllabus with special focus on experimental learning.
- Mini projects that help students implement the theoretical knowledge gained into practical applications which gives a better understanding of the subject.
- Innovations in examination system with opportunity to see the evaluated papers in person.
- Make-up exams in every semester to avoid year loss.
- Placement support and research oriented projects for every student.
- Focus on smart skill development and training for competitive exams.
- Opportunity for internships and industrial visits.
- Tie up with industries to get students trained in latest technology through industry sessions/ workshops.
- Number of seminars, technical talks by experts from industries and academicians is organised by the Department of CSE.
- Hands on sessions/workshops by industry experts, technical paper presentations, project exhibitions, coding and debate competitions are held by the Department of CSE.

**Career Opportunities:**

Associate Business analyst, Data Science Engineer, Database Developer, Hadoop Transfer, ETL Developer, Data Analyst, Data warehouse analyst, ETL Specialist.

**Programme Structure:**

<b>SEMESTER 1</b>			<b>SEMESTER 2</b>		
S. No.	Subjects	Marks	S. No.	Subjects	Marks
1	Engineering Mathematics - I	100	1	Engineering Mathematics - II	100
2	Engineering Physics	100	2	Engineering Chemistry	100
3	Elements of Electronics Engineering	100	3	Basics of Electrical Engineering	100
4	Elements of Mechanical Engineering	100	4	Elements of Civil Engineering	100
5	Computer Concepts & C Programming	100	5	Elements of Engineering Graphics	100
6	Engineering Physics Laboratory	100	6	Engineering Chemistry Laboratory	100
7	Computer Concepts & C Programming Laboratory	100	7	Workshop Practice	100
8	Personality Development & Communication	100	8	Principles of Environmental Studies	100
	Total Marks	800		Total Marks	800
<b>SEMESTER 3</b>			<b>SEMESTER 4</b>		
1	Statistics and Probability - I	100	1	Statistics and Probability - II	100
2	Introduction to Data Science	100	2	Linear Algebra	100
3	Data Structures and Algorithms	100	3	Exploratory Data Analysis	100
4	Database Management Systems	100	4	NoSQL Data bases	100
5	Object Oriented Programming using Java	100	5	R Programming Language	100
6	Database Management Systems Laboratory	100	6	R Programming Language Laboratory	100
7	Data Structures and Algorithms Laboratory	100	7	NoSQL Database Laboratory	100
8	Object Oriented Programming using Java Laboratory	100	8	Object Oriented Programming using Java – Laboratory	100
		800			800
<b>SEMESTER 5</b>			<b>SEMESTER 6</b>		
1	Inferential Statistics	100	1	Machine Learning - II	100
2	Machine Learning - I	100	2	Big Data Analytics - II	100
3	Big data Analytics – I	100	3	Elective – 3	100
4	Python Programming for Data Science	100	4	Elective – 4	100
5	Elective – 1	100	5	Dimension Reduction Techniques	100
6	Elective – 2	100	6	Artificial Neural Network	100
7	Machine Learning – I Laboratory	100	7	Machine Learning – II Laboratory	100
8	Big data Analytics – I Laboratory	100	8	Big Data Analytics – II Laboratory	100
	Total Marks	800		Total Marks	800
<b>SEMESTER 7</b>			<b>SEMESTER 8</b>		
1	Visualization Techniques	100	1	Optimization Techniques	100

2	Natural Language Processing	100	2	Design of Experiments	100
3	Model Validation Techniques	100	3	Internship review*	100
4	Security and Privacy for Data Science	100	4	Project work	100
5	Elective – 5	100	5	Technical seminar	100
6	Elective – 6	100			
7	Model Validation Techniques Laboratory	100			
8	Visualization Techniques Laboratory	100			
	Total Marks	800		Total Marks	800

**JOIN ABOVE INNOVATIVE B TechPROGRAMME WITH INDUSTRY RELEVANCE AND  
JOB ORIENTED SYLLABUS TO RE-DEFINE YOUR CAREER ALTITUDE!!!**

## **COLLEGE OF ENGINEERING& TECHNOLOGY**

**CREATING INNOVATORS**



**SRINIVAS UNIVERSITY**

**Educatingthe Next Generation**