B.Sc - MSDS (Mathematics, Statistics & Data Science)

- Theory and applications of statistics   is structured to provide knowledge and skills in depth necessary for the employability of students in industry, other organizations, as well as in academics., as science of learning from data.
- Students get equipped with various Mathematical   techniques   that has wide ranging applications in Science and Technology.
- Students built logical ability and Programming skills enabling them to get ready for high end technology-oriented programs and to face the challenges at IT Industry AND Understand the notion of Software Project and the Process of software development

Semester 1	Semester2	Semester 3
Semester 1	**Semester2**	**Semester 3**
1 English	1 English	1 English
2 Telugu/Sanskrit /Hindi/French	2 Telugu/Sanskrit /Hindi/French	2 Telugu/Sanskrit /Hindi/French
3 AECC1: Environmental Studies/Basic Computer Skills	3 AECC 2: Environmental Studies/Basic Computer Skills	3 SEC 1: Communication Skills/Professional Skills
4 Differential & Integral Calculus	4 Differential Equations	4 SEC 2: Mini Project
5 Descriptive Statistics and Probability	5 Probability Distributions	5 Real Analysis
6 Descriptive Statistics and Probability -Practical	6 Probability Distributions - Practical	6 Statistical Methods and Theory of Estimation
7. Fundamentals of Information Technology	7. Problem solving and Python Programming	7 Data Engineering with Python
8. Fundamentals of Information Technology (Lab)	8. Problem solving and Python Programming (Lab)	8. Data Engineering with Python (Lab)

Semester 4	Semester 5	Semester 6
1 English	1 English	1 English
2 Telugu/Sanskrit /Hindi/French	2 Telugu/Sanskrit /Hindi/French	2 Telugu/Sanskrit /Hindi/French
3 SEC 3: Leadership & Management Skills/ Universal Human Values	3 GE: Data Structures and Algorithms	3 Numerical Analysis/ Integral Transforms/ Analytical Solid Geometry

4 SEC 4: Mini Project	4. Linear Algebra	4. Applied Statistics – 2 / Analytical Statistics - 2
5 Algebra	5 Applied Statistics – 1/ Analytical Statistics - 1	5. Applied Statistics – 2 (Practical)/ Analytical Statistics – 2 (Practical)
6 Statistical Inference	6 Applied Statistics – 1 (Practical)/ Analytical Statistics – 1 (Practical)	6 Big Data/ Deep Learning
7 Statistical Inference-Practical	7 Natural Language Processing/ No SQL Data Bases	7 Big Data (Lab)/ Deep Learning (Lab)
8 Machine Learning	8 Natural Language Processing (Lab)/ No SQL Data Bases (Lab)	8 Major Project
9 Machine Learning (Lab)		