

Division	Faculty of Science & Health Science
School Name	School of Science & Environmental Studies
Department Name	Department of Mathematics and Statistics
Program Name	B.Sc. (Computational Mathematics and Statistics)

Sem	Course Type	Sum of Total Credits
I		
	University Core	
	Effective Communication	1
	Environment and Sustainability	1
	Foundations of Peace	2
	Indian Constitution	1
	Learning to Learn	1
	Yoga - I	1
	University Core Total	7
	Program Foundation	
	R Programming	1
	Descriptive Statistics- I	3
	Introduction to Probability Theory	3
	Program Foundation Total	7
	Program Major	
	Calculus	3
	Discrete Mathematics	3
	Program Major Total	6
I Total		20
II		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	PBL on Fundamentals of OS & DBMS	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	1
	University Core	
	Co-creation	1
	Critical Thinking	1
	Digital Literacy	1
	Financial Literacy	1
	Yoga - II	1
	University Core Total	5
	Program Foundation	
	Introduction to Graph Theory	3
	Program Foundation Total	3
	Program Major	
	C Programming with Data Structures	3
	Lab on C Programming with Data Structures	1
	Linear Algebra	3
	Descriptive Statistics- II	3
	Fundamentals of OS & DBMS	3
	Program Major Total	13
II Total		22
III		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - I	1
	PLB on OOPs with Java	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	2
	University Core	
	Research Innovation Design Entrepreneurship (RIDE)	1

III	Rural Immersion	1
	Spiritual and Cultural heritage: Indian Experience	2
	University Core Total	4
	University Electives	
	University Electives - I	4
	University Electives Total	4
	Program Foundation	
	Introduction to Sampling	3
	Distribution Theory	3
	Program Foundation Total	6
	Program Major	
	Group Theory & Coding Theory	3
	OOPs with Java	3
	Program Major Total	6
III Total		22
IV		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - II	1
	PBL on Web Technology	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	2
	University Electives	
	University Electives - II	4
	University Electives Total	4
	Program Foundation	
	Introduction to Python	1
	Introduction to Design of Experiment	4
	Numerical Methods	3
	Program Foundation Total	8
	Program Major	
	Testing of Hypothesis	4
	Web Technology	2
	Program Major Total	6
IV Total		20
V		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - III	1
	PBL on Advanced Java	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	2
	Program Electives	
	Program Elective - I	4
	Program Electives Total	4
	University Core	
	Managing Conflicts Peacefully: Tools and Techniques	2
	University Core Total	2
	University Electives	
	University Electives - III	4
	University Electives Total	4
	Program Major	
	Calculus of Several Variables	3
	Advanced Java	2
	Regression Analysis	3
	Program Major Total	8
V Total		20
VI		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	

VI	Project Based Learning - IV	1
	PBL on Introduction to Time Series & Business Forecasting	1
	PBL on Introduction to Deep Learning & Machine Learning	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	3
	Program Electives	
	Program Elective - II	4
	Program Electives Total	4
	University Core	
	National Academic Immersion	2
	University Core Total	2
	Program Foundation	
	Introduction to Artificial Intelligence	2
	Introduction to Time Series & Business Forecasting	2
	IT Lab	1
	Program Foundation Total	5
	Program Major	
	Introduction to Deep Learning & Machine Learning	3
	Predictive Analysis	3
	Program Major Total	6
VI Total		20
VII		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Mini Project	5
	PBL on Advanced Deep Learning & Machine Learning	2
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	7
	Program Electives	
	Program Elective - III	4
	Program Electives Total	4
	Program Foundation	
	Introduction to Stochastic Processes	3
	Program Foundation Total	3
	Program Major	
	Advanced Deep Learning & Machine Learning	3
	Program Major Total	3
VII Total		17
VIII		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Internship	15
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	15
	Program Electives	
	Program Elective - IV	4
	Program Electives Total	4
VIII Total		19
Grand Total		160

Semester	Course Name / Course Title	Program Electives
V	Operation Research	Program Elective - I
V	Ring Theory	Program Elective - I
V	Intro to HTML/CSS	Program Elective - I
VI	Structured Query Language (SQL)	Program Elective - II
VI	Combinatorics	Program Elective - II
VI	Bio-Statistics	Program Elective - II
VII	Data Mining	Program Elective - III
VII	Financial Mathematics	Program Elective - III
VII	Cyber Security	Program Elective - III
VIII	Statistical Quality Control	Program Elective - IV
VIII	Web Designing	Program Elective - IV
VIII	Lattice Theory	Program Elective - IV