

B.S in Data Science & Artificial Intelligence

Course Curriculum for Semester-1

SL No.	Course Name	Course Category	Course code
1	Statistics-I	Foundation	CCF
2	Mathematics I	Foundation	CCF
3	Programming Language-I	Foundation	CCF
4	Philosophy & Sociology	Management	CCM
5	Oral Communication	Management	CCM
6	Yoga & Positive Psychology	Management	CCM
Non-Credit course: Workshop/Certification			

Course Curriculum for Semester-2

SL No.	Course Name	Course Category	Course code
1	Statistics II	Foundation	CCF
2	Mathematics II	Foundation	CCF
3	Programming Language-II	Foundation	CCF
4	Data Visualization	Foundation	CCF
5	Principles of Economics	Management	CCM
6	Principles of Management	Management	CCM
7	Written Communication	Management	CCM
*	Social Internship		Ex
Non-Credit course: Workshop/Certification			

Course Curriculum for Semester-3

SL No.	Course Name	Course Category	Course code
1	Data Science: An Introduction	Foundation	CCF
2	Database Management Systems	Foundation	CCF
3	Data Structures	Foundation	CCF
4	Programming Lab I	Foundation	CCF
5	Introduction to AI	Foundation	CCF
6	Operations Management	Management	CCM
7	Econometrics	Management	CCM
8	Innovation and Entrepreneurship	Management	CCM
9	Business Sustainability	Management	CCM
10	Operations Research	Management	CCM

Course Curriculum for Semester-4

SL No.	Course Name	Course Category	Course code
1	Machine Learning Fundamentals	Foundation	CCF
2	Foundations of Computing (Infrastructure, OS, Networks)	Foundation	CCF
3	AI Lab	Foundation	CCF
4	Design and Analysis of Algorithms	Foundation	CCF
5	Text Mining and Natural Language Processing	Foundation	CCF
6	Data Mining and Warehousing	Foundation	CCF
7	Social Media and Social Network Analytics	Foundation	CCF
8	Principles of Marketing	Management	CCM
9	Financial Accounting and Financial Management	Management	CCM
10	Business Ethics	Management	CCM
*	Corporate Internship		Ex

Course Curriculum for Semester-5

SL No.	Course Name	Course Category	Course code
1	Deep Learning and Neural Networks	Foundation	CCF
2	Fundamentals of Blockchain	Foundation	CCF
3	Predictive and Prescriptive Analytics	Foundation	CCF
4	Quantum Computing	Foundation	CCF
5	Generative AI and Large Language Models	Foundation	CCF
6	Strategic Management	Management	CCM
7	Foundations of Information Systems	Management	CCM
8	Supply Chain Management	Management	CCM
9	Simulation Lab	Management	CCM
10	E-Commerce and Recommender Systems	Management	CCM

Course Curriculum for Semester-6

SL No.	Course Name	Course Category	Course code
1	Big Data Analytics	Foundation	CCF
2	Information and Cyber Security	Foundation	CCF
3	Introduction to Agentic AI	Foundation	CCF
4	Prompt Engineering	Foundation	CCF
5	AI Regulation & Governance	Management	CCM
6	Human Resource Management	Management	CCM
7	Capstone: Integrative Management Project	Management	CCM
8	Business Research Methods	Management	CCM
9	Leveraging Value from AI	Management	CCM
10	Managing AI Projects	Management	CCM

Course Curriculum for Semester-7

SL No.	Course Name (Tentative List)	Course Category	Course code
1	Operations Analytics	Electives	CCE
2	Security Analysis & Portfolio Management	Electives	CCE
3	Data Preprocessing & Feature Engineering	Electives	CCE
4	Banking and Financial Service	Electives	CCE
5	Augmented and Virtual Reality	Electives	CCE
6	HR Analytics	Electives	CCE
7	Supply Chain Analytics	Electives	CCE
8	Revenue & Pricing Analytics	Electives	CCE
9	Emerging Technology in Human Resource Management	Electives	CCE
10	Advanced Econometrics	Electives	CCE
11	Strategy in the era of Big Data	Electives	CCE
12	Emerging trends of Analytics and AI in Public Policy	Electives	CCE
13	IoT Applications	Electives	CCE
14	Pervasive Computing	Electives	CCE
15	Information and Cyber Security	Electives	CCE
16	Introduction to Digital Twin	Electives	CCE

Course Curriculum for Semester-8

SL No.	Course Name
1	Honor's Thesis