NAGARJUNA
COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under VTU)

Department of CSE (Data Science)

VIII Semester Scheme
of 2020 Batch
With effect from Academic Year 2023-24

Vision

To prepare the next generation practitioners and researcher for data centric world by bringing together interdisciplinary faculty across the globe.

Mission

M1: To provide Skill Based Education to master the students in problem solving and analytical skills to enhance their niche expertise in the field Data Science
M2: To educate the students with latest technologies to update their knowledge in the field of Data Science
M3: To enable students to experience the Content Based Learning with premier quality data science education, research and industrial collaboration
M4: To enable students to become leaders in the Industry and Academia Nationally as well as internationally
M5: To guide students in research on Data Science, with the aim of having an ethical impact on society by tackling societal grand challenges

PROGRAM OUTCOMES (POs): Graduates of the Computer Science and Engineering – Data Science Program will be able to achieve the following

POs:

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and Computer Science and Engineering principles to the solution of complex problems in Computer Science and Engineering.
PO2: Problem Analysis: Identify, formulate, research literature, and analyses complex Computer Science and Engineering problems reaching substantiated conclusions using first principles of mathematics and engineering sciences.
PO3: Design/Development of Solutions: Design solutions for complex Computer Science and Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4: Conduct investigations of Complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions related to Computer Science and Engineering problems.
PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex

Computer Science and Engineering activities with an understanding of the limitations.
PO6: The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Computer Science and Engineering practice.
PO7: Environment and Sustainability: Understand the impact of the professional Computer Science and Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Computer Science and Engineering practice.
PO9: Individual and Team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10: Communication: Communicate effectively on complex Computer Science and Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one‘s own work, as a member and leader in a team, to manage Computer Science and Engineering projects and in multidisciplinary environments.
PO12: Life Long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcome (PSO)

PSO1: Ability to analyse complex computing issues and apply the principles to achieve related solution.
PSO2: Ability to design, implement and evaluate computing based solutions to meet range of computing requirements based in the data science.
PSO3: Ability to effectively communicate within diverse work group related to professional framework.

Program Educational Objectives (PEOs)

PEO 1: To make students competent for higher studies and employable, to meet industrial requirements.
PEO 2: To develop students having core competence in science, mathematics and fundamentals of Data Science to address ever changing industrial requirements globally.
PEO 3: To create academically conducive environment to learn engineering skills in the domains such as Data Analytics, Data Modelling, Data Visualization and Allied Technologies.
PEO 4: To enrich students with professional ethics, leadership qualities, and entrepreneurial skills.
PEO 5: An ability to engage in lifelong learning for effective adaptation to technological developments.

Eighth Semester B.E. CSE (Data Science) – Scheme

SL. No	Course Code	Course Name	Total Credits	L: T: P: S (Hrs./Week)	Duration in Hours	CIE Marks	SEE Marks	Total Marks
1	20CDP81	Technical Seminar	1	0 : 0 : 2 : 0	3	100	-	100
2	20CDP82	Internship	3	0 : 0 : 6 : 0	3	50	50	100
3	20CDP83	Project Evaluation	11	0 : 0 : 22 : 0	9	100	100	200
		Total	**15**	**0 : 0 : 30 : 0**	**-**	**250**	**150**	**400**