

**M. Tech (CSE)**

<b>S.No.</b>	<b>Course Code</b>	<b>Course Outcome</b>
<b>1.</b>	<b>MCSP-102</b>	<ol style="list-style-type: none"><li>1. Select appropriate data structures as applied to specified problem definition.</li><li>2. Implement operations like sorting, searching, insertion, and deletion, traversing Mechanism etc. on various data structures.</li><li>3. Students will be able to implement linear and Non-Linear data structures.</li><li>4. Determine and analyze the complexity of given Algorithms.</li></ol>
<b>2.</b>	<b>MCST-102</b>	<ol style="list-style-type: none"><li>1. Analyse the implementation of symbol table using hashing techniques.</li><li>2. Develop and analyze algorithms for red-black trees, B-trees and Splay trees.</li><li>3. Develop algorithms for text processing applications.</li><li>4. Identify suitable data structures and develop algorithms for computational geometry problems.</li></ol>
<b>3.</b>	<b>MCSP-121</b>	<ol style="list-style-type: none"><li>1. Analysis how data is collected, managed and stored for data science.</li><li>2. Understand the key concepts in data science, including their real-world applications and the toolkit used by data scientists;</li><li>3. Implement data collection and management scripts using Mongo DB.</li><li>4. To understand and analyses the concept to unify statistics, data analysis, machine learning and their related methods</li></ol>
<b>4.</b>	<b>MCST-121</b>	<ol style="list-style-type: none"><li>1. Explain how data is collected, managed and stored for data science.</li><li>2. Understand the key concepts in data science, including their real-world applications and the toolkit used by data scientists.</li><li>3. Implement data collection and management scripts using MongoDB</li></ol>
<b>5.</b>	<b>MCST 113</b>	<ol style="list-style-type: none"><li>1. Ability to Demonstrate knowledge of the fundamental principles of intelligent systems.</li><li>2. Ability to apply fuzzy logic in case of uncertainty.</li><li>3. Ability to apply different searching and optimization techniques in solving difficult real world problems.</li><li>4. Ability to apply inference and resolution in propositional and first-order predicate logic to prove theorems.</li><li>5. Ability to apply the advanced reasoning and learning techniques under uncertainty.</li></ol>

6.	<b>MOET 191</b>	<ol style="list-style-type: none"> <li>1. Understand research problem formulation.</li> <li>2. Analyze research related information, Follow research ethics</li> <li>3. Understand that today's world is controlled by Computer, Information Technology, but tomorrow's world will be ruled by ideas, concepts, and creativity.</li> <li>4. Understanding that when IPR would take such an important place in the growth of individuals &amp; nations, it is needless to emphasize the need for information about Intellectual Property Rights to be promoted among students in general &amp; engineering in particular.</li> <li>5. Understand that IPR protection provides an incentive to inventors for further research work and investment in R &amp; D, which leads to creation of new and better products, and inturn brings about, economic growth and social benefits.</li> </ol>
7.	<b>MCST 101</b>	<ol style="list-style-type: none"> <li>1. To understand the basic notions of discrete and continuous probability.</li> <li>2. To understand the methods of statistical inference, and the role that sampling distributions Play in those methods.</li> <li>3. To be able to perform correct and meaningful statistical analyses of simple to moderate complexity</li> </ol>
8.	<b>MCST 201</b>	<ol style="list-style-type: none"> <li>1. Analyze the complexity / performance of different algorithms.</li> <li>2. Determine the appropriate data structure for solving a particular set of problems.</li> <li>3. ategorize the different problems in various classes according to their complexity.</li> <li>4. Students should have an insight of recent activities in the field of the advanced data structure.</li> </ol>
9.	<b>MCSP 201</b>	<ol style="list-style-type: none"> <li>1. To implement the sorting algorithms based on Divide and Conquer techniques such as Merge Sort, Quick Sort.</li> <li>2. To implement the matroids algorithm such as finding the minimum cost of a spanning tree.</li> <li>3. To implement the matrix computation and flow network algorithms such as Strassen's matrix multiplication.</li> <li>4. To implement the shortest path algorithm such as Floyd-Warshall</li> <li>5. To implement the linear programming algorithm such as simplex algorithm.</li> </ol>

10.	<b>MCST 231</b>	<ol style="list-style-type: none"> <li>1. Able to extract the data for performing the analysis.</li> <li>2. Analysis and develop meaningful Data Visualizations for data cleaning.</li> <li>3. Identify and evaluate the clustering and association.</li> <li>4. Designing and virtualization of network and implementation them.</li> </ol>
11.	<b>MCSP 231</b>	<ol style="list-style-type: none"> <li>1. Ability to identify the characteristics of datasets and compare the trivial data and big Data for various applications.</li> <li>2. Ability to select and implement machine learning techniques and computing environment that are suitable for the applications under consideration.</li> <li>3. Ability to understand and apply scaling up machine learning techniques and associated Computing techniques and technologies.</li> <li>4. Determine and analyse the complexity of given Algorithms.</li> </ol>
12.	<b>MCST 241</b>	<ol style="list-style-type: none"> <li>1. Understand the structure of models and theories of human computer interaction and vision</li> <li>2. Design an interactive web interface on the basis of models studied</li> </ol>
13.	<b>MCSP-202</b>	<ol style="list-style-type: none"> <li>1. To apply the Concept of Computer Science &amp; Engineering.</li> <li>2. To demonstrate their project work by presentation and enhance communication skills.</li> <li>3. To demonstrate ethics and technical skills.</li> <li>4. To evaluate the outcome of the project work and present through report.</li> </ol>
14.	<b>MCST 202</b>	<ol style="list-style-type: none"> <li>1. Identify and describe soft computing techniques and their roles in building intelligent machines</li> <li>2. Apply fuzzy logic and reasoning to handle uncertainty and solve various engineering problems.</li> <li>3. Apply genetic algorithms to combinatorial optimization problems.</li> <li>4. Evaluate and compare solutions by various soft computing approaches for a given problem.</li> </ol>

15.	<b>MOET 393</b>	<ol style="list-style-type: none"> <li>1. Students should able to apply the dynamic programming to solve problems of discreet and Continuous variables.</li> <li>2. Students should able to apply the concept of non-linear programming</li> <li>3. Students should able to carry out sensitivity analysis</li> <li>4. Student should able to model the real world problem and simulate it.</li> </ol>
16	<b>MCST 353</b>	<ol style="list-style-type: none"> <li>1. Formulate optimization problems.</li> <li>2. Understand and apply the concept of optimality criteria for various types of optimization problems.</li> <li>3. Solve various constrained and unconstrained problems in Single variable as well as multivariable.</li> <li>4. Apply the methods of optimization in real life situation.</li> </ol>
17.	<b>MCSP 301</b>	<ol style="list-style-type: none"> <li>1. To demonstrate a profundity of knowledge of computer science and engineering.</li> <li>2. To involve students in research topics using latest technology trends in the market.</li> <li>3. To make them work for individuality, resulting in good quality thesis publication.</li> </ol>
18.	<b>MCSP 401</b>	<ol style="list-style-type: none"> <li>1. Ability to adapt existing model of computations for active problem solving.</li> <li>2. Ability to commence original and new research for quality work.</li> <li>3. Ability to design and develop new software and hardware-based applications which meets the needs of the society.</li> </ol>