

## **M.TECH, COMPUTER SCIENCE AND ENGINEERING**

<b>Course Code</b>	<b>ADVANCES IN OPERATING SYSTEMS - 16SCS11</b>
CO1	Demonstrate the Mutual exclusion, Deadlock detection and agreement protocols of Distributed operating system
CO2	Learn the various resource management techniques for distributed systems
CO3	Identify the different features of real time and mobile operating system
CO4	Modify existing open source kernels in terms of functionality or features used
<b>Course Code</b>	<b>CLOUD COMPUTING - 16SCS12</b>
CO1	Compare the strengths and limitations of cloud computing
CO2	Identify the architecture, infrastructure and delivery models of cloud computing
CO3	Apply suitable virtualization concept.
CO4	Choose the appropriate cloud player
CO5	Address the core issues of cloud computing such as security, privacy and interoperability
CO6	Design Cloud Services
CO7	Set a private cloud
<b>Course Code</b>	<b>ADVANCES IN DATA BASE MANAGEMENT SYSTEMS - 16SCS13</b>
CO1	Select the appropriate high performance database like parallel and distributed database.
CO2	Infer and represent the real world data using object oriented database.
CO3	Interpret rule set in the database to implement data warehousing of mining
CO4	Discover and design database for recent applications database for better interoperability
<b>Course Code</b>	<b>PROBABILITY STATISTICS AND QUEUING THEORY - 16SCS14</b>
CO1	Demonstrate use of probability and characterize probability models using probability mass (density) functions & cumulative distribution functions.
CO2	Explain the techniques of developing discrete & continuous probability distributions and its applications.
CO3	Describe a random process in terms of its mean and correlation functions.
CO4	Outline methods of Hypothesis testing for goodness of fit.
CO5	Define the terminology & nomenclature appropriate queuing theory and also distinguish various queuing models.
<b>Course Code</b>	<b>ADVANCES IN STORAGE AREA NETWORKS - 16SCS153</b>
CO1	Identify the need for performance evaluation and the metrics used for it.
CO2	Apply the techniques used for data maintenance.
CO3	Realize strong virtualization concepts.
CO4	Develop techniques for evaluating policies for LUN masking, file systems.

<b>Course Code</b>	<b>OPERATING SYSTEMS AND ADBMS LAB -16SCS16</b>
CO1	Work on the concepts of Software Testing and ADBMS at the practical level
CO2	Compare and pick out the right type of software testing process for any given real world problem
CO3	Carry out the software testing process in efficient way
CO4	Establish a quality environment as specified in standards for developing quality software
CO5	Model and represent the real world data using object oriented database
CO6	Embed the rules set in the database to implement various features of ADBMS
CO7	Choose, design and implement recent applications database for better interoperability
<b>Course Code</b>	<b>MANAGING BIG DATA - 16SCS21</b>
CO1	Describe big data and use cases from selected business domains
CO2	Explain NoSQL big data management
CO3	Install, configure, and run Hadoop and HDFS
CO4	Perform map-reduce analytics using Hadoop
CO5	Use Hadoop related tools such as HBase, Cassandra, Pig, and Hive for big data Analytics
<b>Course Code</b>	<b>ADVANCES IN COMPUTER NETWORKS - 16SCS22</b>
CO1	List and classify network services, protocols and architectures, explain why they are layered
CO2	Choose key Internet applications and their protocols, and apply to develop their own applications (e.g. Client Server applications, Web Services) using the sockets API.
CO3	Explain develop effective communication mechanisms using techniques like connection establishment, queuing theory, recovery Etc.
CO4	Explain various congestion control techniques
<b>Course Code</b>	<b>ADVANCED ALGORITHMS - 16SCS23</b>
CO1	Design and apply iterative and recursive algorithms.
CO2	Design and implement optimization algorithms in specific applications.
CO3	Design appropriate shared objects and concurrent objects for applications.
<b>Course Code</b>	<b>INTERNET OF THINGS - 16SCS24</b>
CO1	Develop schemes for the applications of IOT in real time scenarios
CO2	Manage the Internet resources
CO3	Model the Internet of things to business
CO4	Understand the practical knowledge through different case studies
CO5	Understand data sets received through IoT devices and tools used for analysis
<b>Course Code</b>	<b>WEB SERVICES -16SCS254</b>
CO1	Bind and unbind services in UDDI.
CO2	Develop WSDL document
CO3	Implement web service client to call public service.
CO4	Implement a service and exposing it as public service.

<b>Course Code</b>	<b>MACHINE LEARNING TECHNIQUES - 16SCS41</b>
CO1	Choose the learning techniques with this basic knowledge.
CO2	Apply effectively neural networks and genetic algorithms for appropriate applications.
CO3	Apply bayesian techniques and derive effectively learning rules.
CO4	Choose and differentiate reinforcement and analytical learning techniques
<b>Course Code</b>	<b>BUSINESS INTELIGENCE AND ITS APPLICATIONS 16SCS422</b>
CO1	Explain the complete life cycle of BI/Analytical development
CO2	Illustrate technology and processes associated with Business Intelligence framework
CO3	Demonstrate a business scenario, identify the metrics, indicators and make recommendations to achieve the business goal.