Programme Outcomes and Course Outcomes

Master of Science (Information Technology) (M.Sc.–IT)

Navneet Education Society's

NAVNEET COLLEGE

OF COMMERCE & SCIENCE

Recognised under Section 2(f) of the UGC Act, 1956

Master of Science in Information Technology (M.Sc. – IT)

Program Outcomes

PSO1 Learners are able to enter new problem areas that require an analytic and innovative approach.

PSO2 Learners are able to gather, assess, and make use of new information.

PSO3 Learners are able to combine and use knowledge from several topics.

PSO4 Learners are able to apply advanced theoretical and practical methods gained from various subjects.

PSO5 Learners are able to develop and renew Information Technology competence.

Course Outcomes

M.Sc. (IT) SEMESTER – I

COURSE (PAPER) NAME AND NO.: P-I, DATA MINING

CO1 Learners will be able to identify the major framework of data mining and knowledge representation.

CO2 Learners will be able to become familiar with various data mining tools

CO3 Learners will be able to become familiar with classification methods.

CO4 Learners will be able to become familiar with classification methods, clustering methods.

CO5 Learners will be able to ability to apply various data mining tools.

COURSE (PAPER) NAME AND NO.: P-II, DISTRIBUTED SYSTEM

CO1 Learners will be able to get the basic principles, design issues and architectural aspects of distributed systems.

CO2 Learners will be able to Enhance in networking and different communication channels.

CO3 Learners will be able to learn how to design web services. Analyze the different techniques used for Communication in distributed system.

CO4 Learners will be able to develop the solutions for Clock synchronization, Mutual exclusion in distributed system.

CO5 Learners will be able to gain knowledge on Distributed File System and design issues of Distributed Shared Memory.

COURSE (PAPER) NAME AND NO.: P III, DATA ANALYSIS TOOLS

CO1 Learners will be able to implement C language concepts and SQL queries.

CO2 Learners will be able to implement matrix, vector concepts as well as graphics commands.

CO3 Learners will be able to develop understanding about different distribution models.

CO4 Learners will be able to gain expertise in modelling methods and hypothesis testing.

CO5 Learners will be able to learn different likelihood estimation methods and manto carlo methods.

COURSE (PAPER) NAME AND NO.: P-IV, SOFTWARE TESTING

CO1 Learners will be able to implement various test processes for quality improvement.

CO2 Learners will be able to design test planning & manage the test process

CO3 Learners will be able to apply modern software testing processes in relation to software development and project management.

CO4 Learners will be able to create test strategies and plans, design test cases, prioritize and execute them

CO5 Learners will be able to gain expertise in designing, implementation and development of computer based systems and IT processes.

M.Sc. (IT) SEMESTER – II

COURSE (PAPER) NAME AND NO.: P-I, MOBILE COMPUTING

CO1 Learners will be able to introduce to the principles and theories of mobile computing technologies

CO2 Learners will be able to describe infrastructures and technologies of telecom and satellite.

CO3 Learners will be able to get information about broadcast systems and wireless lan.

CO4 Learners will be able to forecast possible future of mobile computing technologies and applications.

CO5 Learners will be able to get Information about MTL and support.

COURSE (PAPER) NAME AND NO.: P-II ADVANCED COMPUTER NETWORKS

CO1 Learners will be able to illustrate the reference models with layers, protocols and interfaces and to compare it with different versions

CO2 Learners will be able to its emphasis on the design, deployment, management, maintenance and security of wired and wireless networks

CO3 Learners will be able to follow the industry-recognised CISCO Certified Network Professional (CCNP) Routing and Switching, Routing algorithms: Routing and addressing and provide the mathematical background of routing protocols.

CO4 Learners will be able to understand optimum design consideration for layer 3 and advanced WAN services.

CO5 Learners will be able to analyze the design consideration of IPsec, SSL VPN, enterprise data center and SAN.

COURSE (PAPER) NAME AND NO.: P-III CLOUD COMPUTING AND UBIQUITOUS SYSTEM

CO1 Learners will be able to understand the key dimensions of the challenge of Cloud Computing

CO2 Learners will be able to have Assessment of own organizations' needs for capacity building and training in cloud computing-related IT areas

CO3 Learners will be able to learn the different cloud platforms to provide web services.

CO4 Learners will be able to understand the Languages to design the web services.

CO5 Learners will be able to assess the financial, technological, and organizational capacity of employer's for actively initiating and installing cloud-based applications.

COURSE (PAPER) NAME AND NO.: P-IV ADVANCED DATABASE SYSTEMS

CO1 Learners will be able to gain expertise over ER model and Object model concepts and understand concepts of Object oriented databases.

CO2 Learners will be able to gain expertise over object relational and extended relational databases concepts.

CO3 Learners will be able to develop skills for parallel and distributed DB.

CO4 Learners will be able to develop skills for databases on web.

CO5 Learners will be able to gain expertise over advanced databases such as temporal, spatial, multimedia DB.

M.Sc. (IT) SEMESTER – III

COURSE (PAPER) NAME AND NO.: P-I, EMBEDDED SYSTEM

CO1 Learners will be able design, describe, validate and optimize embedded electronic systems in different industrial application areas.

CO2 Learners will be able define hardware and software communication and control requirements.

CO3 Learners will be able to acquire knowledge of and be able to use tools for the development and debugging of programs implemented on microcontrollers and DSPs.

CO4 Learners will be able to design electronic circuits for the processing of information in communications and control systems.

CO5 Learners will be able to acquire knowledge of sensor properties and apply these in the design of Electronic systems which integrate measurement and actuation in different industrial production contexts.

COURSE (PAPER) NAME AND NO.: P-II, INFORMATION SECURITY MANAGEMENT

CO1 Learners will be able to identify potential problems before they occur so that risk-handling activities may be planned and invoked as needed across life of product or project to mitigate adverse impacts on achieving objectives with Risk management

CO2 Learners will be able provide a basic level of security, independent of external requirements so they can maintain the uninterrupted operation of the IT organization.

CO3 Learners will be able to be aware of key management which is the process of administering or managing cryptographic keys for a cryptosystem.

CO4 Learners will be aware of the risks or threats to the success of the plan and test the controls in place to determine whether or not those risks are acceptable.

CO5 Learners will be able to know the basic process of identifying, preserving, analyzing and presenting the digital evidence in such a manner that the evidences are legally acceptable.

COURSE (PAPER) NAME AND NO.: P-III, VIRTUALIZATION

CO1 Learners will be aware of to Introduction to virtualization types.

CO2 Learners will understand Virtual machines and Implementation of virtual machines

CO3 Learners will understand virtualization and various ways of using virtualization.

CO4 Learners would be able to understand Implementation of private cloud platform using virtualization.

CO5 Learners would be able to understand Blade servers.

COURSE (PAPER) NAME AND NO.: P-IV, ETHICAL HACKING

CO1 Learners will able to learn about basics of ethical hacking and its phases.

CO2 Learners will able to know how to hack systems & protect systems from Trojans, Backdoors, Virus & worms.

CO3 Learners will able to understand about methods of hacking.

CO4 Learners will able to know how to hack web applications, wireless networks mobile platforms ethically and techniques like SQL injection

CO5 Learners will able to understand about firewalls, Encryption & Decryption methods.

M.Sc. (IT) SEMESTER – IV

COURSE (PAPER) NAME AND NO.: P-I, ARTIFICIAL INTELLIGENCE

CO1 Learners will able to demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents.

CO2 Learners will able to demonstrate the problem as a state space, graph, design heuristics & select amongst different search or game based techniques to solve them.

CO3 Learners will able to formulate and solve problems with uncertain information using Bayesian approaches.

CO4 Learners will able to attain the capability to represent various real life problem domains using logic based techniques and use this to perform inference or planning. Students will able to understand basics in Prolog Programming.

COURSE (PAPER) NAME AND NO.: P-II, IT INFRASTRUCTURE MANAGEMENT

CO1 Learners will able to will gain knowledge on development of service concepts in preparation for the selection of services to be provided.

CO2 Learners will able to will be able to design profitable services that provide high level of quality to satisfy the business needs.

CO3 Learners will able to will be able to identify any potential risk and provide measures to overcome its impact on other services and business.

CO4 Learners will able to will become familiar with IT service operations used to ensurethat the required IT services are delivered efficiently and effectively as per the service level agreements to the business users and customers.

CO5 Learners will able to will learn about continuously improving the service quality after the service the service has been put into operation.

COURSE (PAPER) NAME AND NO.: P-III, COMPUTER FORENSICS

CO1 Learn Basics about Computer Forensics

CO2 Learn about processing crimes and how to use latest technology

CO3 Lear about Macintosh OS and other forensic analysis techniques.

CO4 Learn about Virtual Machines and network forensics

CO5 Learn how to write report and give expert testimony

COURSE (PAPER) NAME AND NO.: P-IV, CLOUD MANAGEMENT

CO1 Learners would be able to understand virtualized data centers.

CO2 Learners would be able to understand storage network designs.

CO3 Learners would be able to understand system centre 2012.

CO4 Learners would be able to understand different components of system centre 2012.

CO5 Learners should be able to understand different cloud management platforms.