2.6.1: Program Outcomes

Program: M.Sc. Informatics

Program Specific Outcomes (PSO)

PSO1 This program provides studies in the field of informatics, which is essentially a blend of three domains: networking, telecommunication and software.

PSO2 Informatics Students are well placed in IT industries as Software Engineer, Software Programmer, Network Engineers, Data Scientist etc.

PSO3 This program enhance student's capability to think and develop many technological innovations for real life problems.

PSO4 Students get deep knowledge of technology and research oriented knowledge.

Course Outcomes (CO)

COs of the course "Programming Methodology"

CO1 Provide introduction to different methods to program

CO2 Aims to teach Procedural Programming using C language

CO3 Hands-on with programming using C language

COs of the course "Computer Architecture"

CO1 Aims to explain the basic design and architecture of computer

CO2 Thorough explanation of ALU design, Instruction Sequencing and Interpretation, Hardwired control, Micro programmed Virtual memory, Parallel processing, Pipe line processing, Multiprocessing

COs of the course "Introduction to Communication Systems "

CO1 Introduction to Communication systems and modulation techniques.

CO2 Equips students to Analysis of transmission of Signals, Fourier Series and Transform

CO3 Hands-on with modules of modulation techniques.

COs of the course "Mathematical Foundation for Computer Science"

CO1 Provides Understanding of Set theory, Graph Theory and tress.

CO2 Students learn Finite State Machines, Push down Automata, Turing m/c

COs of the course "Microprocessor and Interface Programming"

CO1 Aims to provide knowledge of Microprocessor Architecture, Micro Computer Architecture.

CO2 Hand-on with microprocessor programming.

CO3 Understanding of Compiler, Assembler, Linker, Loader, Introduction to Design of Assembler, Linker, Loader AND Compiler

CO4 Interfacing of I/O devices with microprocessor.

COs of the course "Voice and Data Communication"

CO1 Introduces the concept and Evolution of Telecommunication Systems
CO2 Provide students the Statistical overview of Satellite Communication System
CO3 Helps students understand upcoming Telecommunications Technology like 2G,3G, 4G,4G LTE etc.
CO4 Helps understand Traffic Engineering, Networking Basics and Switching Techniques

COs of the course "Data Structure and Design Algorithm "

CO1 Provides detail review of abstract data types and simple data structures
CO2 Provide students a good understanding of different Data Structure like Stack, Queue, Linked List, Graphs etc.
CO3 Students are trained for implementation of data structure on real life problems.
CO4 Students gets hands on experience on developing and designing Algorithms.
CO5 Students are placed on various companies offering Data Scientist Positions.

COs of the course "Operating Systems"

CO1 Provides overview of all different operating systems available.

CO2 Helps students understands the details how operating system works

CO3 Students gets real exposures of different operating System like Unix, Windows, and DOS etc

CO4 Knowledge of Different OS helps students in getting better industry jobs.

COs of the course "Programming Languages"

CO1 Students get knowledge of syntax and semantics used in programming languages
CO2 Students enhanced with coding basics in different Programming Languages like C, C++ and JAVA
CO3 Students are trained to develop problem-solving applications.
CO4 Students are placed well in Company as Software developer and Software Programmer

COs of the course "Computer Graphics and Multimedia "

CO1 Gives thorough knowledge of Graphics system architecture

CO2 Enable students to implement 2D and 3D transformations on Objects
CO3 Provides Students detail knowledge of multimedia technology
CO4 Students gets hands on experience in developing graphics library and algorithms

COs of the course "Summer Internship"

CO1 Students get the opportunity to solve real life problem through technology.

CO2 Students work on new technology and implement them through projects.

CO3 Many students get to work with industry on their project.

CO4 Many government body collaborated with Institute for real life projects like NIC

COs of the course "Network Architecture"

CO1- Helps students to understand the governing principles of data communication and the various protocols used in data communication.

CO2- Provides a good knowledge of various network topologies. Understand how the different layers of the data communication functions together and how the data flow from from one layer to another.

COs of the course "Database Management System"

CO1- Imparts knowledge about various database systems.
CO2- Introduces the concepts of data security, data integrity and relational databases.
CO3- Helps students to understand different database query languages, Relational Database design, functional and multi valued dependencies & normal forms of the Data.

COs of the course "Tele-Communication Networks and Technology "

CO1- Introduces the basic concepts of wired and wireless communications, point to point and satellite communication.
CO2- Equips students with the security principals and Elementary Encoding Ideas.

COs of the course "Object Oriented Technology"

CO1- Helps students to understand the basics of object oriented programming.

CO2- A practical approch to understand Classes, Objects, Inheritance, Polymorphism.

COs of the course ".Software Engineering I"

CO1- Helps students to understand the software life cycle, various System Modeling.
CO2- Equips student with the concepts Requirements Analysis, Software Design, Object Oriented Design, Function Oriented Design, Real time system Design, U.I. Design.

COs of the course "Network Application & Development "
CO1 It helps to understand the evolution of various communication protocols.
CO2 Helps in designing the efficient Network Architecture Simulation using open source software GNS3
CO3 Get hands on practice to use the various protocols according to the network design.

COs of the course "Tele-Communication Network Management "
CO1 This subject provides the hands on skill on Core Technologies used by Telecom Industries to efficiently manage and deliver high availability services.

COs of the course "Modelling, Simulation and Performance Evaluation"
CO1 This subject refreshes the way of solving the problems.
CO2 It enables us to increase the performance of the algorithm and different ways of approaching it efficiently.

COs of the course "IT Management"
CO1 It injects the idea of "Delivery with quality on time is priority".
CO2 It provides the way of dealing with the Human, Financial assets of an organisation to strategically deliver the services or products in cost efficient manner.

COs of the course "Software Engineering II"
CO1 It helps to deal with the functional and non-functional requirements required before initiating a project.
CO2 It enables a student to decide, which software model is perfectly fitted for a project.
CO3 From the requirement analysis, to the prototyping design, to the development of software and the type of testing before the deployment, it trained a graduate with all the phases of of the software life cycle development.

Program: Ph.D. Informatics

Program Specific Outcomes (PSO)

PSO1 Actual knowledge generation and core understanding of the subject studied.
PSO2 Research outcome in terms of research article, product, patent or procedure.
PSO3 Understating the working of various equipment's and using them in research work.

Course Outcomes (CO)

COs of the course "Computational Modeling and Performance of Stochastic Systems"

CO1 Basic understating of stochastic processes.
CO2 Introduces students to understand and model different stochastic systems and the ways to evaluate their performances.
CO3 Finding new ways of efficiently simulating various models.
CO4 New models for performance evaluation of stochastic systems.

COs of the course "Advanced Communication Networks,"

CO1 Equips the students with the knowledge of modern day communication networks.
CO2 Helps in developing new protocols for data communication for better performance.
CO3 Evaluation of existing protocols of data communication.

COs of the course "Communication Theory and Wave Propagation"

CO1 The basics of communication and wave theory to understand the functionality of modern day equipments and systems.
CO2 Understating of actual data transmission and effect of various factors over it.
CO3 Helps in analysing different modulation schemes for particular application.

COs of the course "Communication Systems"

CO1 Study of advanced systems for analog and digital communication.
CO2 Aspects of research in digital circuits and its use in communication.
CO3 Basics of the analog communication system.

COs of the course "Cloud Computing"

CO1 Offers the recent advancement in cloud architecture and relevant tools to excel the cutting edge technological requirements of the domain for knowledge and research.
CO2 Advanced research in the field with various applications.
CO3 Evaluation of existing technologies for selection in particular scenario.

COs of the course "Research Methodology"

CO1 Discusses in details the obejective, architecture and process of conducting research and methods of quantifying its coutcome.

CO2 Understanding the meaning of research and its impact on society.

CO3 Type of research and its commencement architecture in different environment.