Academic Year 2019-20
Semester - IV

Unique Course Number: ITC401   **Course Name: Applied Mathematics-IV**

Unique CO Number	Course Outcome (CO) Statement
ITC401.1	Apply the Number Theory to different applications using theorem
ITC401.2	Apply Probability to understand Probability Distribution Function
ITC401.3	Understand sampling theory and Solve problems on Correlation and Regression
ITC401.4	Apply the graphs and trees concepts to different applications
ITC401.5	Understand group theory and other algebraic structures and its computer applications
ITC401.6	Describe Lattice theory and its application to Coding and Decoding Errors

Unique Course Number: ITC402   **Course Name: Computer Networks**

Unique CO Number	Course Outcome (CO) Statement
5.ITC402.1	Describe the functions of each layer in OSI and TCP/IP model.
5.ITC402.2	Explain the functions of Application layer and Presentation layer paradigms and Protocols.
5.ITC402.3	Describe the Session layer design issues and Transport layer services.
5.ITC402.4	Classify the routing protocols and compare the IP addresses for the given network.
5.ITC402.5	Describe the functions of data link layer and explain & compare the protocols.
5.ITC402.6	Discuss the fundamentals of communication & explain the transmission media.

Unique Course Number: ITC403   **Course Name: Operating Systems**

Unique CO Number	Course Outcome (CO) Statement
8.ITC403.1	Describe the important computer system resources and the role of operating system in their management policies and algorithms
8.ITC403.2	Understand the process management policies and scheduling of processes by CPU
8.ITC403.3	Evaluate the requirement for process synchronization and coordination handled by operating system
8.ITC403.4	Describe and analyze the memory management and its allocation policies
8.ITC403.5	Identify use and evaluate the storage management policies with respect to different storage management technologies.
8.ITC403.6	Identify the need to create the special purpose operating system.

Unique Course Number: ITC404   **Course Name: Computer Organization and Architecture**

Unique CO Number	Course Outcome (CO) Statement
8.ITC404.1	Identify core components of computer and Explain the Architecture of it
8.ITC404.2	Discuss various Addressing modes and Data Processing Techniques of the Processor.
8.ITC404.3	Categorized various Operations of Control Unit and Memory Organization.
8.ITC404.4	Implement Programming of 8086 and Design Memory using various Mapping Techniques.

8.ITC404.5	Classify and Compare different types of memories ,Data Transfer Techniques and Conceptualize Instruction Level Parallelism.
8.ITC404.6	Demonstrate to Design Memory,Control Unit Using Different Techniques

Unique Course Number: ITC405   **Course Name: Automata Theory**

Unique CO Number	Course Outcome (CO) Statement
2.ITC405.1	Understand, design, construct, analyze and interpret Regular languages, Expression and Grammars.
2.ITC405.2	Understand and design different types of finite automata and machine as acceptor, verifier and translator.
2.ITC405.3	Understand, design, analyze and interpret Context free language, expression and grammars.
2.ITC405.4	Design different types of Push down Automata.
2.ITC405.5	Understand the concepts and design different types of Turing Machines as Acceptor, Verifier, and Translator.
2.ITC405.6	Compare, understand and analyze different languages, grammars, Automata and Machines and appreciate their power and convert Automata to Programs and Functions.

Unique Course Number: ITL401   **Course Name: Networking Lab**

Unique CO Number	Course Outcome (CO) Statement
5.ITL401.1	Execute and evaluate network administration commands and demonstrate their use in different network scenarios.
5.ITL401.2	Demonstrate the installation and configuration of network simulator.
5.ITL401.3	Demonstrate and measure different network scenarios and their performance behaviour.
5.ITL401.4	Analyze the contents of packet contents of different protocols.
5.ITL401.5	Implement the socket programming for client server architecture.
5.ITL401.6	Design and setup an organization network using packet tracer.

Unique Course Number: ITL402   **Course Name: Unix Lab**

Unique CO Number	Course Outcome (CO) Statement
8.ITL402.1	Identify the basic Unix general purpose commands
8.ITL402.1	Apply and change the ownership and file permissions using advanced Unix commands.
8.ITL402.1	Use awk, grep, perl scripts.
8.ITL402.1	Implement shell scripts and sed.
8.ITL402.1	Apply basic administrative tasks.
8.ITL402.1	Apply networking Unix commands.

Unique Course Number: ITL403   **Course Name: Microprocessor Programming Lab**

Unique CO Number	Course Outcome (CO) Statement

8.ITL403.1	Identify various components of Personal Computer and perform Assembly and Disassembly of computer.
8.ITL403.2	Implement Assembly Language Programs using Arithmetical and Logical Instruction set of 8086 Microprocessor
8.ITL403.3	Demonstrate the use of 8086 loop instructions to write an Assembly Language Program.
8.ITL403.4	Use string and procedure to execute programs for 8086 Microprocessor.
8.ITL403.5	Discuss and Compare Interfacing of 8086 Microprocessor.
8.ITL403.6	Execute and Debug programs in TASM/MASM.

Unique Course Number: ITL404   **Course Name: Python Lab**

Unique CO Number	Course Outcome (CO) Statement
ITL404.1	Describe the Numbers, Math Functions, Strings, List, Tuples, Set and Dictionaries in Python.
ITL404.2	Write all kinds of decision making statements and functions.
ITL404.3	Interpret Object Oriented Programming in Python.
ITL404.4	Apply different file handling operations.
ITL404.5	Design GUI applications in Python and evaluate various database operations.
ITL404.6	Develop Client Server network applications using Python.