



VAAGDEVI COLLEGE OF ENGINEERING  
UGC-Autonomous  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**Course Outcomes for M.Tech – CNIS (R15) for the year 2015-16**

Course Outcome	Year/Semester I/I Sem	Subject Name (Subject Code) DATA STRUCTURES AND ALGORITHMS (A978101)	No. Of Hours L:4 T:0 P: 0	Credits-4
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**After the completion of this course, the students should be able to**

1	Understand the basics of Algorithms and Analyze the performance and complexity of Algorithms and explain the concepts of basic data structures: Linear and Non Linear and compare how the storage and retrieval of data is done on these data structures.			
2	Gain knowledge about applications of data structures including creating, inserting, deleting, searching and sorting of data for each data structure.			
3	Analyze Various Sorting Techniques for real time applications and Comparison of Sorting methods.			
4	Understand the various Concepts of Graphs representations and Applications of Graphs			
5	Understand Operations on Binary Search Trees and Pattern Matching Algorithm .			

Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) COMPUTER NETWORKING (A978102)	No. Of Hours L:4 T: 0 P:0	Credits-4
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**After the completion of this course, the students should be able to**

1	Describe the concepts of computer networks their types and Network Applications and Understand the architecture of Packet-Switched Networks , Protocol Layers and their Service Models.			
2	Compare the principles of reliable data transfer for UDP and TCP transport layer protocols.			
3	Explain about Routers and Routing algorithms and the process of broadcasting..			
4	Understand how error detection and correction techniques can be applied to data in link layer			
5	Differentiate between Wired network, Wireless network and mobile network.			

Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) NETWORK PROGRAMMING(A978103)	No. Of Hours L:4 T:0 P: 0	Credits-4
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**After the completion of this course, the students should be able to**

1	Understand the basic concepts of OSI model, Unix standards, TCP and UDP			
2	Explain the TCP and UDP socket address structure and its related functions and Classify the TCP Echo server functions for server process termination, Crashing and Rebooting.			
3	Compare the different socket options for IPV6 and ICMPV6.			
4	Analyze the working of advanced input output functions like Timeouts, recv, send, readv, writev, recvmsg and sendmsg and Understand the difference between broadcasting and multicasting			
5	Demonstrate RPC and concepts related to it..			

Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) DATABASE INTERNALS (CORE ELECTIVE-I) (A978104)	No. Of Hours L:4 T:0 P:0	Credits-4
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**After the completion of this course, the students should be able to**

1	Understand the Purpose of a Database Systems and different models available to build a			
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	database and Perform a case study on designing a data model for any small organization using ER data model and relational data model.			
2	Explain the problem of anomalies caused due to data redundancy and data decomposition considering functional dependencies			
3	Analyze how concurrency control can be achieved in transaction management.			
4	Understand the concepts of different data structures used for storing and indexing large database.			
5	Gain complete knowledge on distributed databases, distributed transactions and distributed recovery			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>SOFTWARE DEFINED NETWORKS</b> <b>(CORE ELECTIVE-I) (A978105)</b>	<b>No. Of Hours</b> <b>L:4 T:0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Explain the basic concepts and architecture of Software Defined Networks( SDN).			
2	Understand all the issues related to SDN- Design, Implementation, Operations and Service Providers.			
3	Interpret the process of Open Flow Packet-Processing and use of Auxiliary Connection for Performance and Reliability			
4	Classify the different SDN controllers.			
5	Compare the functioning of SDN with Enterprise, Transport and Optical Transport Networks and Summarize Google's G-Scale Network Hardware, and challenges in Google SDN Deployment and Implementation.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>TCP/IP PROTOCOL SUITE (CORE ELECTIVE-I) (A978106)</b>	<b>No. Of Hours</b> <b>L:4 T:0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Identify and differentiate the various TCP/IP protocol suites and explore the OSI Model and Understand the major technologies like IP Addressing, Sub netting , Super netting and Routing of IP Packets.			
2	Analyze the functionalities of various protocols like a. Internet Protocol (IP), Internet Control Message Protocol (ICMP), Internet Group Management Protocol (IGMP) b. User Datagram Protocol (UDP), Transmission Control Protocol (TCP) ; Routing Protocols (RIP)			
3	Explain the differences between the Routing Protocols - RIP, OSPF, HELLO and BGP.			
4	Understand the importance of Domain Name System-DNS for Internet and Differentiate between Rlogin and Telnet protocols for remote connections and execution of commands.			
5	Summarize the different File Transfer Protocols.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>CLOUD COMPUTING(Core Elective-I)</b> <b>(A978107)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the basic Principles of Parallel, Distributed Computing and the importance of cloud computing.			



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2	Classify the requirement for migrating into cloud computing platform from the existing one.			
3	Explain how cloud computing works in application areas like Industry, Health, Education, Business etc.			
4	Introduce the concept of Python and how cloud applications can be developed using Python and Experiment on Programming Google App Engine with Python			
5	Summarize the cloud management issues related to cloud age, cloud security and legal issues of a cloud.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code) INTERNET OF THINGS (Core Elective-II) (A978108)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the basic Characteristics, Physical Design, Protocols and Communication Models of IoT.			
2	Acquire Knowledge on M2M: Machine to Machine and IoT System Management			
3	Develop techniques using Python Scripting Language to solve problems of IoT.			
4	Analyze IoT Physical Devices and Raspberry PI-Interfaces (serial, SPI, I2C).			
5	Experiment with Python programming on Raspberry PI and illustrate IoT Physical Server and Web Server designing frameworks.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code) EMBEDDED SYSTEMS (Core Elective-II) (A978109)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Explain the different embedded system design techniques and the metrics or challenges in designing them.			
2	Understand the complete architecture of 8051 and Advanced Processor.			
3	Demonstrate Software programming in Assembly language and High Level Language.			
4	Classify the different Real Time Operating System (RTOS), RTOS Vx Works, Windows CE.			
5	Understand the Embedded Software Development Process and Tools and Perform testing on Testing on Host Machine, Simulators, Laboratory Tools			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code) DISTRIBUTED SYSTEMS (Core Elective-II) (A978110)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand all the protocols which support client/server communication, group communication and IPC in Unix.			
2	Analyze the Distributed OS with respect to its kernel, Processes and Threads.			
3	Define Replication and its architectural model.			
4	Explain what are Distributed Transactions and Nested Transactions and Understand the problem of Deadlock and how can they be handled in distributed systems			
5	Explain the Design and Implementation issues of shared memory in distributed systems.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code) DISTRIBUTED COMPUTING (Core Elective-II) (A978111)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>



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<b>After the completion of this course, the students should be able to</b>				
1	Analyze the different forms of computing and the strength & weakness of distributed computing.			
2	Compare the parallel computing and cluster computing architecture and programming models.			
3	Understand how Grid services Architecture can be merged with Web Services Architecture and analyze the open grid service architecture			
4	Experiment on sample use cases of Commercial Data Center, Online Media and Entertainment.			
5	Demonstrate the Globus GT 3 Toolkit.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>BIG DATA ANALYTICS (Open Elective-I)</b> <b>(A978112)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the cause and sources for evolution of Big Data and Explain the process of Big Data Analytics and its importance in different fields of data science.			
2	Compare the different Reporting and Analysis tools of Big Data Analytics.			
3	Analyze the different techniques needed to Optimize MapReduce problems and demonstrate the installation of Hadoop and the process of storing data in Hadoop			
4	Explain the programming concepts with HBase and combining HBase with Hadoop Distributed File System (HDFS).			
5	Understand the concepts of Mobile Analytics and Web Analytics.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>BIOINFORMATICS (Open Elective-I)</b> <b>(A978113)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Discuss the basic knowledge, concepts of computer science and biology			
2	Describe molecular phylogenetics and advanced statistical approaches.			
3	Understand the concepts, functions of RNA Structure Prediction			
4	Understand the concepts, functions, relationships and database queries.			
5	Understand concepts of Genomics and Proteomics and its comparison.			
<b>Course Outcome</b>	<b>Year / semester I/I Sem</b>	<b>Subject Name (Subject Code)</b> <b>BIOMETRICS (Open Elective-I)</b> <b>(A978114)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the history, types, architecture and Applications of Biometric System and Perform a comparative study on Benefits of Biometrics Versus Traditional Authentication Methods			
2	Acquire advanced knowledge in Biological Biometrics like Face Recognition, Retina and Iris Biometrics and Identify the advantages and disadvantages of Using Vein Pattern of Palm, Fingerprint biometrics and Hand Geometry			
3	Implement practically any one of the biometric authentication system.			
4	Explore the different cryptography techniques which can improve the working of biometric systems.			
5	Make a study on how Watermarking Techniques and Image Enhancement Techniques can be used in biometrics and identify the future scope.			



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Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) COMPUTER FORENSICS (Open Elective-I) (A978115)	No. Of Hours L:4 T: 0 P:0	Credits-4
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**After the completion of this course, the students should be able to**

1	Understand the fundamental concepts of Computer Forensics and Describe the different Types of Computer Forensics Technologies.			
2	Explain the role of backup in data recovery and how it can be used as an evidence and Classify the different types of evidences and identify the steps in collecting the evidences			
3	Explain the process of verification and Authentication of any computer image..			
4	Understand the concepts like destruction of any Email or damaging any computer evidence under Network Forensics..			
5	Interpret the performance of the current Computer Forensics Tools.			

Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) DISTRIBUTED SYSTEMS SECURITY(Open Elective-I) (A978116)	No. Of Hours L:4 T: 0 P:0	Credits-4
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**After the completion of this course, the students should be able to**

1	Compare the benefits of centralized system versus distributed systems and define the Architectural requirements for distributed environment and Formulate a case study on Inter Process Communication using Java RMI			
2	Analyze the concepts of Operating system architecture, File Service architecture, Name Services and the Domain Name System.			
3	Understand the concepts of concurrency control and deadlocks in distributed system environment.			
4	Classify the cryptographic algorithms and identify which suits best for securing the distributed system.			
5	Design case study on Global Name Service, X.500 Directory Service and CORBA Services.			

Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) NETWORK PROGRAMMING LAB (A978117)	No. Of Hours L:0 T: 0 P:4	Credits-2
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**After the completion of this course, the students should be able to**

1	Understand using shell scripts and apply for interactive file-handling shell program			
2	Make use of shell scripts for writing code for all basic programs like finding GCD, Factorial, generate multiplication table and design simple calculator.			
3	Practice Implementing UNIX commands using system calls in C .			
4	Develop client server programming in C using Unix Domain Sockets.			

Course Outcome	Year / semester I/II Sem	Subject Name (Subject Code) NETWORK SECURITY (A978201)	No. Of Hours L:4 T: 0 P:0	Credits-4
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**After the completion of this course, the students should be able to**

1	Gain a complete knowledge on types of security attacks, services and mechanisms.			
2	Understand the implementation of Internetwork security model and its standards and vulnerabilities.			



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3	Demonstrate the Conventional Encryption Principles and the Public key cryptography principles			
4	Take up projects on Email privacy system and compare Pretty Good Privacy (PGP) and S/MIME.			
5	Build a model of Firewall and test the security issues			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>WIRELESS NETWORKS (A978202)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Identify the importance and advantage of a wireless network over the wired network			
2	Understand the architecture and different layers of wireless Local Area Network(LAN), PAN's and MAN's.			
3	Acquire knowledge in physical, data link ,network and transport layer of wireless internet networking models.			
4	Classify the network and routing protocols for AD-HOC Wireless Network			
5	Compare the applications of wireless sensor networks with MANET with respect to design challenges.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>NETWORK SECURITY STANDARDS AND APPLICATIONS(A978203)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the network issues and development strategies.			
2	Understand the IEEE 802.11 standard and GSM -2G,3G Technology.			
3	Adapt and illustrate cryptographic issues and security of information.			
4	Discuss intruders, e-transactions over internet..			
5	Ability to implement Mobile payment applications and Develop real time problems meeting the requirement of network standards.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>INTERNET TECHNOLOGIES AND SERVICES(CORE ELECTIVE-III) (A978204)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Develop web based solutions using multi -tier architecture for client and server side components.			
2	Illustrate dynamic content with Hibernate and Connection Pooling.			
3	Understand the JSP constructs and apply it to develop for Web applications.			
4	Analyze and validate Strut framework and Describe MVC architecture.			
5	Adapt framework such as SOA: Service Oriented Architecture, Web services fundamentals.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>DIGITAL WATERMARKING AND STEGANOGRAPHY (CORE ELECTIVE-III) (A978205)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Define Steganography and importance of water marking.			
2	Model different along with error correction codes.			





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3	Evaluate perceptual and robust water marking approaches.			
4	Analyze watermark security, attacks and authentication.			
5	Implement practical steganography methods and Develop Steganalysis and Steganography methods			
<b>Course Outcome</b>	<b>Year /semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>SECURITY THREATS (CORE ELECTIVE-III)(A978206)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
1	Gain a complete knowledge on Sources of security threats, vulnerabilities and consequences of threats.			
2	Understand the threats on internet like Email threats, Web threats and how they lead to cyber crime.			
3	Perform analysis on Vulnerability sources and assessment tools under Security Threat Management.			
7	Implement types of policies, access control, Trusted systems.			
8	Compare and understand Email and Internet use policies.			
<b>Course Outcome</b>	<b>Year /semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>NETWORK MANAGEMENT AND PERFORMANCE EVALUATION (CORE ELECTIVE-III) (A978207)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the challenges of Information Technology, Goals, Organization, and Functions.			
2	Analyze Functional model, SNMP Management, SNMPv2 System Architecture, along with Structure of Management Information..			
3	Understand overview of Probability and stochastic Processes.			
4	Model and Estimate Self-Similar Traffic.			
5	Implement QOS support and services and Develop resource reservation RSVP Multiprotocol label.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>STORAGE AREA NETWORKS (CORE ELECTIVE-IV) (A978208)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand Storage Area Networks characteristics and components.			
2	Learn SAN vendors and their products.			
3	Discuss Fibre Channel protocols and how SAN components use them to communicate with each other.			
4	Describe Cisco MDS 9000 Multilayer Directors and Fabric Switches Thoroughly learn Cisco SAN-OS features.			
5	Adapt the usage of all SAN-OS commands			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>DISTRIBUTED SYSTEMS SECURITY(CORE ELECTIVE-IV) (A978209)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Compare the benefits of centralized system versus distributed systems and define the Architectural requirements for distributed environment and Formulate a case study on			



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	Inter Process Communication using Java RMI.			
2	Analyze the concepts of Operating system architecture, File Service architecture, Name Services and the Domain Name System.			
3	Classify the cryptographic algorithms and identify which suits best for securing the distributed system			
4	Design case study on Global Name Service, X.500 Directory Service and CORBA Services.			
5	Implement the security techniques and cryptographic algorithms and plan a case study on CORBA.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>CYBER SECURITY (CORE ELECTIVE-IV) (A978210)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the different kinds of security attacks, services and mechanisms.			
2	Gain complete knowledge in number system and areas of applications in public key cryptography algorithms and Interpret the importance of digital signatures, digital Certificates, Certificate Authority for electronic document transfer on internet.			
3	Demonstrate IP security architecture.			
4	Explain how Pretty Good Privacy (PGP) and S/MIME provides Email privacy.			
5	Develop information security standards, Copy Right Law, and Patent Law.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>INFORMATION SYSTEMS CONTROL AND AUDIT(CORE ELECTIVE-IV) (A978211)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Discuss the fundamental of auditing in information systems and applications.			
2	Describe the basics of threats, computer security and remedies.			
3	Adapt the trends on various Information Control Techniques.			
4	Analyze the Types of testing such as Performance, Parallel Testing			
5	Develop methods to execute security threats and plan to protect computer systems from various security threats.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>E – COMMERCE (Open Elective-II) (A978212)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the fundamentals, foundations and importance of E-Commerce.			
2	Analyze the effectiveness of market research and Implement the electronic payment systems.			
3	Demonstrate the role and impact of E-Commerce in business models.			
4	Discuss the internet trading relationship by advertising and marketing.			
5	Assess the payment systems and determine and recognize multimedia concepts.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>INTELLECTUAL PROPERTY RIGHTS (OPEN ELECTIVE-II) (A978213)</b>	<b>No. Of Hours L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the legal rights related to design, trade and unfair competition.			





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2	Ability to apply and assess principles in intellectual property.			
3	Discuss the real time areas related to semiconductor chip protection act.			
4	Develop different law of patents.			
5	Introduce trade secret and apply state law and trade secret law.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>MOBILE COMPUTING(OPEN ELECTIVE-II)</b> <b>(A978214)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Describe the importance of design paradigms in mobile computing.			
2	Discuss the GSM Architecture and understand various services like SMS,GPRS			
3	Manage software systems of various Operating systems			
4	Understand the J2ME Architecture, J2ME Profiles and other Protocols.			
5	Evaluate the role of Multimedia in mobile applications.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>MOBILE APPLICATION SECURITY</b> <b>(OPEN ELECTIVE-II) (A978215)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the mobile devices and its platforms.			
2	Describe the knowledge on mobile operating system wireless communication and architecture.			
3	Implement Bluetooth security for mobile applications.			
4	Categorize appropriate methodologies on PDUs, converting XML.			
5	Implement Secure Local storage on Enterprise Security.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>PRINCIPLES OF INFORMATION SECURITY</b> <b>(OPEN ELECTIVE-II) (A978216)</b>	<b>No. Of Hours</b> <b>L:4 T: 0 P:0</b>	<b>Credits-4</b>
<b>After the completion of this course, the students should be able to</b>				
1	Understand the importance of Information Security.			
2	Describe the need and role of network security.			
3	Deploy the security Technologies and adapt various firewalls and Intrusion detection systems.			
4	Implement the techniques used in cryptography.			
5	Plan methods for information security and demonstrate it with Real Time problems.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>NETWORK SECURITY LAB(A978217)</b>	<b>No. Of Hours</b> <b>L:0 T: 0 P:4</b>	<b>Credits-2</b>
<b>After the completion of this course, the students should be able to</b>				
1	Implement Simplified DES Algorithm for encryption and decryption and also check how to break the DES coding.			
2	Apply the RSA the public key cryptography algorithm to transfer data securely across any network.			
3	Verify the correctness of the Email system using digital signatures by using a mail agent and also verify email authentication using S/MIME.			
4	Examine the working of Sniffers for network communication monitoring.			
<b>Course Outcome</b>	<b>Year / semester I/II Sem</b>	<b>Subject Name (Subject Code)</b> <b>SEMINAR(A978218)</b>	<b>No. Of Hours</b> <b>L:0 T: 0 P:4</b>	<b>Credits-2</b>
<b>After the completion of this course, the students should be able to</b>				
1	Identify the seminar topic and gather the literature related to the topic.			



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2	Plan and organize the contents and prepare a perfect written and oral presentation.			
3	Explain how the topic chosen can be implemented in other allied areas.			
4	Develop skills in presentation and discussion related to research areas.			
<b>Course Outcome</b>	<b>Year / semester</b>	<b>Subject Name (Subject Code)</b>	<b>No. Of Hours</b>	<b>Credits-4</b>
	<b>II/I Sem</b>	Comprehensive Viva-Voce(A978301)	<b>L:0 T: 0 P:0</b>	
<b>After the completion of this course, the students should be able to</b>				
1	Summarize all the subjects learnt in previous two semesters.			
2	Prepare to answer any question from all the core subjects.			
3	Understand the practical importance of the subjects in depth.			
4	Improve the oral presentation skills and gain confidence.			
5	Explain the areas of interest and concepts learnt thoroughly.			
<b>Course Outcome</b>	<b>Year / semester</b>	<b>Subject Name (Subject Code)</b>	<b>No. Of Hours</b>	<b>Credits-12</b>
	<b>II/I Sem</b>	Project work Review I (A978302)	<b>L:0 T: 0 P:24</b>	
<b>After the completion of this course, the students should be able to</b>				
1	Define the problem.			
2	Find a problem.			
3	Motivate the team.			
4	Discuss with team and theoretical concepts			
5	Demonstrate the requirements			
6	Integrate the ideas			
7	Choose appropriate methodology			
8	Infer different hypothesis and questions			
<b>Course Outcome</b>	<b>Year / semester</b>	<b>Subject Name (Subject Code)</b>	<b>No. Of Hours</b>	<b>Credits-4</b>
	<b>II/II Sem</b>	Project work Review II (A978401)	<b>L:0 T: 0 P:8</b>	
<b>After the completion of this course, the students should be able to</b>				
1	Communicate it clearly			
2	Summarize the background literature			
3	Outline the various research methods.			
4	Propose a solution to the problem.			
5	Apply the methods according to the needs.			
6	Select and collect the data.			
7	Conduct the response ethically			
8	Analyze the empirical data.			
<b>Course Outcome</b>	<b>Year / semester</b>	<b>Subject Name (Subject Code)</b>	<b>No. Of Hours</b>	<b>Credits-12</b>
	<b>II/II Sem</b>	Project Evaluation (Viva-Voce) (A978402)	<b>L:0 T: 0 P:16</b>	
<b>After the completion of this course, the students should be able to</b>				
1	Organize, interpret and evaluate data			
2	Solve and find different solutions related to context			
3	Determine the efficiency of the method.			
4	Prioritize the importance of method			
5	Simply the techniques in simple way			
6	Estimate the complexity of the solution			
7	Prove the method is sustainable.			
8	Modify if based on the requirements.			