



KIET GROUP OF INSTITUTIONS, GHAZIABAD

Department of Information Technology

Course Outcome



Session 2019-20

**Department of Information
Technology**



Index

4th Semester		
S No.	Subject Code	Subject Name
1	KVE-401	Universal Human Values
2	KNC402	Python Programming
3	KCS-401	Operating System
4	KIT-401	Web Designing
5	KCS-451	Operating System Lab
6	KCS453	Python programming Lab
7	KIT-451	Web Designing Lab

6th Semester		
S No.	Subject Code	Subject Name
1	RCS-601	Computer Networks
2	RIT-E22	Data Warehousing & Data Mining
3	RCS-603	Web Technology
4	RCS-602	Compiler Design
5	RUC-601	Cyber Security
6	RCS-651	Computer Network Lab
7	RCS-653	Web Technologies Lab
8	RCS-652	Compiler Design Lab
9	RCS-654	Data Warehousing & Data Mining



KIET GROUP OF INSTITUTIONS, GHAZIABAD

Department of Information Technology

8th Semester		
S No.	Subject Code	Subject Name
1	RCS082	Image Processing
2	RCS087	Data Compression

CO PO and Mapping of CO PO 2nd Year

(2018-2022 BATCH)

Session:- 2019-20 Semester:- 4th

Theory

Universal Human Values (KVE-401)	CO1: Start exploring the importance of 'I' (self), get comfortable to each other, to the teacher and start finding the need and relevance of the course.											
	CO2: Start feeling lack of understanding of human values is the root cause of all problems											
	CO3: Understand the physical facilities are required in limited quantity											
	CO4: See that respect is right evaluation and only right evaluation leads to fulfillment in relationship											
	CO5: Differentiate between the characteristics of different order and they are able to understand his/her role in this existence											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	3	2	2	2	2	3	3	2	1	3
CO2	2	3	1	3	3	2	1	3	2	2	1	3
CO3	2	2	3	2	3	2	1	3	1	3	1	3
CO4	3	2	3	3	2	3	1	3	3	2	1	3
CO5	3	2	2	3	3	1	2	3	3	2	1	3

Python Programming (KNC402)	CO1: To read and write simple python programs											
	CO2: To develop python programs with conditionals and loops											
	CO3: To define Python functions and to use Python data structures -- lists, tuples, dictionaries											
	CO4: To do input/output with files in Python											
	CO5: To do searching ,sorting and merging in Python											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	2	1	3	1	1	1	1	1	1	1
CO2	3	2	2	2	3	1	1	1	2	1	1	2
CO3	3	3	2	2	3	1	1	1	2	1	1	2
CO4	3	2	2	2	3	1	1	1	2	1	1	2
CO5	3	2	2	3	3	1	1	1	2	1	1	2

Operating System (KCS-401)	CO1: Illustrate the need, evolution, various categories and design issues of operating systems.											
	CO2: Analyze the problems related to concurrency and the different synchronization mechanism available.											
	CO3: Apply the techniques used to implement processes and threads as well as the different algorithms for process scheduling.											
	CO4: Analyze the various memory management techniques for memory allocation.											
	CO5: Understand the Security issues, I/O management, Disk management and file system structure in operating systems.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	2	1	1	1	1	1	3
CO2	3	3	2	3	2	2	2	1	1	1	1	3
CO3	3	3	3	3	3	3	1	1	1	1	1	3

CO4	3	3	2	3	2	3	3	2	1	1	2	3
CO5	3	2	2	2	2	3	3	2	1	1	2	3

Web Designing (KIT-401)	CO1: Understand principle of Web page design and about types of websites.											
	CO2: Visualize and Recognize the basic concept of HTML and application in web designing.											
	CO3: Recognize and apply the elements of Creating Style Sheet (CSS).											
	CO4: Understanding the basic concept of Java Script and its application.											
	CO5: Introduce basics concept of Web Hosting and apply the concept of SEO.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	1	1	1	1	2	1	2	1	2
CO2	3	1	3	1	2	1	1	1	1	3	1	2
CO3	3	1	3	1	2	1	1	1	1	3	1	2
CO4	2	1	3	3	3	1	2	2	1	1	1	3
CO5	1	3	1	2	2	2	3	3	2	1	2	2

Practical

Operating System Lab (KCS-451)	CO1: Implement the basic command of OS and will execute the various system calls.											
	CO2: Implement the process synchronization problem using semaphore.											
	CO3: Implement CPU scheduling algorithm for process scheduling and deadlock management techniques.											
	CO4: Implement memory management techniques.											
	CO5: Implement file storage allocation techniques.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	2	1	1	1	1	1	3
CO2	3	3	2	3	2	2	2	1	1	1	1	3
CO3	3	3	3	3	3	3	1	1	1	1	1	3
CO4	3	3	2	3	2	3	3	2	1	1	2	3
CO5	3	2	2	2	2	3	3	2	1	1	2	3

Python programming Lab (KCS453)	CO1: To understanding basic syntax of python implementation											
	CO2: To practically apply looping and conditional constructs											
	CO3: To implement programs related with list data structure.											
	CO4: To implement various searching algorithm in python											
	CO5: To implement sorting techniques in python											
CO \ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	2	1	3	1	1	1	1	1	1	1
CO2	3	2	2	2	3	1	1	1	2	1	1	2
CO3	3	3	2	2	3	1	1	1	2	1	1	2
CO4	3	2	2	2	3	1	1	1	2	1	1	2
CO5	3	2	2	3	3	1	1	1	2	1	1	2

Web Designing	CO1: Understanding the principle of Web design concepts.											
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Lab (KIT-451)	CO2: Implementation of HTML in the workings of the web applications.											
	CO3: Applying CSS for creating and designing the Web pages.											
	CO4: Applying and build dynamic web pages using client-side programming JavaScript.											
	CO5: Analysing and developing different types of web pages using HTML, CSS and JavaScript.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	1	1	1	1	2	1	2	1	2
CO2	3	1	3	1	2	1	1	1	1	3	1	2
CO3	3	1	3	1	2	1	1	1	1	3	1	2
CO4	2	1	3	3	3	1	2	2	1	1	1	3
CO5	1	3	1	2	2	2	3	3	2	1	2	2

CO PO and Mapping of CO PO 3rd Year

(2017-2021 BATCH)

Session:- 2019-20 Semester:- 6th

Theory

Computer Networks (RCS-601)	CO1: Build an understanding of the fundamental concepts and Layered Architecture of computer networking.											
	CO2: Understand the basic concepts of link layer properties to detect error and develop the solution for error control and flow control.											
	CO3: Design, calculate, and apply subnet masks and addresses to fulfil networking requirements and calculate distance among routers in subnet.											
	CO4: Understanding the duties of transport layer, session layer and presentation layer and also focus on network security issues to secure communication towards society.											
	CO5: Understand the features and operations of various application layer protocols such as DNS, HTTP, FTP, e-mail protocols and other applications.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3	3	2
CO3	3	3	3	1	3	3	3	3	3	3	3	2
CO4	3	2	1	2	3	2	3	3	3	3	3	2
CO5	3	2	2	3	3	2	2	2	3	2	3	2

Data Warehousing & Data Mining (RIT-E22)	CO1: To understand the basic principles, concept and applications of data warehousing											
	CO2: To develop ability to do conceptual, Logical, and Physical design of data warehouse.											
	CO3: To introduce the task of data mining as an important phase of knowledge recovery process											
	CO4: To have a good knowledge of the fundamental concepts that provide the foundation of data mining.											
	CO5: To have knowledge about Security , Backup and Recovery of data warehouse.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	1	2	3	2	1	3	2	2	2
CO2	3	3	3	2	2	3	3	2	3	3	2	3
CO3	2	2	3	2	1	2	2	2	3	3	3	3
CO4	2	3	2	2	3	3	2	1	2	3	2	2
CO5	3	2	3	2	3	2	3	1	2	3	2	2

Web Technology (RCS-603)	CO1: Understand the web application development and analyze the insights of intent programming to implement application over the web											
	CO2: Understand, analyze and apply the role of markup languages like HTML, DHTML and XML in the workings of the web applications											
	CO3: Use web application development tools i.e. Apache tomcat, WAMP etc and identifies the environment currently available on the market to design websites.											
	CO4: Build dynamic web pages using client-side scripting (JavaScript) and also develop the web application using servlet and JSP.											
	CO5: Understand the database connectivity with JDBC and learn to design various applications for E-commerce and E-tools											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	1	1	2	2	1	2	2	2

CO2	3	2	3	1	1	1	3	1	1	3	2	3
CO3	3	1	2	1	1	2	2	1	2	3	3	3
CO4	3	1	2	1	2	2	1	1	2	3	2	2
CO5	3	1	1	1	2	2	1	1	2	3	2	2

Compiler Design (RCS-602)	CO1: Acquire knowledge of different phases and passes of compiler and to give the essence of various compiler tools. Students will also be able to design multiple modules of a general compiling tool having realistic constraints of compilers.											
	CO2: Understand the parser and its types and the construction of various types of parsing tables.											
	CO3: Implement the compiler using syntax directed translation method and to get a better understanding of synthesized and inherited attributes.											
	CO4: Acquire knowledge about run time data structure like symbol table organization and different techniques used in that.											
	CO5: Understand the target machine's run time environment, its instruction set for code generation and techniques used for code optimization.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	1	2	2	2	3	3	2	2	2
CO2	3	3	2	2	2	3	3	2	3	3	2	3
CO3	3	2	3	2	2	2	2	2	3	3	3	3
CO4	2	3	2	2	3	3	1	1	2	3	2	2
CO5	2	2	2	2	3	2	1	1	2	3	2	2

Cyber Security (RUC-601)	CO1: Learn about information systems, its types, threats, security issues related to it and also about cyber security and risk associated to it .											
	CO2: Learn about Application security, Data security and types of security Threats in network.											
	CO3: Understand the importance of secure information system and risk management issues indifferent applications.											
	CO4: Design security procedures, policies and also implement cryptography in their live projects and also learn about modern copyright, patent law, skills of ethics, cyber crime and IT ACT.											
	CO5: Understand modern copyright, patent law, skills of ethics, cyber crime and IT ACT so that they can protect their inventions by making use of these Laws.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	3	3	3	1	1	1	3
CO2	3	3	2	2	2	3	1	3	1	1	1	3
CO3	3	2	3	2	2	3	1	3	1	1	1	3
CO4	3	3	2	3	2	3	1	3	1	1	1	3
CO5	2	2	2	2	2	2	3	3	2	1	1	3

Practical

Computer Network Lab (RCS-651)	CO1: Understand the fundamental concepts of computer networking and Network topologies.											
	CO2: Know about different types of network devices and design, implement, and analyse simple computer networks.											
	CO3: Learn the basic network commands and use techniques, skills, and modern networking tools necessary for engineering practice.											
	CO4: Formulate problems and their solutions, think creatively and communicate effectively.											
	CO5: Describe how rapid progress of computer network technology can impact on the society and continue to advance personal knowledge and understanding.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	2	1	3	3	2	3	3	3	1
CO2	3	2	3	2	1	2	3	2	2	2	3	3
CO3	3	2	3	1	3	1	2	3	2	2	2	3

CO4	2	1	3	2	3	1	2	2	3	3	2	2
CO5	3	1	2	2	2	3	2	2	3	2	2	2

Web Technologies Lab (RCS-653)	CO1: Understand the web application development and analyse the insights of intent programming to implement application over the web											
	CO2: Applying the role of markup languages like HTML, DHTML and XML in the workings of the web applications.											
	CO3: Use web application development tools i.e. Apache tomcat and identifies the environment currently available on the market to design websites.											
	CO4: Develop the dynamic web pages using client-side scripting (javascript) and also the web application using Servlet and JSP											
	CO5: Implementation of the database connectivity with JDBC and learn to design various applications.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	1	1	2	2	1	2	2	2
CO2	3	2	3	1	1	1	3	1	1	3	2	3
CO3	3	1	2	1	1	2	2	1	2	3	3	3
CO4	3	1	2	1	2	2	1	1	2	3	2	2
CO5	3	1	1	1	2	2	1	1	2	3	2	2

Compiler Design Lab (RCS-652)	CO1: To learn and use the new tools and technologies used to design a compiler and apply the knowledge of patterns, tokens and regular expressions in programming for solving a problem in the field of compiler.											
	CO2: To develop program for solving parser problems.											
	CO3: To create program for intermediate code generation.											
	CO4: To develop program for implementing symbol table.											
	CO5: To learn the new code optimization techniques and apply it to improve the performance of a program in terms of time and space.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	2	2	2	2	3	3	2	2	2
CO2	3	3	2	2	2	3	3	2	3	3	2	3
CO3	3	2	3	2	2	2	2	2	3	3	3	3
CO4	2	3	2	2	3	3	1	1	2	3	2	2
CO5	2	2	2	2	3	2	1	1	2	3	2	2

Data Warehousing & Data Mining (RCS-654)	CO1: How to pre-process and improve data quality											
	CO2: How to select data and technique for the mining											
	CO3: How to use Algorithms for data mining											
	CO4: How to analyse data											
	CO5: How to compare techniques based on result											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	2	3	1	1	2	2	3	3	2
CO2	3	1	2	3	2	1	1	3	2	1	2	2
CO3	3	3	3	3	2	1	1	1	2	2	3	3
CO4	3	2	2	3	2	3	2	2	3	2	2	3
CO5	2	2	3	3	3	3	2	2	3	2	2	3

CO PO and Mapping of CO PO 4th Year

(2016-2020 BATCH)

Session:- 2019-20 Semester:- 8th

Theory

Image Processing (RCS082)	CO1: Introduction to image fundamentals containing the concept of image acquisition, sampling, quantization and 2D transformation											
	CO2: Identify and study the different types of image enhancement technique.											
	CO3: Analyse and interpret the effects of high pass and low pass filter in an image.											
	CO4: Analyse and interpret the effect of different types of image segmentation techniques.											
	CO5: Understand the concept and need of image compression and recognition.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	2	1	1	2	1	1	1	2
CO2	3	2	2	2	1	1	1	2	1	2	2	1
CO3	2	3	3	3	2	2	2	2	1	1	1	1
CO4	3	2	3	3	2	2	1	2	1	1	2	1
CO5	3	1	1	2	2	1	2	2	2	1	2	2

Data Compression (RCS087)	CO1: Get knowledge of Lossless and lossy compression, Information Theory and Modelling.											
	CO2: Learning of Implementing generic Lossless (text) compression Algorithms.											
	CO3: Learning of Applying Lossy (Image) Compression Algorithms.											
	CO4: Learning of the distortion and quantization techniques.											
	CO5: Learning of Advanced Quantization Techniques.											
CO \ PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	3	1	1	1	1	1	1	1	2
CO2	3	2	2	3	1	2	1	1	1	1	1	1
CO3	3	2	2	3	1	2	1	1	1	1	1	1
CO4	3	2	1	3	1	1	1	1	1	1	1	1
CO5	3	2	1	3	1	1	1	1	1	1	1	1