



Excël

COLLEGE FOR COMMERCE AND SCIENCE



Approved by Government of TamilNadu & Affiliated with Periyar University, Salem
Pallakkapalayam, Komarapalayam, Namakkal Dt-637 303

Tamilnadu, India

www.excelinstitutions.com

2021-22 REGULATION

DEPARTMENT OF DATA SCIENCE

Program Outcomes (Pos)

	Program Outcomes (Pos)
PO1.	Understand and apply fundamental principles, concepts and methods in critical areas of science and multidisciplinary fields.
PO2	Demonstrate problem-solving, analytical and logical skills to provide solutions for scientific requirements.
PO3.	Develop critical thinking with scientific temper and apply the technologies in various fields of Data Science
PO4.	Communicate the subject effectively.
PO5.	Understand professional, ethical, and social responsibilities

Program Specific Outcomes (PSOs)

	Program Specific Outcomes (PSOs)
PSO1.	To develop the ability to understand abstract concepts that lead to various data science theories in Mathematics, Statistics, and Computer Science.
PSO2.	To identify, analyze and design solutions for problems using the fundamental principles of Mathematics, Statistics, Computing Sciences, and relevant domain disciplines.
PSO3.	To acquire the skill of handling data science programming tools for problem solving.
PSO4.	To understand and commit to professional ethics, cyber regulations, responsibilities, and norms of professional computing practices.
PSO5.	To understand the role of statistical approaches and apply the same to solve real life problems in the fields of data science.



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DEPARTMENT OF DATA SCIENCE

2021-22 REGULATION-COURSE OUTCOMES

Course Code	Course Title	Course Outcomes	
SEMESTER-I			
22UDS01	PYTHON PROGRAMMING	CO1	Understand the Basic Programming Logic.
		CO2	Understand the basic Statements
		CO3	Implement Files and SQL.
		CO4	Evaluate Graphics in python.
		CO5	Analyze Version control system.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

S- Strong M-Medium L-Low



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SEMESTER-II

22UDS02	DATA STRUCTURES AND ALGORITHMS	CO1	Remember the concept of algorithms.
		CO2	Understanding the stack and queues.
		CO3	Apply linked list for other data structures.
		CO4	Evaluate the trees and sorting methods.
		CO5	Analyze the sorting and file organizations.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

S- Strong M-Medium L-Low



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22UDS03	RELATIONAL DATABASE MANAGEMENT SYSTEMS	CO1	Remember the concept of database.
		CO2	Understanding the data models and ER Diagram.
		CO3	Apply SQL commands.
		CO4	Evaluate the DBMS in SQL.
		CO5	Analyze the Transaction management.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

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SEMESTER-III

22UDS04	DATA SCIENCE	CO1	Understand the concept of Data Science.
		CO2	Understanding the Machine Learning.
		CO3	Data Visualizations concept.
		CO4	Web Services in Python
		CO5	Library for Statistics.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

S- Strong M-Medium L-Low



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22UDS05	OPERATING SYSTEM	CO1	Understand the structure and functions of Operating System.
		CO2	Compare the performance of Scheduling Algorithms
		CO3	Understand and organize the memory
		CO4	Evaluate the deadlock measures
		CO5	Analyze the I/O hardware and software

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

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SEMESTER-IV

22UDS06	COMPUTER NETWORKS	CO1	Remember the concepts of OOPS.
		CO2	Understand the basic Terminologies of languages and statements.
		CO3	Demonstrate the use classes and objects.
		CO4	Evaluate the packages and exception handling methods.
		CO5	Analyze the I/O Streams and graphics classes.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

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22UDS07	BIG DATA ANALYSIS	CO1	Know about the R programming
		CO2	Tools in big data analytics using Hadoop
		CO3	Data model in big data analytics using NoSQL
		CO4	Understanding and Know about Map Reduce Programming
		CO5	Gain more knowledge about Hadoop streaming with R.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	M	S	S	S
CO3	S	S	M	S
CO4	S	S	S	M
CO5	S	S	S	M

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SEMESTER-V

22UDS08	DATA VISUALIZATION TECHNIQUES	CO1	Introduction to Data Visualization.
		CO2	Data Management for data visualization.
		CO3	Data sources and Data processing for data visualization.
		CO4	Advanced Data processing and Basic Charting.
		CO5	Interactivity Charting and Storyboard.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	-
CO2	S	M	M	S
CO3	S	L	L	M
CO4	M	S	M	S
CO5	S	L	S	S

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22UDS09	MACHINE LEARNING	CO1	Introduction to machine learning
		CO2	Probabilistic and Stochastic Models
		CO3	Supervised learning
		CO4	Unsupervised learning
		CO5	Modeling, evaluation and Genetic algorithms

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	S	---
CO2	S	M	M	S
CO3	S	L	M	M
CO4	M	S	M	S
CO5	S	L	S	S

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22UDS10	INTERNET OF THINGS	CO1	Understand the Basic Programming Logic.
		CO2	Understand the basic Statements.
		CO3	Implement Files and SQL.
		CO4	Evaluate Graphics in python.
		CO5	Analyze Version control system.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	S	S	M	---
CO2	M	M	M	S
CO3	S	M	L	M
CO4	M	S	M	S
CO5	S	M	L	L

S- Strong M-Medium L-Low



SEMESTER-VI

22UDS11	DIGITAL MARKETING	CO1	Ability to develop marketing strategies based on product, price, place and promotion objectives.
		CO2	Ability to create an integrated marketing communications plan which includes promotional strategies and measures of effectiveness.
		CO3	Ability to communicate the unique marketing mixes and selling propositions for specific product offerings.
		CO4	Ability to construct written sales plans and a professional interactive oral sales presentation.
		CO5	Ability to formulate marketing strategies that incorporate psychological and sociological factors which influence consumers.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	M	S	M	L
CO2	S	M	M	L
CO3	S	M	M	L
CO4	M	S	M	L
CO5	S	M	L	L

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22UDSS01	SOFT SKILLS	CO1	To understand the nature of technical communication.
		CO2	To understand the listening process.
		CO3	To implement the interview process.
		CO4	To understand the group discussion.
		CO5	To improve the presentation skills.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4
CO1	M	S	M	L
CO2	S	M	M	L
CO3	S	M	M	L
CO4	M	S	M	L
CO5	S	M	L	L

S- Strong M-Medium L-Low