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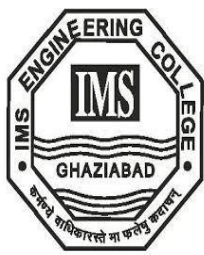
Department of Information Technology

2020-21

IMS Engineering College, Ghaziabad

Course Outcomes (CO) mapping with

Programme Outcomes (PO)

and

Programme Specific Outcomes (PSO)

# IMS Engineering College, Ghaziabad

Institute Vision and Mission

Vision

Our vision is to impart Vibrant, Innovative and Global Education to make IMS the world leader in terms of Excellence of Education, Research and to serve the nation in the 21st century.

Mission

- To develop IMSEC as a Centre of Excellence in Technical and Management Education.

- To inculcate in its students the qualities of Leadership, Professionalism, Executive Competence and Corporate understanding.

- To imbibe and enhance Human Values, Ethics and Morals in our students.

- To transform students into Globally Competitive Professionals

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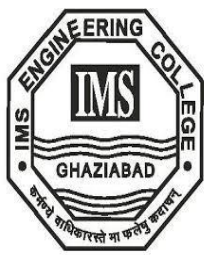
Department Vision and Mission

Vision :

To impart futuristic technical education and establish a department of excellence by preparing students to apply their knowledge and varied skills as a competent technocrat to contribute towards solving complex societal problems and thus building a peaceful and prosperous nation.

Mission:

- To impart quality engineering education so that they become perfect IT professional by getting high quality of technical education, research, training, professionalism with strong ethical values.

- To educate students in such a way that they shape up their minds to ensure their productive careers in industry and academia.

- To help students to excel in research and innovation that discovers new knowledge which enables new technologies and systems.

- To prepare students to become an industry ready IT professional by inculcating creativity, team spirit, leadership and ethical competency through industry academia collaboration, continuous curricular, co-curricular and extra-curricular activities.

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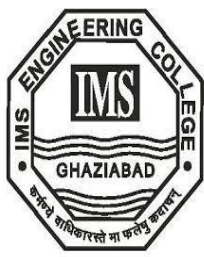
Program Outcomes

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Objectives

PEO 1: Graduates of the program will be able to apply fundamental principles of engineering in problem solving and understanding the role of computing in multiple disciplines.

PEO 2: Graduates will learn to apply the various computational techniques and tools for developing solutions & projects in the real world.

PEO 3: Graduates will be employed as Information Technology professional beyond entry level positions or be making satisfactory progress in graduate program.

PEO 4: Graduates will be able to demonstrate that they can function, communicate, collaborate and continue to learn effectively, and ethically as a socially responsible information technology professional. They will contribute to the society by their professional capabilities through lifelong learning.

Program Specific Outcomes (PSO)

PSO1: Foundation of computer system: Ability to understand the principles and working of computer systems.

PSO2: Foundations of software development: possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.

PSO3: Foundation of mathematical concepts: Ability to apply mathematical methodologies to solve computation task, model real world problem, using appropriate data structure and suitable algorithm.

PSO4: Applications of computing and research ability: Ability to use knowledge in various domains to identify research gaps and hence to provide solution to new ideas and innovations.

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VII SEMESTER

SI. No.	Subject Code	Subject Name	L-T-P	Th/Lab Marks ESE	Sessional CT	Sessional TA	Total	Credit
1	Open Elective-1	Open Elective Course -1	3--0--0	70	20	10	100	3
2	IT Elective-3	Deptt Elective Course-3	3--0--0	70	20	10	100	3
3	IT Elective-4	Deptt Elective Course-4	3--1--0	70	20	10	100	4
4	RIT701	Cryptography & Network Security	3--1--0	70	20	10	100	4
5	RCS702	Artificial Intelligence	3--0--0	70	20	10	100	3
6	RIT751	Cryptography & Network Security Lab	0--0--2	50		50	100	1
7	RCS752	Artificial Intelligence Lab	0--0--2	50		50	100	1
8	RIT753	Industrial Training	0--0--3			100	100	2
9	RIT754	Project	0--0--6			200	200	3
	TOTAL			450	100	450	1000	24

IMS Engineering College, Ghaziabad

VIII SEMESTER

SI. No.	Subject Code	Subject Name	L-T-P	Th/Lab Marks	Sessional			Total	Credit
				ESE	CT	TA			
1	Open Elective-2	Open Elective Course-2	3--0--0	70	20	10		100	3
2	IT Elective-5	Deptt Elective Course-5	3--1--0	70	20	10		100	4
3	IT Elective-6	Deptt Elective Course-6	3--0--0	70	20	10		100	3
4	RIT851	Seminar	0--0--3			100		100	2
5	RIT852	Project	0--0--12	350		250		600	12
	TOTAL			560	60	380		1000	24

Sub Code	RCS-702
Sub. Name	Artificial Intelligence

	COURSE OUTCOMES	Bloom's Level
CO1	Students will be able to apply the fundamental aspects of AI, Intelligent agents in field of AI	K3
CO2	Students will be able to apply and analyze various search strategies in AI and its area of applications	K3, K4
CO3	Students will be able to discuss and create the methods for Knowledge Representation & Reasoning in AI	K2, K6
CO4	Students will be able to demonstrate the Machine learning concepts & its fundamental algorithms	K3
CO5	Students will be able to analyse and apply the pattern recognition techniques & its role in AI	K3, K4

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	2	1		1	1	1	1			3
CO2	1	3	3	3	1	1	1	1	1		2	3
CO3	2	3	2	2	1	1	1	1	1		2	3
CO4	3	3	3	3	2	1	1	1	1		3	3
CO5	3	3	3	3	2	1	1	1	1		3	3
Avg	2.00	2.60	2.60	2.40	1.50	1.00	1.00	1.00	1.00		2.50	3.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	3			2
CO2	3	3	1	3
CO3	3	1	1	3
CO4	3	3	3	3
CO5	3	1	3	3
Avg	3.00	2.00	2.00	2.80

Sub Code	RCS752
Sub. Name	AI Lab

	COURSE OUTCOMES	**Bloom's Level**
CO1	Students will be able to learn different logic programming languages.	K1
CO2	Students will be able to apply and analyze various problem solving techniques on artificial intelligent problems.	K3, K4
CO3	Students will be able to acquire skill to identify the given problem and design the rule based systems.	K3
CO4	Students will be able to develop better understanding to represent various real life problem domains using logic based techniques and use this to perform inference or planning.	K6
CO5	Students will be able to understand the working knowledge in Lisp and demonstrate that for solving the artificial intelligent problems	K2

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	2	2	3							3
CO2	3	3	3	3	3	2						3
CO3	3	3	3	3	2	3						3
CO4	3	3	3	3	2	3	2	1	1		3	3
CO5	3	3	3	3	2	2			2	2	3	3
Avg	2.80	2.80	2.80	2.80	2.40	2.50	2.00	1.00	1.50	2.00	3.00	3.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	2	2	1	1
CO2	2	1	2	1
CO3	2	2	2	2
CO4	2	2	2	2
CO5	2	2	2	2
Avg	2.00	1.80	1.80	1.60

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Sub Code	RIT701
Sub. Name	Cryptography and Network Security

	COURSE OUTCOMES	Bloom's Level
CO1	To understand the basic concept of Cryptography and Network Security, their mathematical models. Encrypt and decrypt messages using block ciphers.	K2
CO2	To understand various types ciphers ,DES,AES, message Authentication, digital Signature, System	K2
CO3	To Identify and classify computer and security threats and develop a security model to prevent, detect and recover from attacks .	K2, K4
CO4	To Sign and verify messages using well-known signature generation and verification algorithms.	K5
CO5	To describe and analyze existing authentication protocols for two party communications	K1, K4
CO6	To understand the SSL or firewall based solution against security threats.	K2

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	1	1	1	1		1				1
CO2	3	3	3	3	2	1	1	1	1	1	1	2
CO3	3	3	3	3	2	2		1	1	1	1	3
CO4	3	3	3	3	2	2	1	1	1	1	1	3
CO5	3	3	2	2	1	2	1	1				2
CO6	3	2	2	2	1	1		1				1
Avg	2.83	2.67	2.33	2.33	1.50	1.50	1.00	1.00	1.00	1.00	1.00	2.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	2	2		1
CO2	3	3	1	2
CO3	3	3	1	3
CO4	3	3	1	3
CO5	3	2		2
CO6	3	2		2
Avg	2.83	2.50	1.00	2.17

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Sub Code	RIT-751
Sub. Name	Cryptography & Network Security Lab

COURSE OUTCOMES		Bloom's Level
CO1	To be able to identify common network security vulnerabilities/attacks; explain the foundations of Cryptography and network security	K1
CO2	To be able to evaluate the risks and threats to networked computers	K4
CO3	To be able to demonstrate detailed knowledge of the role of encryption to protect data	K3
CO4	To be able to analyze security issues arising from the use of certain types of technologies	K4
CO5	To be able to identify the appropriate procedures required to secure networks; identify the appropriate procedures required for system security testing and procedures of Backup and Recovery	K1

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	2	1	1							
CO2	2	1	1		2							
CO3	1	2		1	1							
CO4	1	2	2	1	1							
CO5	2	1	2	1	2							
Avg	1.40	1.40	1.75	1.00	1.40							

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	1	2		1
CO2	1	2	1	1
CO3	1	1		2
CO4	2	1		1
CO5	1	2		2
Avg	1.20	1.60	1.00	1.40

IMS Engineering College, Ghaziabad

Sub Code	RIT-753
Sub. Name	Industrial Training

	COURSE OUTCOMES	Bloom's Level
CO1	Students are expected to present the objective and the work done during training	K5
CO2	Students are expected to apply the learned concept through design,analysis and development of mini project	K3
CO3	Students are expected to present overall working and implementation of mini project during their presentation	K5
CO4	Students are expected to present the result/output and prepare a mini project report	K5

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2	1	2	1	1		1	1	1	1	1
CO2	3	3	3	3	3	1	1	1	2	2	3	2
CO3	3	3	3	3	3			2		3	3	3
CO4	1	1	3	2	3			1		3	2	2
Average	2.00	2.25	2.50	2.50	2.50	1.00	1.00	1.25	1.50	2.25	2.25	2.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	1	2	2	1
CO2	3	3	3	3
CO3	3	3	3	3
Average	2.33	2.25	2.25	2.00

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Sub Code	RIT-754
Sub. Name	Project

	COURSE OUTCOMES	Bloom's Level
CO1	To identify a real world problem in a clear and concise manner demonstrating a sound technical knowledge in form of synopsis covering problem understanding, project objectives, expected features and results.	K1
CO2	To identify and summarize an appropriate list of literature review, analyse previous researchers' work and relate them to current project.	K1, K5
CO3	To understand how to collect primary data from the field according to the requirements, analyse the collected data in form of tables, bar chats, pie charts, etc. and create a paper model for the project.	K2
CO4	To undertake problem identification, formulation and design engineering solutions to complex problems utilising a systems approach.	K2
CO5	To validate the results with defined project objectives through standard or benchmark procedures.	K5
CO6	To present the project outlining the approach and expected results using good oral and written presentation skills thereby producing a written project report that record and compile work done throughout the project.	K5

CO-PO Matrix												
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2		2		1	1	1	2	1	2	2
CO2	1	3	1	2		1			2			1
CO3	2	2	2	2	2	1	1		1		2	2
CO4	2	2	3	1	1	1			2		2	2
CO5	2	2	3	2	2	1	1	1	2	1	3	2
CO6	2	2	2	1	1	1	1	1	2	3	3	2
Average	1.67	2.17	2.20	1.67	1.50	1.00	1.00	1.00	1.83	1.67	2.40	1.83

CO-PSO Matrix				
COs	PSO1	PSO2	PSO3	PSO4
CO1	3	1	1	2
CO2	1	3	1	2
CO3	1	3	2	2
CO4	2	2	2	1
CO5	1	3	2	2
CO6	3	2	2	2
Average	1.83	2.33	1.67	1.83

IMS Engineering College, Ghaziabad

Sub Code	RCS-071
Sub. Name	Applications of Soft Computing

	COURSE OUTCOMES	Bloom's Level
CO1	Student should be able to understand the concept of Neural Network and Artificial Neural Network. They should be able to create and evaluate the various architecture of ANN and different learning techniques.	K2
CO2	Student should be able to understand the architecture and meaning of Back Propagation Network.	K2
CO3	Student should be able to understand the basic concept of Fuzzy Logic, fuzzy vs crisp data, and fuzzy to crisp data conversion.	K2
CO4	Student should be able to apply the concept of Fuzzyfication and De-fuzzyfication, and creating fuzzy logic based industrial applications.	K3
CO5	Student should be able to understand the basic concept of Genetic Algorithm, genetic representation of a problem, genetic operators, and applying it in various optimization problems.	K2
CO6	Student should be able to create a model of fusion of Fuzzy and Neural Network processes for industrial applications.	K6

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	3	3	2				1	2	2
CO2	3	3	2	3	3	2				2	2	2
CO3	3	3	3	2	3	2				1	3	2
CO4	3	3	3	2	2	2				2	2	2
CO5	3	3	2	3	3	3				3	3	2
CO6	3	3	2	3	3	3				2	2	2
Avg	3.00	3.00	2.33	2.67	2.83	2.33				1.83	2.33	2.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	1	3	3	3
CO2	1	2	2	3
CO3	1	3	2	3
CO4	1	2	3	3
CO5	1	3	3	2
CO6	1	3	2	3
Avg	1.00	2.67	2.50	2.83

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Sub Code	RCS-077
Sub. Name	AGILE SOFTWARE DEVELOPMENT

	COURSE OUTCOMES	Bloom's Level
CO1	Student will be able to understand the fundamentals of Agile Software Development.	K2
CO2	Student will be able to apply different Agile processes like Scrum, Extreme Programming.	K3
CO3	Student will be able to analyze the agility and knowledge management concept.	K4
CO4	Student will be able to understand agility and requirement engineering.	K2
CO5	Student will be able to understand agility and quality assurance.	K2

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	1	3	2		3	3	3	3	2
CO2	3	3	3	1	3	3		3	3	3	2	1
CO3	3	1	1	1	2	2		3	3	3	3	1
CO4	3	3	3	3	2	2		3	3	3	3	2
CO5	2	3	2	3	2	2		2	3	3	3	2
Avg	2.80	2.40	2.40	1.80	2.40	2.20		2.80	3.00	3.00	2.80	1.60

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	2	2	1	2
CO2	2	3	1	2
CO3	2	3	1	2
CO4	2	3	2	3
CO5	2	3	2	1
Avg	2.00	2.80	1.40	2.00

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Sub Code	ROE074
Sub. Name	Human value

COURSE OUTCOMES		Bloom's Level
CO1	Define, identify and remember the facts and process, to assess basic human aspirations /goals and to see the shifts.	K1
CO2	Facilitate the competence to understand the harmony in nature/existence and apply it in attaining human goals.	K2
CO3	Analyze various factors and sources influencing decision makings, and significance of knowledge in RESOLUTION.	K4
CO4	Evaluate transformation in thoughts through knowledge and in expressions as humane conduct (behavior, work/participation).	K5
CO5	Create and develop the understanding of humane tradition and its various components.	K6

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1		2				1	1	1	1			1
CO2			3			2	2	2	2			3
CO3		3	3	2		3	3	3	2	2		3
CO4		2	3	3		3	3	3	3	3		3
CO5			3	3		3	3	3		2		3
Avg		2.33	3.00	2.67		2.40	2.40	2.40	2.00	2.33		2.60

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1				
CO2				
CO3				
CO4				
CO5				
Avg				

EVEN Semester

Sub Code	RIT851
Sub. Name	Seminar

	COURSE OUTCOMES	Bloom's Level
CO1	Student will be able to Identify, understand, discuss and solve current, real-world issues.	K1, K2
CO2	Student will be able to collaborate with others as they work on intellectual projects.	K3
CO3	Student will be able to speak and debate with an appreciation for complex social, cultural and technical sensibilities.	K5
CO4	Student will be able to increase self-motivation, personal responsibility, and understanding of his or her role in being an informed participant in the educational and organizational process.	K3
CO5	Student will be able to construct a paper consistent with expectations of the discipline, including an appropriate organization, style, voice, and tone.	K6

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1						1				1
CO2	3	3	2	2	2	2	1	1	1	1	1	3
CO3	3	3	3	3	2		1				1	3
CO4	2	3	2	2	2		1	1	1		2	3
CO5	3	3	3	3	2		1		1		2	3
Avg	2.60	2.60	2.50	2.50	2.00	2.00	1.00	1.00	1.00	1.00	1.50	2.60

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	1			1
CO2	3	3	1	3
CO3	2	3	1	3
CO4	3	3	1	3
CO5	3	3	1	3
Avg	2.40	3.00	1.00	2.60

IMS Engineering College, Ghaziabad

Sub Code	RIT852
Sub. Name	Project

	COURSE OUTCOMES	Bloom's Level
CO1	Students will be able To identify a real world problem in a clear and concise manner demonstrating a sound technical knowledge in form of synopsis covering problem understanding, project objectives, expected features and results.	K1
CO2	Students will be able To identify and summarize an appropriate list of literature review, analyse previous researchers' work and relate them to current project.	K1, K5
CO3	Students will be able To understand how to collect primary data from the field according to the requirements, analyse the collected data in form of tables, bar chats, pie charts, etc. and create a paper model for the project.	K2
CO4	Students will be able To undertake problem identification, formulation and design engineering solutions to complex problems utilising a systems approach.	K2
CO5	Students will be able To validate the results with defined project objectives through standard or benchmark procedures.	K5
CO6	Students will be able To present the project outlining the approach and expected results using good oral and written presentation skills thereby producing a written project report that record and compile work done throughout the project.	K5

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2		2		1	1	1	2	1	2	2
CO2	1	3	1	2		1			2			1
CO3	2	2	2	2	2	1	1		1		2	2
CO4	2	2	3	1	1	1			2		2	2
CO5	2	2	3	2	2	1	1	1	2	1	3	2
CO6	2	2	2	1	1	1	1	1	2	3	3	2
Avg	1.67	2.17	2.20	1.67	1.50	1.00	1.00	1.00	1.83	1.67	2.40	1.83

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	3	1	1	2
CO2	1	3	1	2
CO3	1	3	2	2
CO4	2	2	2	1
CO5	1	3	2	2
CO6	3	2	2	2
Avg	1.83	2.33	1.67	1.83

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Sub Code	RCS-086
Sub. Name	Deep Learning

	COURSE OUTCOMES	Bloom's Level
CO1	**Learn** and **Understand** the basic concepts of Machine Learning, Linear Models and Neural Networks.	K2
CO2	**Understand** the fundamentals of deep learning and its various networks.	K2
CO3	**Learn** and **Understand** various Dimensionality Reduction Models.	K2
CO4	**Analyze** and **Remember** optimization and generalisation models of deep learning.	K1, K2
CO5	**Apply** knowledge and understanding of deep neural networks for various applications.	K2, K3

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2		1								3
CO2	3	2	1	1								3
CO3	3	2	2	1								3
CO4	3	3	1	1								3
CO5	2	3	3	3			2					3
Avg	2.8	2.4	1.75	1.4			2					3

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1			3	1
CO2			3	1
CO3			3	1
CO4			3	2
CO5		1	1	3
Avg		1	2.6	1.6

IMS Engineering College, Ghaziabad

Sub Code	RCS-087
Sub. Name	DATA COMPRESSION

	COURSE OUTCOMES	Bloom's Level
CO1	Student will be able to understand the fundamentals of Data Compression and Information theory.	K2
CO2	Student will be able to apply lossless and lossy compression strategies according to different types of data.	K3
CO3	Student will be able to understand different kinds of coding schemes for various sequences.	K2
CO4	Student will be able to understand the concept of scalar quantization.	K2
CO5	Student will be able to understand the concept of vector quantization.	K2

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	1	2	2	2			3	1	3
CO2	3	3	3	3	3	2	1			3	2	3
CO3	3	3	3	2	3	2	2			3	1	3
CO4	3	3	2	3	2	2	1			3	1	3
CO5	3	3	2	3	3	2	2			2	1	3
Avg	3.00	2.80	2.60	2.40	2.60	2.00	1.60			2.80	1.20	3.00

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	2	2	2	2
CO2	2	3	2	2
CO3	2	3	2	2
CO4	2	3	2	1
CO5	2	3	2	1
Avg	2.00	2.80	2.00	1.60

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IMS Engineering College, Ghaziabad

Sub Code	RCS-080
Sub. Name	Machine Learning

	COURSE OUTCOMES	Bloom's Level
CO1	To understand the need for machine learning for various problem solving	K1 , K2
CO2	To understand a wide variety of learning algorithms and how to evaluate models generated from data	K1 , K3
CO3	To understand the latest trends in machine learning	K2 , K3
CO4	To design appropriate machine learning algorithms and apply the algorithms to a real-world problems	K4 , K6
CO5	To optimize the models learned and report on the expected accuracy that can be achieved by applying the models	K4, K5

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	1					1			2
CO2	3	3	3	1					1			1
CO3	3	3	3	1		1			1			1
CO4	3	3	3	2					1			2
CO5	3	3	3	3								
Avg	3.00	3.00	3.60	1.60		1.00			1.00		2.50	1.50

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1	1	2		2
CO2	1	2	1	1
CO3	2	1	1	1
CO4	1	1	1	1
CO5	1	1	1	1
Avg	1.20	1.25	1.00	1.20

Sub Code	ROE-081
Sub. Name	**Digital and Social Media Marketing**

	COURSE OUTCOMES	Bloom's Level
CO1	"To help students understand digital marketing practices, inclination of digital consumers and role	2
CO2	To provide understanding of the concept of social media platforms	2
CO3	To impart learning on various digital channels and how to acquire and engage consumers online.	3
CO4	To provide insights on building organizational competency by way of digital marketing practices and cost considerations	5
CO5	To develop understanding of the latest digital practices for marketing and promotion.	6

CO-PO Matrix

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1				3	3		3	1		2		2
CO2			2	2				1	1		3	2
CO3					1			2				1
CO4						2		3	2			2
CO5								2				2
Avg			2	2.5	2	2	3	1.8	1.5	2	3	1.8

CO-PSO Matrix

COs	PSO1	PSO2	PSO3	PSO4
CO1				
CO2		2		2
CO3				2
CO4		2		
CO5		2		2
Avg		2		2