



NPR

COLLEGE OF ENGINEERING AND TECHNOLOGY

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DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Course Outcomes(Cos) – Programme Outcomes(POS)/Programme Specific Outcomes(PSOs) Mapping for All Courses- Regulation 2021

SEMESTER I

Course Code & Title: C101 & HS3152 - Professional English - I		
	CO Statements	Knowledge Level
The students should be able to		
C101.1	Use appropriate words in a professional context	K3
C101.2	Describe the basic grammatical structures and use them in right context.	K2
C101.3	Read and infer the denotative and connotative meanings of technical texts	K1
C101.4	Write definitions, descriptions, narrations and essays on various topics	K1

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	1	1	1	1	3	3	3	1	3	-	3	-	-	-
CO2	2	3	2	3	2	3	3	3	2	3	3	3	-	-	-
CO3	2	3	2	3	2	3	3	3	2	3	3	3	-	-	-
CO4	2	3	3	3	-	3	3	3	2	3	-	3	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C102 & MA3151 - Matrices And Calculus		
	CO Statements	Knowledge Level
The students should be able to		
C102.1	Use the matrix algebra methods for solving practical problems.	K3
C102.2	Apply differential calculus tools in solving various application problems.	K3
C102.3	Use differential calculus ideas on several variable functions.	K3
C102.4	Apply different methods of integration in solving practical problems.	K3
C102.5	Apply multiple integral ideas in solving areas, volumes and other practical problems.	K3

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
CO2	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
CO3	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
CO4	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
CO5	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C103 &PH3151 - Engineering Physics		
	CO Statements	Knowledge Level
The students should be able to		
C103.1	Understand the importance of mechanics.	K2
C103.2	Express their knowledge in electromagnetic waves.	K2
C103.3	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.	K3
C103.4	Understand the importance of quantum physics.	K2
C103.5	Comprehend and apply quantum mechanical principles towards the formation of energy bands.	K2

CO's-PO's & PSO's MAPPING

CO	PO	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	1	1	1	-	-	-	-	-	-	-	-	-
CO2	3	3	2	1	2	1	-	-	-	-	-	-	-	-	-
CO3	3	3	2	2	2	1	-	-	-	-	-	1	-	-	-
CO4	3	3	1	1	2	1	-	-	-	-	-	-	-	-	-
CO5	3	3	1	1	2	1	-	-	-	-	-	-	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Course Code & Title: C104 & CY3151 - Engineering Chemistry

	CO Statements	Knowledge Level
The students should be able to		
C104.1	Infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.	K4
C104.2	Identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.	K1
C104.3	Apply the knowledge of phase rule and composites for material selection requirements	K3
C104.4	Select suitable fuels for engineering processes and applications.	K2
C104.5	Recognize different forms of energy resources and apply them for suitable applications in energy sectors.	K1

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	1	1	-	-	-	-	1	-	-	-
CO2	2	-	-	1	-	2	2	-	-	-	-	-	-	-	-
CO3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CO4	3	1	1	-	-	1	2	-	-	-	-	-	-	-	-
CO5	3	1	2	1	-	2	2	-	-	-	-	2	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C105 & GE3151- Problem Solving and Python Programming

	CO Statements	Knowledge Level
The students should be able to		
C105.1	Express algorithmic solutions to simple computational problems.	K2
C105.2	Compute and execute simple Python programs.	K3
C105.3	Implement simple Python programs using conditionals and loops for solving problems	K3
C105.4	Determine compound data using Python lists, tuples, dictionaries etc.	K3
C105.5	Read and write data from/to files in Python programs.	K1

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	-	-	-	-	-	2	2	3	3	-
CO2	3	3	3	3	2	-	-	-	-	-	2	2	3	-	-
CO3	2	2	-	2	2	-	-	-	-	-	1	-	3	-	-
CO4	1	2	-	-	1	-	-	-	-	-	1	-	2	-	-
CO5	2	2	-	-	2	-	-	-	-	-	1	-	2	-	-

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Course Code & Title: C107 & GE3171- Problem Solving and Python Programming Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C107.1	Simplify algorithmic solutions to simple computational problems	K4
C107.2	Model and execute simple Python programs	K4
C107.3	Implement programs in Python using conditionals and loops for solving problems.	K3
C107.4	Generate functions to decompose a Python program	K6
C107.5	Utilize Python packages for developing real-world software applications.	K3

CO's- PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	-	-	-	-	-	2	2	3	3	-
CO2	3	3	3	3	2	-	-	-	-	-	2	2	3	-	-
CO3	3	3	3	3	2	-	-	-	-	-	2	-	3	-	-
CO4	2	2	-	2	2	-	-	-	-	-	1	-	3	-	-
CO5	2	2	-	-	2	-	-	-	-	-	1	-	2	-	-

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Course Code & Title: C108 & BS3171 - Physics and Chemistry Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C108.1	Understand the functioning of various physics laboratory equipment.	K2
C108.2	Use graphical models to analyze laboratory data.	K3
C108.3	Examine mathematical models as a medium for quantitative reasoning and describing physical reality	K4
C108.4	Model , process and analyze scientific information	K4
C108.5	Solve problems individually and collaboratively.	K6

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	-	-	-	-	-	-	-	-	-	-
CO2	3	3	2	1	1	-	-	-	-	-	-	-	-	-	-
CO3	3	2	3	1	1	-	-	-	-	-	-	-	-	-	-
CO4	3	3	2	1	1	-	-	-	-	-	-	-	-	-	-
CO5	3	2	3	1	1	-	-	-	-	-	-	-	-	-	-

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CHEMISTRY LABORATORY:

Course Code & Title: C108 & BS3171 - Physics and Chemistry Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C108.1	Analyse the quality of water samples with respect to their acidity, alkalinity, hardness and DO.	K4
C108.2	Determine the amount of metal ions through volumetric and spectroscopic techniques	K3
C108.3	Analyse and determine the composition of alloys	K4
C108.4	Learn simple method of synthesis of nanoparticles	K2
C108.5	Analyse quantitatively the impurities in solution by electro analytical techniques	K4

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	1	-	-	2	2	-	-	-	-	2	-	-	-
CO2	3	1	2	-	-	1	2	-	-	-	-	1	-	-	-
CO3	3	2	1	1	-	-	1	-	-	-	-	-	-	-	-
CO4	2	1	2	-	-	2	2	-	-	-	-	-	-	-	-
CO5	2	1	2	-	1	2	2	-	-	-	-	1	-	-	-

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Course Code & Title: C109 & GE3172 - English Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C109.1	Prepare and comprehend general as well as complex academic information	K3
C109.2	Carry out different points of view in a discussion	K3
C109.3	Express fluently and accurately in formal and informal communicative contexts	K2
C109.4	Focus on products and processes and explain their uses and purposes clearly and accurately	K4
C109.5	Demonstrate their opinions effectively in both formal and informal discussions	K3

CO's-PO's & PSO's MAPPING

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO2	3	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO3	3	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO4	3	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO5	3	3	3	3	1	3	3	3	3	3	3	3	-	-	-

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SEMESTER II

Course Code & Title: C110 & HS3252 - Professional English -II		
	CO Statements	Knowledge Level
The students should be able to		
C110.1	Compare and contrast products and ideas in technical texts	K4
C110.2	Identify and report cause and effects in events, industrial processes through technical texts	K1
C110.3	Analyze problems in order to arrive at feasible solutions and communicate them in the written format	K4
C110.4	Express their ideas and opinions in a planned and logical manner.	K2
C110.5	Construct effective resumes in the context of job search.	K3

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	3	2	3	3	3	-	-	-
CO2	3	3	3	3	3	3	3	3	2	3	3	3	-	-	-
CO3	3	3	3	3	3	3	3	3	2	3	3	3	-	-	-
CO4	3	3	3	3	2	3	3	3	2	3	3	3	-	-	-
CO5	-	-	-	-	-	-	-	-	3	3	3	3	-	-	-

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Course Code & Title: C111 & MA3251 - Statistics And Numerical Methods		
	CO Statements	Knowledge Level
The students should be able to		
C111.1	Apply the concept of testing of hypothesis for small and large samples in real life problems	K3
C111.2	Use the basic concepts of classifications of design of experiments in the field of agriculture.	K3
C111.3	Comprehend the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.	K2
C111.4	Compute various techniques and methods for solving first and second order ordinary differential equations.	K3
C111.5	Examine partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.	K3

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
CO2	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
CO3	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
CO4	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
CO5	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C112 & PH3256 - Physics for Information Science		
	CO Statements	Knowledge Level
The students should be able to		
C112.1	Gain knowledge on classical and quantum electron theories, and energy band structures	K2
C112.2	Acquire knowledge on basics of semiconductor physics and its applications in various devices	K2
C112.3	Use the knowledge on magnetic properties of materials and their applications in data storage,	K3
C112.4	Understand the functioning of optical materials for optoelectronics	K2
C112.5	Understand the basics of quantum structures and their applications and basics of quantum computing	K2

CO's-PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	3	1	2	-	-	-	-	-	-	-	-	-	-	-	-
CO3	3	-	-	1	2	1	1	-	-	-	-	-	-	-	-
CO4	3	-	2	1	3	-	1	-	-	-	-	-	-	-	-
CO5	3	2	2	2	2	1	2	-	-	-	-	2	-	-	-

1-Low,2-Medium,3-High,"-"-no correlation



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Course Code & Title: C113 & BE3251 – Basic Electrical and Electronics Engineering		
	CO Statements	Knowledge Level
The students should be able to		
C113.1	Compute the electric circuit parameters for simple problems	K3
C113.2	Explain the working principle and applications of electrical machines	K2
C113.3	Analyze the characteristics of analog electronic devices	K3
C113.4	Explain the basic concepts of digital electronics	K2
C113.5	Explain the operating principles of measuring instruments	K2

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	1	-	-	-	-	1	-	-	-	2	-	-	1
CO2	2	2	1	-	-	-	-	1	-	-	-	2	-	-	1
CO3	2	1	1	-	-	-	-	1	-	-	-	2	-	-	1
CO4	2	2	1	-	-	-	-	1	-	-	-	2	-	-	1
CO5	2	2	1	-	-	-	-	1	-	-	-	2	-	-	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C114 & GE3251- Engineering Graphics		
	CO Statements	Knowledge Level
The students should be able to		
C114.1	Use BIS conventions and specifications for engineering drawing	K3
C114.2	Construct the conic curves, involutes and cycloid.	K3
C114.3	Compute practical problems involving projection of lines.	K3
C114.4	Sketch the orthographic, isometric and perspective projections of simple solids.	K3
C114.5	Describe the development of simple solids.	K2

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	2	-	2	-	-	-	-	3	-	2	2	2	-
CO2	3	1	2	-	2	-	-	-	-	3	-	2	2	2	-
CO3	3	1	2	-	2	-	-	-	-	3	-	2	2	2	-
CO4	3	1	2	-	2	-	-	-	-	3	-	2	2	2	-
CO5	3	1	2	-	2	-	-	-	-	3	-	2	2	2	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C115 & AD3251 – Data Structures Design		
	CO Statements	Knowledge Level
The students should be able to		
C115.1	Explain abstract data types	K2
C115.2	Design and implement linear data structures, such as lists, queues, and stacks, according to the needs of different applications	K3
C115.3	Design a tree structures to meet requirements such as searching, indexing, and sorting	K3
C115.4	Implement tree structures to meet requirements such as searching, indexing, and sorting	K3
C115.5	Design and Implement efficient graph algorithms to solve an application	K3

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	3	-	-	-	-	3	1	2	1	2	3	3
CO2	2	3	1	3	1	-	-	1	1	2	2	1	3	3	3
CO3	2	2	2	1	1	-	-	1	2	3	1	2	1	1	2
CO4	2	2	3	1	-	1	-	1	1	2	1	2	2	2	2
CO5	2	3	2	1	-	1	-	1	2	1	1	2	1	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

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Course Code & Title: C117 & GE3271 - Engineering Practices Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C117.1	Analyze the pipe line plan; lay and connect various pipe fittings used in common household plumbingwork; Saw; plan; make joints in wood materials used in common household wood work	K2
C117.2	Weld various joints in steel plates using arc welding work; Simple machine processes like turning, drilling, tapping in parts; Making simple mechanical assembly of common household equipments; Make a tray outof metal sheet using sheet metal work	K2
C117.3	Apply the Knowledge of electrical wiring in common household electrical wire work	K2
C117.4	Demonstrate the soldering and testing of simple electronic circuits and assembling and testing of simpleelectronic components on PCB	K2

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	-	1	1	1	-	-	-	-	2	2	1	1
CO2	3	2	-	-	1	1	1	-	-	-	-	2	2	1	1
CO3	3	2	-	-	1	1	1	-	-	-	-	2	2	1	1
CO4	3	2	-	-	1	1	1	-	-	-	-	2	2	1	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C118 & AD3271 - Data Structures Design Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C118.1	Implement ADTs as Python classes	K3
C118.2	Implement linear data structures, such as lists, queues, and stacks, according to the needs of different applications	K3
C118.3	Design a tree structures to meet requirements such as searching, indexing, and sorting	K3
C118.4	Implement tree structures to meet requirements such as searching, indexing, and sorting	K3
C118.5	Implement efficient graph algorithms to solve an application	K3

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CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	3	-	-	-	-	3	1	2	1	2	3	3
CO2	2	3	1	3	1	-	-	1	1	2	2	1	3	3	3
CO3	2	2	2	1	1	-	-	1	2	3	1	2	1	1	2
CO4	2	2	3	1	-	1	-	1	1	2	1	2	2	2	2
CO5	2	3	2	1	-	1	-	1	2	1	1	2	1	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C119 & GE3272 - Communication Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C119.1	Prepare effectively in group discussions held in formal/semi formal contexts.	K3
C119.2	Analyze and present concepts and problems from various perspectives to arrive at suitable solutions	K4
C119.3	Write emails, letters and effective job applications.	K6
C119.4	Make critical reports to convey data and information with clarity and precision	K6
C119.5	Examine appropriate instructions and recommendations for safe execution of tasks	K3

CO's-PO's & PSO's MAPPING

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO1	PO1	PO1	PSO1	PSO2	PSO3
CO1	2	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO2	2	3	3	3	1	3	3	3	3	3	3	3	-	-	-
CO3	2	2	3	3	1	3	3	3	3	3	3	3	-	-	-
CO4	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
CO5	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation



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SEMESTER III

Course Code & Title: C201 & MA3354 - Discrete Mathematics		
	CO Statements	Knowledge Level
The students should be able to		
C201.1	Understand the concepts needed to test the logic of a program	K2
C201.2	Understand and identify the structures on many levels.	K2
C201.3	Describe a class of functions which transform a finite set into another finite set which relates to input and output functions in computer science.	K2
C201.4	Be aware of the counting principles.	K2
C201.5	Be exposed to concepts and properties of algebraic structures such as groups, rings and fields.	K2

CO's-PO's & PSO's MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	-	-	-	-	-	-	2	-	-	-
CO2	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
CO3	-	3	2	-	-	2	-	-	-	3	-	-	-	-	-
CO4	-	2	2	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	2	2	2	-	-	-	-	-	2	-	-	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C202 & CS3351 - Digital Principles and Computer Organization		
	CO Statements	Knowledge Level
The students should be able to		
C202.1	Design various combinational digital circuits using logic gates	K4
C202.2	Design sequential circuits and analyze the design procedures	K4
C202.3	State the fundamentals of computer systems and analyze the execution of an instruction	K4
C202.4	Analyze different types of control design and identify hazards	K4
C202.5	Identify the characteristics of various memory systems and I/O communication	K3

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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	1	1	1	1	2	3	2	3	3
CO2	3	3	3	3	2	1	1	1	1	1	2	3	1	2	2
CO3	3	3	3	3	2	2	1	1	1	1	2	3	2	3	1
CO4	3	3	3	3	1	1	1	1	1	1	1	2	1	3	1
CO5	3	3	3	3	1	2	1	1	1	1	1	2	1	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C203 & AD3391 – Database Design and Management		
	CO Statements	Knowledge Level
The students should be able to		
C203.1	Understand the database development life cycle and apply conceptual modeling	K2
C203.2	Apply SQL and programming in SQL to create, manipulate and query the database	K3
C203.3	Apply the conceptual-to-relational mapping and normalization to design relational database	K3
C203.4	Determine the serializability of any non-serial schedule using concurrency techniques	K2
C203.5	Apply the data model and querying in Object-relational and No-SQL databases.	K3

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	3	-	-	-	-	3	1	2	1	2	3	3
CO2	2	3	1	3	1	-	-	-	1	2	2	1	3	3	3
CO3	2	2	2	1	1	-	-	-	2	3	1	2	1	1	2
CO4	2	2	3	1	-	-	-	-	1	2	1	2	2	2	2
CO5	3	1	3	2	1	-	-	-	1	3	1	1	2	1	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

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Course Code & Title: C204 & AD3351 - Design and Analysis of Algorithms

	CO Statements	Knowledge Level
The students should be able to		
C204.1	Analyze the efficiency of recursive and non-recursive algorithms mathematically	K4
C204.2	Analyze the efficiency of brute force, divide and conquer, decrease and conquer, Transform and conquer algorithmic techniques	K4
C204.3	Implement and analyze the problems using dynamic programming and greedy algorithmic techniques.	K4
C204.4	Solve the problems using iterative improvement techniques for optimization.	K4
C204.5	Compute the limitations of algorithmic power and solve the problems using backtracking and branch and bound techniques.	K4

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	3	3	1	1	-	-	-	1	1	2	2	3	2	1
CO2	2	1	1	3	2	-	-	-	2	2	1	2	2	2	2
CO3	3	2	1	2	2	-	-	-	2	1	1	2	1	3	3
CO4	3	2	3	2	2	-	-	-	3	3	3	2	2	1	2
CO5	3	1	2	3	3	-	-	-	2	2	2	2	3	1	3

1 - low, 2 - medium, 3 - high, '-' - no correlation

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Course Code & Title: C205 & AD3301- Data Exploration and Visualization		
	CO Statements	Knowledge Level
The students should be able to		
C205.1	Understand the fundamentals of exploratory data analysis	K2
C205.2	Implement the data visualization using Matplotlib.	K4
C205.3	Perform univariate data exploration and analysis	K4
C205.4	Apply bivariate data exploration and analysis	K3
C205.5	Use Data exploration and visualization techniques for multivariate and time series data	K3

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	3	3	-	-	-	-	2	3	3	3	2	2	2
CO2	2	2	2	1	1	-	-	-	3	2	3	1	3	1	3
CO3	2	1	2	1	1	-	-	-	3	2	1	2	2	2	1
CO4	2	2	2	1	-	-	-	-	1	2	1	3	1	3	2
CO5	3	1	1	2	1	-	-	-	3	2	1	2	2	2	3

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C206 & AL3391 - Artificial Intelligence		
	CO Statements	Knowledge Level
The students should be able to		
C206.1	Explain intelligent agent frameworks	K2
C206.2	Apply problem solving techniques	K3
C206.3	Apply game playing and CSP techniques	K3
C206.4	Perform logical reasoning	K4
C206.5	Perform probabilistic reasoning under uncertainty	K4

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	3	3	-	-	-	-	2	3	3	1	2	1	1
CO2	2	2	1	1	1	-	-	-	2	2	3	1	3	2	2
CO3	2	1	2	1	-	-	-	-	2	1	1	3	1	2	1
CO4	2	1	2	2	-	-	-	-	2	1	2	2	1	3	3
CO5	3	2	2	1	1	-	-	-	3	2	1	2	2	2	1

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Course Code & Title: C207 & AD3381- Database Design and Management Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C207.1	Understand the database development life cycle	K2
C207.2	Design relational database using conceptual-to-relational mapping, Normalization	K4
C207.3	Apply SQL for creation, manipulation and retrieval of data	K3
C207.4	Develop a database applications for real-time problems	K3
C207.5	Design and query object-relational databases	K4

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	3	3	-	-	-	-	1	1	1	3	2	2	1
CO2	2	2	1	3	1	-	-	-	3	2	3	1	1	1	2
CO3	2	1	3	1	-	-	-	-	3	3	1	1	2	1	1
CO4	2	2	3	1	-	-	-	-	2	3	2	1	2	1	2
CO5	3	3	1	3	1	-	-	-	1	3	2	3	3	3	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C208 & AD3311 - Artificial Intelligence Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C208.1	Design and implement search strategies	K4
C208.2	Implement game playing techniques	K4
C208.3	Implement CSP techniques	K4
C208.4	Develop logical reasoning systems	K3
C208.5	Develop probabilistic reasoning systems	K3



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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	1	3	3	-	-	-	-	1	1	2	1	3	2	1
CO2	1	2	3	3	2	-	-	-	3	2	3	3	3	3	2
CO3	3	1	3	3	1	-	-	-	1	3	1	2	1	1	3
CO4	2	1	1	1	1	-	-	-	2	3	1	2	2	2	1
CO5	3	1	1	1	1	-	-	-	1	3	3	3	3	3	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C209 & GE3361 - Professional Development		
	CO Statements	Knowledge Level
The students should be able to		
C209.1	Use MS Word to create quality documents, by structuring and organizing content for their day to day technical and academic requirements.	K3
C209.2	Use MS EXCEL to perform data operations and analytics, record, retrieve data as per requirements and visualize data for ease of understanding	K3
C209.3	Use MS PowerPoint to create high quality academic presentations by including common tables, charts, graphs, interlinking other elements, and using media objects.	K3

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SEMESTER IV

Course Code & Title: C210 & MA3391- Probability and Statistics		
	CO Statements	Knowledge Level
The students should be able to		
C210.1	Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon.	K2
C210.2	Understand the basic concepts of one and two dimensional random variables and apply in engineering applications.	K2
C210.3	Apply the concept of testing of hypothesis for small and large samples in real life problems.	K3
C210.4	Apply the basic concepts of classifications of design of experiments in the field of agriculture and statistical quality control.	K3
C210.5	Have the notion of sampling distributions and statistical techniques used in engineering and management problems.	K2

CO's-PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	3	-	-	-	-	-	-	2	-	-	2	-	-	-
CO2	3	3	-	-	-	-	-	-	2	-	-	2	-	-	-
CO3	3	3	-	-	-	-	-	-	2	-	-	2	-	-	-
CO4	3	3	3	2	-	-	-	-	2	-	-	2	-	-	-
CO5	3	3	2	2	-	-	-	-	2	-	-	2	-	-	-

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C211 & AL3452- Operating Systems		
	CO Statements	Knowledge Level
The students should be able to		
C211.1	Analyze various scheduling algorithms and process synchronization.	K4
C211.2	Explain deadlock, prevention and avoidance algorithms.	K2
C211.3	Compare and contrast various memory management schemes.	K2
C211.4	Explain the functionality of file systems I/O systems, and Virtualization	K2
C211.5	Compare iOS and Android Operating Systems	K2

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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	1	1	-	-	-	-	1	1	1	2	2	1	2
CO2	2	3	1	3	1	-	-	-	3	2	2	3	3	3	1
CO3	2	2	3	3	2	-	-	-	3	1	1	2	1	1	1
CO4	2	2	1	2	1	-	-	-	1	3	2	1	1	1	2
CO5	2	3	3	2	1	-	-	-	3	1	2	1	3	1	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C212 & AL3451- Machine Learning		
	CO Statements	Knowledge Level
The students should be able to		
C212.1	Explain the basic concepts of machine learning.	K2
C212.2	Construct supervised learning models.	K3
C212.3	Construct unsupervised learning algorithms.	K3
C212.4	Evaluate different models	K4
C212.5	Compare different models	K2

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	1	2	1	-	-	-	-	3	3	2	2	2	2	1
CO2	1	3	3	1	2	-	-	-	2	2	2	1	3	1	1
CO3	2	1	3	3	2	-	-	-	1	1	1	1	1	2	1
CO4	2	3	3	2	1	-	-	-	3	2	3	2	1	2	1
CO5	1	1	3	3	1	-	-	-	3	1	1	3	3	3	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C213 & AD3491- Fundamentals of Data Science and Analytics		
	CO Statements	Knowledge Level
The students should be able to		
C213.1	Explain the data analytics pipeline	K2
C213.2	Describe and visualize data	K2
C213.3	Perform statistical inferences from data	K3
C213.4	Analyze the variance in the data	K4
C213.5	Build models for predictive analytics	K3

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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	1	1	2	1	-	-	-	-	3	1	3	2	3	3	1
CO2	1	1	2	2	2	-	-	-	2	2	3	2	3	1	1
CO3	1	1	3	1	1	-	-	-	2	3	1	1	2	3	1
CO4	2	3	1	3	1	-	-	-	3	3	3	3	3	2	2
CO5	2	1	1	1	2	-	-	-	3	3	1	3	2	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C214 & CS3591- Computer Networks		
	CO Statements	Knowledge Level
The students should be able to		
C214.1	Explain the basic layers and its functions in computer networks.	K2
C214.2	Understand the basics of how data flows from one node to another.	K2
C214.3	Analyze routing algorithms	K4
C214.4	Describe protocols for various functions in the network.	K2
C214.5	Analyze the working of various application layer protocols	K4

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	2	3	-	-	-	-	1	1	3	1	3	2	1
CO2	3	2	1	2	2	-	-	-	2	2	2	1	3	2	3
CO3	2	2	3	2	1	-	-	-	3	3	1	2	1	1	3
CO4	1	3	1	3	1	-	-	-	1	2	1	1	1	3	1
CO5	3	3	1	1	2	-	-	-	2	2	2	2	2	2	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

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Course Code & Title: C215 & GE3451- Environmental Sciences and Sustainability		
	CO Statements	Knowledge Level
The students should be able to		
C215.1	Recognize and understand the functions of environment, ecosystems and biodiversity and their conservation	K2
C215.2	Identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.	K3
C215.3	Identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.	K3
C215.4	Recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.	K2
C215.5	Demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.	K3

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	2	2	3	-	-	-	-	2	2	3	3	3	2	1
CO2	1	2	1	2	2	-	-	-	1	2	3	1	3	2	1
CO3	2	2	2	2	2	-	-	-	3	1	1	2	2	3	1
CO4	2	3	1	3	2	-	-	-	2	3	1	2	2	1	3
CO5	3	1	1	1	2	-	-	-	1	2	2	3	2	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C217& AD3461- Machine Learning Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C217.1	Apply suitable algorithms for selecting the appropriate features for analysis.	K3
C217.2	Implement supervised machine learning algorithms on standard datasets and evaluate the performance.	K3
C217.3	Apply unsupervised machine learning algorithms on standard datasets and evaluate the performance.	K3
C217.4	Build the graph based learning models for standard data sets.	K3
C217.5	Assess and compare the performance of different ML algorithms and select the suitable one based on the application.	K3



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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
C01	2	2	2	1	-	-	-	-	1	2	3	3	3	2	1
C02	2	1	1	3	2	-	-	-	3	2	3	2	3	1	1
C03	2	2	1	1	2	-	-	-	1	1	1	1	2	3	3
C04	2	2	3	3	2	-	-	-	1	2	1	1	1	2	2
C05	2	2	3	1	2	-	-	-	3	1	1	1	2	1	2

1 - low, 2 - medium, 3 - high, '-' - no correlation



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SEMESTER V

Course Code & Title: C301 & AD3501- Deep Learning		
	CO Statements	Knowledge Level
The students should be able to		
C301.1	Explain the basics in deep neural networks	K2
C301.2	Apply Convolution Neural Network for image processing	K3
C301.3	Apply Recurrent Neural Network and its variants for text analysis	K3
C301.4	Apply model evaluation for various applications	K3
C301.5	Apply autoencoders and generative models for suitable applications	K3

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	2	2	3	1	-	-	-	2	3	1	2	3	3	3
CO2	2	2	2	3	3	-	-	-	1	2	2	3	1	1	3
CO3	3	3	3	3	3	-	-	-	2	1	1	2	2	1	3
CO4	3	3	1	1	1	-	-	-	1	3	1	3	2	1	1
CO5	3	2	2	2	3	-	-	-	2	3	2	2	2	3	3

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C302 & CW3551- Data and Information Security		
	CO Statements	Knowledge Level
The students should be able to		
C302.1	Understand the basics of data and information security	K2
C302.2	Understand the legal, ethical and professional issues in information security	K2
C302.3	Understand the various authentication schemes to simulate different applications.	K2
C302.4	Understand various security practices and system security standards	K2
C302.5	Understand the Web security protocols for E-Commerce applications	K2

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CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	2	3	1	-	-	-	-	1	3	1	2	3	1	1
CO2	1	3	3	3	2	-	-	-	1	2	2	2	1	2	2
CO3	2	3	3	3	1	-	-	-	1	3	1	2	1	2	1
CO4	3	3	1	1	1	-	-	-	3	1	1	3	2	3	3
CO5	3	2	2	3	2	-	-	-	1	2	1	2	2	2	1

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C303 & CS3551- Distributed Computing		
	CO Statements	Knowledge Level
The students should be able to		
C303.1	Explain the foundations of distributed systems	K2
C303.2	Solve synchronization and state consistency problems	K3
C303.3	Use resource sharing techniques in distributed systems	K3
C303.4	Apply working model of consensus and reliability of distributed systems	K3
C303.5	Explain the fundamentals of cloud computing	K2

CO's-PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	2	3	3	1	-	-	-	2	1	3	3	2	1	1
CO2	1	3	2	1	2	-	-	-	2	2	2	2	1	3	2
CO3	2	2	1	3	3	-	-	-	3	2	1	1	1	2	1
CO4	1	2	2	3	1	-	-	-	3	3	2	1	3	1	1
CO5	3	3	1	2	3	-	-	-	3	3	3	1	3	2	3

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C304 & CCS334- Big Data Analytics		
	CO Statements	Knowledge Level
The students should be able to		
C304.1	Describe big data and use cases from selected business domains.	K2
C304.2	Explain NoSQL big data management	K2
C304.3	Install, configure, and run Hadoop and HDFS.	K3
C304.4	Perform map-reduce analytics using Hadoop.	K2
C304.5	Use Hadoop-related tools such as HBase, Cassandra, Pig, and Hive for big data analytics.	K2

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	3	3	3	3	-	-	-	2	2	3	1	1	3	3
CO2	3	3	2	3	2	-	-	-	2	2	3	3	2	3	2
CO3	3	3	3	2	3	-	-	-	2	2	1	2	2	3	3
CO4	2	3	3	3	3	-	-	-	2	2	3	2	3	3	2
CO5	3	3	3	3	3	-	-	-	3	1	3	2	3	2	3

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C305 & CCS360- Recommender Systems		
	CO Statements	Knowledge Level
The students should be able to		
C305.1	Understand the basic concepts of recommender systems.	K2
C305.2	Implement machine-learning and data-mining algorithms in recommender systems data sets.	K2
C305.3	Implementation of Collaborative Filtering in carrying out performance evaluation of recommender systems based on various metrics.	K2
C305.4	Design and implement a simple recommender system.	K4
C305.5	Learn about advanced topics of recommender systems.	K2
C305.6	Learn about advanced topics of recommender systems applications	K2

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	2	1	2	1	-	-	-	1	-	-	1	-	-	-
CO2	1	2	-	-	1	-	-	-	-	-	-	1	-	-	-
CO3	2	3	1	-	1	-	-	-	2	-	-	-	-	-	-
CO4	3	2	2	2	1	-	-	-	2	-	-	2	-	-	-
CO5	1	1	-	2	1	-	-	-	-	-	-	1	-	-	-
CO6	2	2	1	1	1	-	-	-	-	-	-	1	-	-	-

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Course Code & Title: C306 & CCS370- UI and UX Design

	CO Statements	Knowledge Level
The students should be able to		
C306.1	Build UI for user Applications	K3
C306.2	Evaluate UX design of any product or application	K4
C306.3	Demonstrate UX Skills in product development	K3
C306.4	Implement Sketching principles	K3
C306.5	Create Wireframe and Prototype	K5

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	1	1	3	1	-	-	-	3	3	2	1	3	3	1
CO2	2	3	1	3	2	-	-	-	1	2	2	2	1	2	2
CO3	1	3	3	2	2	-	-	-	2	3	1	2	1	3	3
CO4	1	2	3	3	1	-	-	-	3	2	1	3	3	3	3
CO5	1	2	3	2	1	-	-	-	2	1	1	1	3	2	2

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Course Code & Title: C307 & MX3084 Disaster Risk Reduction and Management

	CO Statements	Knowledge Level
The students should be able to		
C307.1	To impart knowledge on the concepts of Disaster, Vulnerability and Disaster Risk reduction (DRR)	K2
C307.2	To enhance understanding on Hazards, Vulnerability and Disaster Risk Assessment prevention and risk reduction	K2
C307.3	Develop disaster response skills by adopting relevant tools and technology	K3
C307.4	Enhance awareness of institutional processes for Disaster response in the country	K2
C307.5	Develop rudimentary ability to respond to their surroundings with potential Disaster response in areas where they live, with due sensitivity	K3

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	3	2	3	-	-	2	2	-	-	2	-	2	-	1
CO2	3	3	3	3	-	-	2	1	-	-	2	-	2	-	1
CO3	3	3	3	3	-	-	2	2	-	-	-	-	2	-	1
CO4	3	3	2	3	-	-	2	1	-	-	2	-	2	-	1
CO5	3	3	2	3	-	-	2	2	-	-	2	-	3	-	1

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Course Code & Title: C308 & AD3511 - Deep Learning Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C308.1	Apply deep neural network for simple problems	K3
C308.2	Apply Convolution Neural Network for image processing	K3
C308.3	Apply Recurrent Neural Network and its variants for text analysis	K3
C308.4	Apply generative models for data augmentation	K3
C308.5	Develop real-world solutions using suitable deep neural networks	K3

CO's-PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	3	2	1	1	1	-	-	-	3	2	3	2	3	3	2
CO2	1	3	2	2	2	-	-	-	3	2	2	2	1	3	1
CO3	3	2	1	2	1	-	-	-	2	3	1	1	2	3	3
CO4	3	3	1	2	1	-	-	-	1	3	2	2	3	2	2
CO5	3	3	3	3	2	-	-	-	1	2	3	1	3	3	2

1 - low, 2 - medium, 3 - high, '-' - no correlation

Course Code & Title: C309 & CS3691 Embedded Systems and IoT		
	CO Statements	Knowledge Level
The students should be able to		
C309.1	Explain the architecture of embedded processors.	K2
C309.2	Write embedded C programs.	K2
C309.3	Design simple embedded applications.	K5
C309.4	Compare the communication models in IOT	K2
C309.5	Design IoT applications using Arduino/Raspberry Pi /open platform	K5



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DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

CO's-PO's & PSO's MAPPING

CO's	PO's												PSO's		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
C01	3	1	1	3	1	-	-	-	3	1	2	3	2	1	1
C02	2	3	1	3	2	-	-	-	1	2	3	1	1	1	2
C03	2	2	3	2	3	-	-	-	1	3	1	1	2	1	3
C04	2	2	2	1	1	-	-	-	1	3	1	1	2	2	3
C05	3	2	1	1	3	-	-	-	3	2	3	2	1	3	1

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HoD (i/c) / AI&DS



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