

## DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE B.TECH- FULL TIME (UG\_2022)

COURSE CODE	COURSE TITLE	COURSE OUTCOMES										PO				PSO	
			1	2	3	4	5	6	7	8	9	10	1 1	1 2	1	2	3
		To use appropriate words in a professional context	1	1	1	1	1	3	3	3	1	3	-	3	-	-	-
		To gain understanding of basic grammatical structures and use them in right context.	1	1	1	1		3	3	3	1	3	-	3	-	-	-
21147S11	PROFESSIONAL ENGLISH - I	To read and infer the denotative and connotative meanings of technical texts	2	3	2	3		3	3	3	2	3	3	3	-	-	-
		To read and interpret information presented in tables, charts and other graphic forms	2	3		3	2	3	3	3	2	3	3	3	-	-	-
		To write definitions, descriptions, narrations and essays on various topics	2	3		3		3	3	3	2	3	-	3	-	-	-
		AVg.	1 6	2 2	1 8	2 2	1 5	3	3	3	1 6	3	3	3	-	-	-

		Use the matrix algebra methods for solving practical problems.	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
		Apply differential calculus tools in solving various application problems.	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
21148S12	MATRICES AND CALCULUS	Able to use differential calculus ideas on several variable functions.	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
		Apply different methods of integration in solving practical problems.	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
		Apply multiple integral ideas in solving areas, volumes and other practical problems	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
		Avg	3	3	1	1	0	0	0	0	2	0	2	3	-	-	-
		Understand the importance of mechanics.	3	3	2	1	1	1		-	-	-	-	-	-	-	-
		Express their knowledge in electromagnetic waves.	3	3	2	1	2	1	-	-	I	-	-	-	-	-	-
21149513	ENGINEERING	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.	3	3	2	2	2	1		-	-	-	-	1	-	-	-
21119513	PHYSICS	Understand the importance of quantum physics.	3	3	1	1	2	1		-	-	-	-	-	-	-	
		Comprehend and apply quantum mechanical principles towards the formation of energy bands.	3	3	1	1	2	1		-	-	-	-	-	-	-	-
		AVĞ	3	3	1 6	1 2	1 8	1	-	-	-	-	-	1	-	-	-
21149S14	ENGINEERING CHEMISTRY	To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.	3	2	2	1	-	1	1	-	-	-	-	1	-	-	-

		To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.	2	-	-	1	-		2	-	-	-	-	-	-	-	-
		To apply the knowledge of phase rule and composites for material selection requirements.	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		To recommend suitable fuels for engineering processes and applications.	3	1	1	-	-	1	2	-	-	-	-	-	-	-	-
		To recognize different forms of energy resources and apply them for suitable applications in energy sectors.	3	1	2	1	-		2	-	-	-	-	2	-	-	-
		Avg.	2 8	1 3	1 6	1	-	5	1 8	-		-	-	1. 5	-	-	-
		Develop algorithmic solutions to simple computational problems	3	3		3	2		-	-	-	-	2	2	3	3	
		Develop and execute simple Python programs.	3	3		3	2		-	-	-	-	2	2	3	-	
	PROBLEM	Write simple Python programs using conditionals and looping for solving problems.	3	3		3	2		-	-	-	-	2	-	3	-	
21150S15	SOLVING AND PYTHON PROGRAMMING	Decompose a Python program into functions	2	2		2	2		-	-	-	-	1	-	3	-	
		Represent compound data using Python lists, tuples, dictionaries etc	1	2			1		-	-	-	-	1	-	2	-	
		AVg.	2	2			2		-	-	-	-	1	-	2	-	
21150L16	PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY	Dvelop algorithmic solutions to simple computational problems Develop and execute simple Python programs.	3	3	3	3	3	-	-		-	-	3	2	3	-	-

		Implement programs in Python using conditionals and loops for solving problems.	3	3	3	3	2	-	-		-	-	2	-	3	-	-
		Deploy functions to decompose a Python program.	3	2	-	2	2	-	-		-	-	1	-	3	-	-
		Process compound data using Python data structures.	1	2	-		1	-	-		-	-	1	-	2	-	-
		Process Value data using Python data structures.	2	-	-		2	-	-		-	-	1	-	2	-	-
		AVg.	2	3	3	3	2	-	-		-	-	2	2	3	3	-
		Understand the functioning of various physics laboratory equipment.	3	2	3	1	1	-	-		-	-	-	-	-	-	-
		Use graphical models to analyze laboratory data.	3	3	2	1	1	-	-		-	-	-	-	-	-	-
21149L17	PHYSICS AND CHEMISTRY	Use mathematical models as a medium for quantitative reasoning and describing physical reality.	3	2	3	1	1	-	-		-	-	-	-	-	-	-
	LABORATORY	Access, process and analyze scientific information.	3	3	2	1	1	-	-		-	-	-	-	-	-	-
		Solve problems	3	2	3	1	1	-	-		-	-	-	-	-	-	-
		AVG	3	2 4	2 6	1	1										
		To listen to and comprehend general as well as complex academic information		3	3	3	1	3	3	3		3	3	3	-	-	
21147L18	N LABORATORY-	To listen to and understand different points of view in a discussion		3	3	3	1	3	3	3		3	3	3	-	-	
	1	To speak fluently and accurately in formal and informal communicative contexts		3	3	3	1	3	3	3		3	3	3	-	-	

		To describe products and processes and explain their uses and purposes clearly and accurately		3	3	3	1	3	3	3		3	3	3	-	-	
		To express their opinions effectively in both formal and informal discussions		3	3	3	1	3	3	3		3	3	3	-	-	
		AVg.		3	3	3	1	3	3	3		3	3	3	-	-	
		To compare and contrast products and ideas in technical texts.	3	3		3	3	3	3	3	2	3	3	3	-	-	-
		To identify and report cause and effects in events, industrial processes through technical texts	3	3	3	3	3	3	3	3	2	3	3	3	-	-	-
		To analyse problems in order to arrive at feasible solutions and communicate them in the written format.	3	3		3	3	3	3	3	2	3	3	3	-	-	-
21147S21	PROFESSIONAL ENGLISH - II	To present their ideas and opinions in a planned and logical manner	3	3		3	2	3	3	3	2	3	3	3	-	-	-
		To draft effective resumes in the context of job search.	-	-	-	-	-	-	-	-	3	3	3	3	-	-	-
		AVg.	3	3		3	2 7 5	3	3	3	2 2	3	3	3	-	-	-
		Apply the concept of testing of hypothesis for small and large samples in real life problems.	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
21148S22	STATISTICS AND NUMERICAL METHODS	Apply the basic concepts of classifications of design of experiments in the field of agriculture.	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
		Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-

		Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
		Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
		Avg	3	3	1	1	1	0	0	0	2	0	2	3	-	-	-
		gain knowledge on classical and quantum electron theories, and energy band structures	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		acquire knowledge on basics of semiconductor physics and its applications in various devices	3	1	2	-	-	-	-	-	-	-	-	-	-	-	-
		get knowledge on magnetic properties of materials and their applications in data storage,	3	-	-	1	2	1	1	-	-	-	-	-	-	-	-
22149S23 A	INFORMATION SCIENCE	have the necessary understanding on the functioning of optical materials for optoelectronics	3	-	2	1	3	-	1	-	-	-	-	-	-	-	-
		understand the basics of quantum structures and their applications and basics of quantumcomputing	3	2	2	2	2	1	2	-	-	-	-	2	-	-	-
		AVG	3	1 3	2	1 3	2 3	1	1 3	-	-	-	-	2	-	-	-
		Compute the electric circuit parameters for simple problems	2	2	1					1				2			1
	BASIC	Explain the working principle and applications of electrical machines	2	2	1					1				2			1
21153S25 A	ELECTRICAL AND	Analyze the characteristics of analog electronic devices	2	1	1					1				2			1
	ELECTRONICS	Explain the basic concepts of digital electronics	2	2	1					1				2			1
		Explain the operating principles of measuring instruments	2	2	1					1				2			1

		CO/PO & PSO Average	2	1 8	1			1		2			1
		Use BIS conventions and specifications for engineering drawing.	3	1	2	2			3	2	2	2	
		Construct the conic curves, involutes and cycloid.	3	1	2	2			3	2	2	2	
	ENGINEERING	Solve practical problems involving projection of lines.	3	1	2	2			3	 2	2	2	
21154 <b>S</b> 24	GRAPHICS	Draw the orthographic, isometric and perspective projections of simple solids.	3	1	2	2			3	2	2	2	
		Draw the development of simple solids.	3	1	2	2			3	2	2	2	
		Avg.	3	1	2	2			3	2	2	2	
		explain abstract data types	3	1	2	2			3	2			
		design, implement, and analyse linear data structures, such as lists, queues, and stacks,according to the needs of different applications	3	1	2	2			3	2			
221AIDS2 6	DATA STRUCTURES DESIGN	design, implement, and analyse efficient tree structures to meet requirements such assearching, indexing, and sorting	3	1	2	2			3	2			
		model problems as graph problems and implement efficient graph algorithms to solve them	3	1	2	2			3	2			
			3	1	2	2			3	2			

				1		- 1		- 1									
		Draw pipe line plan; lay and connect various pipe fittings used in common household plumbing work; Saw; plan; make joints in wood materials used in common household wood work.	3	2			1	1	1					2	2	1	1
		Wire various electrical joints in common household electrical wire work.	3	2			1	1	1					2	2	1	1
21154L27	ENGINEERING PRACTICES LABORATORY	Weld various joints in steel plates using arc welding work; Machine various simple processeslike turning, drilling, tapping in parts; Assemble simple mechanical assembly of common household equipments; Make a tray out of metal sheet using sheet metal work.	3	2			1	1	1					2	2	1	1
		Avg.	3	2			1	1	1					2	2	1	1
		Average															
		implement ADTs as Python classes	3	3	3	3	3	-	-		-	-	3	2	3	3	-
		design, implement, and analyse linear data structures, such as lists, queues, and stacks,according to the needs of different applications	3	3	3	3	3	-	-		-	-	3	2	3	-	-
221AIDL2 8	DATA STRUCTURES DESIGN LABORATORY	design, implement, and analyse efficient tree structures to meet requirements such assearching, indexing, and sorting	3	3	3	3	2	-	-		-	-	2	-	3	-	-
		model problems as graph problems and implement efficient graph algorithms to solve them	3	2	-	2	2	-	-		-	-	1	-	3	-	-
			3	3	3	3	2	-	-		-	-	2	2	3	3	-
22148S31 A	DISCRETE MATHEMATICS	Have knowledge of the concepts needed to test the logic of a program.	3	3	2	-	-	-	-	-	-	-	-	2	-	-	-

		Have an understanding in identifying structures on many levels.	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
		Be aware of a class of functions which transform a finite set into another finite set which relatesto input and output functions in computer science.	-	3	2	-	-	2	-	-	-	3	-	-	-	-	-
		Be aware of the counting principles	-	2	2	2	-	-	-	-	-	-	-	-	-	-	-
		Be exposed to concepts and properties of algebraic structures such as groups, rings and fields.	-	2	2	2	-	-	-	-	-	2	-	-	-	-	-
		Avg	1	3	2	1	-	-	-	-	-	1	-	-	-	-	-
		Design various combinational digital circuits using logic gates	3	3	3	3	3			1	1	1		3	2	3	3
		Design sequential circuits and analyze the design procedures	3	3	3	3	2			1	1	1		3	1	2	2
		State the fundamentals of computer systems and analyze the execution of an instruction	3	3	3	3	2			1	1	1		3	2	3	1
221AIDS3 2	AND COMPUTER ORGANIZATION	Analyze different types of control design and identify hazards	3	3	3	3	1			1	1	1		2	1	3	1
		Identify the characteristics of various memory systems and I/O communication	3	3	3	3	1			1	1	1		2	1	2	1
			3	3	3	3	1			1	1	1		2	1	2	1
		Understand the database development life cycle and apply conceptual	2	2		3	-			-	3	1		1	2	3	3
221AIDC 33	DATABASE DESIGN	Apply SQL and programming in SQL to create, manipulate and query the database	2	3		3	1			-	1	2		1	3	3	3
		Apply the conceptual-to-relational mapping and normalization to design relational database	2	2		1	1			-	2	3		2	1	1	2

		Determine the serializability of any non-serial schedule using concurrency techniques	2	2		1	-			-	1	2		2	2	2	2
		Apply the data model and querying in Object-relational and No-SQL databases	3	1		2	1			-	1	3		1	2	1	1
		AVG	2	2		2	1			-	2	2		1	2	2	2
		Analyze the efficiency of recursive and non-recursive algorithms mathematically	3	3	2	2	1	2	2	1	2	1	1	2	3	2	3
221AIDC	Design and	Analyze the efficiency of brute force, divide and conquer, decrease and conquer, Transformand conquer algorithmic techniques	3	3	3	2	1	2	2	1	2	1	1	2	3	2	3
34	Analysis of Algorithm	Implement and analyze the problems using dynamic programming and greedy algorithmictechniques.	3	3	3	3	1	2	2	1	2	1	1	2	3	3	3
		Solve the problems using iterative improvement techniques for optimization.	3	3	3	3	1	2	2	1	2	1	1	3	3	2	2
		Compute the limitations of algorithmic power and solve the problems using backtracking andbranch and bound techniques.	3	3	3	3	1	2	2	1	2	1	1	3	3	2	2
		Understand the fundamentals of exploratory data analysis	3	1		3	-			-	2	3		3	2	2	2
221AIDC 35	Data Exploration and Visualization	Implement the data visualization using Matplotlib.	2	2		1	1			-	3	2		1	3	1	3
		Perform univariate data exploration and analysis.	2	1		1	1			-	3	2		2	2	2	1

		Apply bivariate data exploration and analysis.	2	2		1	-	-	- 1	2		:	3	1	3	2
		Explain the testing of mechanical properties	3	1		2	1	-	- 3	3 2			2	2	2	3
		Explain intelligent agent frameworks	3	1		3	-	-	- 2	2 3			1	2	1	1
		Apply problem solving techniques	2	2		1	1	-	- 2	2 2			1	3	2	2
221AIDC	Artificial	Apply game playing and CSP techniques	2	1		1	-	-	- 2	2 1			3	1	2	1
36	Intelligence	Perform logical reasoning	2	1		2	-	-	- 2	2 1			2	1	3	3
		Perform probabilistic reasoning under uncertainty 2		2		1	1	-	. 3	8 2		:	2	2	2	1
221AIDL	Database Design and	Understand the database development life cycle	3	1	3	3			- 1		1	1	3	2	2	1
37	Management Laboratory	Design relational database using conceptual-to-relational mapping, Normalization	2	2	1	3				3 2	2	3	1	1	1	2
		Apply SQL for creation, manipulation and retrieval of data	2	1	3	1		-   -	- 3	3 :	3	1	1	2	1	1
		Develop a database applications for real-time problems	2	2	3	1			- 2	2 :	3	2	1	2	1	2
		Design and query object-relational databases	3	3	1	3			- 1	;	3	2	3	3	3	2
	Artificial	Design and implement search strategies	3					1	2	2			1	1	2	2
221AIDL	Laboratory	Implement game playing and CSP techniques	3					1	2	2			1	1	2	2
38		Develop logical reasoning systems	3					1	2	!			1	1	2	2
		Develop probabilistic reasoning systems	2	1		1	1	-	- 2	2 3			2	2	2	1

		Understand the fundamental knowledge of the concepts of probability and have knowledge ofstandard distributions which can describe real life phenomenon	3	2	1	1						1	2	1	
22148S41	Probability and	Understand the basic concepts of one and two dimensional random variables and apply inengineering applications.	3	2	2	1						1	2	1	
А	Statistics	Apply the concept of testing of hypothesis for small and large samples in real life problems	3	2	2	1						1	2	1	
		Apply the basic concepts of classifications of design of experiments in the field of agricultureand statistical quality control.	3	2	1	1						1	2	1	
		Have the notion of sampling distributions and statistical techniques used in engineering andmanagement problems	3	2	1	1						1	2	1	
221AIDC 42		Analyze various scheduling algorithms and process synchronization.	2	1	1	1						1	2	1	1
		Explain deadlock, prevention and avoidance algorithms.	2	1	1	1						1	2	1	1
	Operating Systems	Compare and contrast various memory management schemes.	2	1	1	1						1	2	1	1
	Systems	Explain the functionality of file systems I/O systems, and Virtualization	2	1	1	1						1	2	1	1
		Compare iOS and Android Operating Systems.	2	1	1	1						1	2	1	1
221AIDC 43		Explain the basic concepts of machine learning.	2	1		1	-		-	3	3	2	2	2	1
	Machine Learning	Construct supervised learning models.	1	3		1	2		-	2	2	1	3	1	1
		Construct unsupervised learning algorithms.	2	1		3	2		-	1	1	1	1	2	1

		Evaluate and compare different models	2	3		2 ′			-	3	2		2	1	2	1
			2	2		2 2	2		-	2	2		2	2	2	1
221AIDC		Explain the data analytics pipeline	1	1		1	-		-	3	1		2	3	3	1
44		Describe and visualize data	1	1		2 2	2		-	2	2		2	3	1	1
	Fundamentals of	Perform statistical inferences from data	1	1		1 ′			-	2	3		1	2	3	1
	and Analysis	Analyze the variance in the data	2	3		3 ′			-	3	3		3	3	2	2
		Build models for predictive analytics	2	1		1 2	2		-	3	3		3	2	2	1
221AIDC 45		Explain the basic layers and its functions in computer networks.	3	1		3 ·	-		-	1	1		1	3	2	1
		Understand the basics of how data flows from one node to another.	3	2		2 2	2		-	2	2		1	3	2	3
	Computer	Analyze routing algorithms.	2	2		2 ′	I		-	3	3		2	1	1	3
	Networks	Describe protocols for various functions in the network	1	3		3 ′			-	1	2		1	1	3	1
		Analyze the working of various application layer protocols	3	3		1 2	2		-	2	2		2	2	2	2
		Avg.	3	1	1	3	•		-	1	1		1	3	2	1
22149S46	Environmental Sciences and	To recognize and understand the functions of environment, ecosystems and biodiversity and their conservation.	2	1			2	З		-	-	-	2	-	-	-

	Sustainability	To identify the causes, effects of environmental pollution	3	2			;	3	3	-	-		-	2	-	-	-
		and natural disasters and contributeto the preventive															
		measures in the society.															
		To identify and apply the understanding of renewable	3	-			:	2	2	-	-		-	2	-	-	-
		and non-renewable resources and contribute to the															
		sustainable measures to preserve them for future															
		generations.															
		To recognize the different goals of sustainable	3	2			:	2	2	-	-		-	2	-	-	-
		development and apply them for suitabletechnological															
		advancement and societal development.															
		To demonstrate the knowledge of sustainability practices	3	2			:	2	2	-	-		-	1	-	-	-
		and identify green materials, energycycles and the role															
		of sustainable urbanization.															
		Avg.	2	1				1	2	-	-		-	1. 8	-	-	-
			8	8					4					Ũ			
				1													
		Write python programs to handle data using Numpy and	2	2		3	-		-	2		2		3	3	2	1
		Pandas															
		Derform descriptive analytics	1	2		2	2	+	-	1		2		1	3	2	1
		Perform descriptive analytics															
221AIDL	Data Science and																
47	Analysis Laboratory	Perform data exploration using Matplotlib	2	2		2	2		-	3		1		2	2	3	1
	5																
		Perform inferential data analytics	2	3		3	2		-	2		3		2	2	1	3
							_					_			_		
		Build models of predictive analytics	3	1		1	2		-	1		2		3	2	2	1
			2	2	2	1				1		2	2	2	2	2	1
		Apply suitable algorithms for selecting the appropriate	2	2	2	1						2	3	3	3	2	1
		features for analysis.		_		_											
221AIDL	Machine Learning	Implement supervised machine learning algorithms on	2	1	1	3				3		2	3	2	3	1	1
48	Laboratory	standard datasets and evaluate theperformance.															
		Apply unsupervised machine learning algorithms on	2	2	1	1			- [	1		1	1	1	2	3	3
		standard datasets and evaluate theperformance.															

		Build the graph based learning models for standard data sets.	2	2	3	3			-	1	2	1	1	1	2	2
		Assess and compare the performance of different ML algorithms and select the suitable onebased on the application.	2	2	3	1			-	3	1	1	1	2	1	2
		Explain the basics in deep neural networks	3	2	2	3	1		-	2	3	1	2	3	3	3
		Apply Convolution Neural Network for image processing	2	2	2	3	3		-	1	2	2	3	1	1	3
221AIDC 51	Deep Learning	Apply Recurrent Neural Network and its variants for text analysis	3	3	3	3	3		-	2	1	1	2	2	1	3
		Apply model evaluation for various applications	3	3	1	1	1	-	-	1	3	1	3	2	1	1
		Apply auto encoders and generative models for suitable applications	3	2	2	2	3		-	2	3	2	2	2	3	3
		Understand the basics of data and information security	3	2		1	-		-	1	3		2	3	1	1
		Understand the legal, ethical and professional issues in information security	1	3		3	2		-	1	2		2	1	2	2
221AIDC	Data and	Understand the various authentication schemes to simulate different applications	2	3		3	1		-	1	3		2	1	2	1
52	Security	Understand various security practices and system security standards	3	3		1	1		-	3	1		3	2	3	3
		Understand the Web security protocols for E-Commerce applications	3	2		3	2		-	1	2		2	2	2	1
221AIDC		Explain the foundations of distributed systems (K2)	2	2	3	3				2	1	3	3	2	1	1
53		Solve synchronization and state consistency problems (K3)	1	3	2	1				2	2	2	2	1	3	2

	Distributed	Use resource sharing techniques in distributed systems (K3)	2	2	1	3					3	2	1	1	1	2	1
	Computing	Apply working model of consensus and reliability of distributed systems (K3)	1	2	2	3					3	3	2	1	3	1	1
		Explain the fundamentals of cloud computing (K2)	3	3	1	2					3	3	3	1	3	2	3
		Describe big data and use cases from selected business domains.	3	3	3	3	3				2	2	3	1	1	3	3
001.410.0		Explain NoSQL big data management.	3	3	2	3	2				2	2	3	3	2	3	2
221AIDC 54	Big Data Analytics	Install, configure, and run Hadoop and HDFS.	3	3	3	2	3				2	2	1	2	2	3	3
		Perform map-reduce analytics using Hadoop.	2	3	3	3	3				2	2	3	2	3	3	2
		Use Hadoop-related tools such as HBase, Cassandra, Pig, and Hive for big data analytics.	3	3	3	3	3				3	1	3	2	3	2	3
		Explain the architecture of embedded processors.	3	1	1	3	1			-	3	1		3	2	1	1
	Embedded	Write embedded C programs.	2	3	1	3	2			-	1	2		1	1	1	2
22152S61	Systems and IOT	Design simple embedded applications.	2	2	3	2	3			-	1	3		1	2	1	3
	Design	Compare the communication models in IOT	2	2	2	1	1			-	1	3		1	2	2	3
		Design IoT applications using Arduino/Raspberry Pi /open platform.	3	2	1	1	3			-	3	2		2	1	3	1
221AIDC		Explain the real world business problems and model with analytical solutions.	2	2	3	1	1	-	-		1	2	1	1	ß	2	1
55E		Identify the business processes for extracting Business Intelligence	3	3	3	2	3	-	-		1	2	2	2	3	1	2
	Business Analytics																

		Apply predictive analytics for business fore-casting														
		Apply analytics for supply chain and logistics management	2	2	3	3	2	-	-	3	1	1	3	3	1	2
		Use analytics for marketing and sales	2	1	1	2	2	-	-	3	3	2	1	1	3	1
		Describe syntax and semantics of programming languages	2	2		2		-		-	-		3	2	3	-
56H	Dringiples of	Explain data, data types, and basic statements of programming languages	3	3		2		-		-	-		3	2	3	-
	Programming	Design and implement subprogram constructs	3	3		2		-		-	-		3	2	3	-
	Languages	Apply object-oriented, concurrency, and event handling programming constructsand Develop programs in Scheme, ML, and Prolog	3	3		3		2		-	-		-	3	2	-
		Understand and adopt new programming lan	3	3		3		3	•••	1	3		3	3	3	-
		Interpret the basic principles of cryptography and general cryptanalysis.	3	3	3	3	1	-	-	2	1	1	2	2	1	1
		Determine the concepts of symmetric encryption and authentication.	1	3	2	1	2	-	-	3	2	2	2	2	1	3
22AIDC6 4D	Modern Cryptography	Identify the use of public key encryption, digital signatures, and key establishment.	1	1	2	3	2	-	-	1	1	1	3	1	1	3
		Articulate the cryptographic algorithms to compose, build and analyze simple cryptographicsolutions.	3	1	2	1	3	-	-	3	2	1	2	3	2	1
		Express the use of Message Authentication Codes.	2	3	3	3	3	-	-	3	1	1	1	2	1	1
221AIDC 66B	Robotic Process	Enunciate the key distinctions between RPA and existing automation techniquesand platforms.	3	2	2	1	3	-	-	1	3	3	2	2	2	1

	Automation	Use UiPath to design control flows and work flows for the target process	1	1	2	3	3	-	-	1	2	3	1	3	2	1
		Implement recording, web scraping andprocess mining by automation	2	3	2	3	3	-	-	2	3	1	1	3	3	3
		Use UIPath Studio to detect, and handle exceptions in automation processes	1	2	1	2	2	-	-	1	2	1	3	3	3	2
		Implement and use Orchestrator for creation, monitoring, scheduling, andcontrolling of automated bots and processes.	3	3	3	3	3	-	-	3	1	1	1	3	2	1
		Upon completion of the course, students will be able to have clear understanding ofmanagerial functions like planning, organizing, staffing, leading & controlling.		1	2	1				1			1	1	2	1
22160E75	Principles of Management	Have same basic knowledge on international aspect of management		1	2	1				1			1	1	2	1
A		Ability to understand management concept of organizing.		1	2	1				1			1	1	2	1
		Ability to understand management concept of directing.		1	2	1				1			1	1	2	1
		Ability to understand management concept of controlling.		1	2	1				1			1	1	2	1
22150FE6	IoT Concepts and Applications (CSE)	Explain the layout, construction and working of the components inside a thermal power plant.	3	1	1	1		1	3		1		1	2	2	1
/A		Explain the layout, construction and working of the components inside a Diesel, Gas and	3	1	1	1		1	3		1		1	2	2	1
		Combined cycle power plants.	3	1	1	1		1	3		1		1	2	2	1
		Explain the layout, construction and working of the components inside nuclear power plants.	3	1	1	1		1	3		1		1	2	2	1
		Explain the layout, construction and working of the components inside Renewable energy	3	1	1	1		1	3		1		1	2	2	1

221 53OE 61	Renewable Energy	Attained knowledge about various renewable energy technologies	3	-	-	-	-	-	-	-	-	-	-	2	3	3	3
61	System	Ability to understand and design a PV system.	3	2	-	-	-	-	-	-	-	-	-	2	3	3	3
		Understand the concept of various wind energy system.	3	2	-	-	-	-	-	-	-	-	-	2	3	3	3
		Gained knowledge about various possible hybrid energy systems	3	2	-	-	-	-	-	-	-	-	-	2	3	3	3
		Attained knowledge about various application of renewable energy technologies	3	2	-	-	-	-	-	-	-	-	-	2	3	3	3
22154 OE73B	Industrial Management	Understand the basic concepts of industrial management	;	3	1	1					1			1	3	1	2
		Identify the group conflicts and its causes.		3	1	1					1			1	3	1	2
		Perform swot analysis	1		3		3	3	3	3	1	3		3	-	-	-
		Analyze the learning curves	2				~~		3	3	1	3		3	-	-	-
		Understand the placement and performance appraisal	3				.,		3	3	3	3		3	-	-	-

K-ST 8

Head of the Department Department of Computer Science and Engineering Ponnalystitute of Science & Technology (PRIST) (Insulton Deemed to be University "1430 fthe UGC Act. 1986) THANJAVUR - 613 403, TAMIL NADU

Summit

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