



ADITYA ENGINEERING COLLEGE
MUMBAI, INDIA

An Autonomous Institution

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Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956

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Department of Artificial Intelligence & Machine Learning

B.Tech - AR20 - Course Articulation Matrix

Note: Correlation Levels are 1 or 2 or 3. Where 1 Slight(Low), 2 Moderate(Medium), 3 Substantial(High).

	CO Statements	POs												PSOs	
CO4	Explain about renewable energy sources and their manufacturing methods	2	-	-	-	-	-	-	-	-	-	-	-	-	-
CO5	Summarize the importance of Nano materials and Green chemistry.	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Course Code	201ES1T02 -PROGRAMMING FOR PROBLEM SOLVING USING C	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Develop the basic programs in C and draw the flowcharts using Raptor.	2	3	-	-	1	-	-	-	-	-	-	2	1	-
CO2	Make use of control structures and arrays in solving complex problems	3	2	-	-	2	-	-	-	-	-	-	2	2	-
CO3	Apply the concept of modularity and strings to handle complex problems	2	2	3	-	2	-	-	-	-	-	-	1	2	-
CO4	Apply the dynamic memory allocation functions using pointers.	2	3	-	-	2	-	-	-	-	-	-	2	2	-
CO5	Solve real world problems using the concept of structures, unions and File operations	3	2	2	-	-	-	-	-	-	-	-	2	3	-
Course Code	201ES1I02 - COMPUTER ENGINEERING WORKSHOP	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Identify the components of a PC, Assemble & disassemble the same.	3	1	-	-	-	-	-	-	-	-	-	-	3	3
CO2	Experiment with installation of Linux Operating System, Virtual machine and secure a computer from cyber threats	3	2	1	-	3	-	-	-	-	-	-	-	3	3
CO3	Summarize the fundamentals and architecture of IoT.	3	-	1	1	3	-	-	-	-	-	-	-	3	3
CO4	Prepare word documents; excel sheets and power point presentation	2	1	1	-	3	-	-	-	-	-	-	-	3	3
CO5	Develop presentation /documentation using Office tools and Latex.	3	2	1	1	3	-	-	-	-	-	-	-	3	3
Course Code	201HS1L01 -COMMUNICATIVE ENGLISH LAB	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Make use of the concepts to communicate confidently and competently in English Language in all spheres.	-	-	-	-	1	-	-	-	-	3	-	1	-	-
CO2	Express Creative skills to construct Dialogues / Conversations in Spoken and Written forms.	-	-	-	-	1	-	-	-	-	3	-	2	-	-
CO3	Identify Accent for intelligibility.	-	-	-	-	1	-	-	-	-	3	-	2	-	-
CO4	Demonstrate communicative ability in everyday Conversation, JAM Sessions and Public Speaking.	-	-	-	-	1	-	-	-	-	3	-	1	-	-
CO5	Demonstrate nuances of Language through Audio – Visual Experience and group activities.	-	-	-	-	1	-	-	-	-	3	-	1	-	-
Course Code	201BS1L03 - ENGINEERING CHEMISTRY LAB	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Demonstrate Complex metric titrations by volumetric analysis.	2	-	-	-	-	-	-	-	1	-	-	1	-	-
CO2	Demonstrate Acid – Base titrations by instrumental analysis.	2	-	-	-	-	-	-	-	1	-	-	1	-	-
CO3	Estimate Vitamin C using volumetric analysis	2	-	-	-	-	-	-	-	1	-	-	1	-	-
CO4	Prepare polymer like Bakelite.	2	-	-	-	-	-	-	-	1	-	-	1	1	-
CO5	Prepare alternative fuel like Bio-Diesel.	2	-	-	-	-	-	-	-	1	-	-	1	-	-

	CO Statements		POs												PSOs	
CO4	Apply various tests to test the hypothesis concerning mean, Proportion, variance.		3	2	-	-	-	-	-	-	-	-	-	-	1	-
CO5	Apply the concepts of correlation and regression to the given statistical data.		3	2	-	-	-	-	-	-	-	-	-	-	1	-
Course Code	201CS4T05 - FORMAL LANGUAGES AND AUTOMATA THEORY		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Explain the basic concepts of automaton and its properties.		3	1	-	1	-	-	-	-	-	-	-	-	2	-
CO2	Apply inter conversion of regular expression and finite automata.		1	3	1	2	-	-	-	-	-	-	-	-	3	-
CO3	Design grammars to produce strings from a specific language.		2	2	3	2	-	-	-	-	-	-	-	-	2	-
CO4	Construct automaton for a given problem.		1	2	2	3	-	-	-	-	-	-	-	-	2	-
CO5	Analyze decidability and undesirability problems.		2	3	1	2	-	-	-	-	-	-	-	-	1	-
Course Code	201CS4T06 - DATABASE MANAGEMENT SYSTEMS		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Summarize the database characteristics and identify various database architectures.		3	-	1	-	1	-	-	-	-	-	-	-	2	-
CO2	Interpret relational database using SQL		1	-	1	-	3	-	-	-	-	-	-	-	1	-
CO3	Examine issues in data storage and query processing for appropriate solutions.		1	2	1	-	3	-	-	-	-	-	-	-	3	-
CO4	Make use of normalization techniques for database design		2	2	1	-	3	-	-	-	-	-	-	-	1	-
CO5	Illustrate the mechanisms of transaction management.		2	3	-	-	1	-	-	-	-	-	-	-	2	-
Course Code	201IBS4T18 - Integral Transforms and Differential Calculus		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Compute Laplace transform of standard functions and apply Laplace transform to solve Initial value problems.		3	2	2	-	-	-	-	-	-	-	-	-	-	-
CO2	Compute the Fourier series of periodic signals and compute the Fourier transform to a range of non-periodic waveforms.		3	2	3	-	-	-	-	-	-	-	-	-	-	-
CO3	Calculate the gradient of a scalar function, divergence and curl of a vector function and also calculate line, surface and volume integrals.		3	2	3	-	-	-	-	-	-	-	-	-	-	-
CO4	Solve partial differential equations of first order.		2	3	1	-	-	-	-	-	-	-	-	-	-	-
CO5	Solve one dimensional heat equation, wave equation and two dimensional Laplace equation.		2	3	2	-	-	-	-	-	-	-	-	-	-	-
Course Code	201HS4T03 - MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Explain the Managerial Economic concepts for decision making and forward planning		1	-	-	-	-	-	-	-	-	-	-	1	-	-
CO2	Illustrate the law of demand and its exceptions, to use different forecasting methods for predicting demand for various products and services.		1	1	-	-	-	-	-	-	-	3	1	-	-	-
CO3	Identify the cost behavior for managerial decision making and Break Even Point (BEP) of an enterprise		-	1	-	-	-	-	-	-	-	3	1	-	-	-
CO4	Classify the different types of business organizations along with basic knowledge on business cycle.		-	-	-	-	-	-	-	-	-	-	1	-	-	-

	CO Statements	POs												PSOs	
Course Code	201MC4T04 - ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	Identify the concept of Traditional knowledge and its importance.	-	-	-	-	-	1	1	-	-	-	-	-	-	-
CO2	Explain the need and importance of protecting traditional knowledge.	-	-	-	-	-	1	1	-	-	-	-	-	-	-
CO3	Illustrate the various enactments related to the protection of traditional knowledge	-	-	-	-	-	1	1	-	-	-	-	-	-	-
CO4	Interpret the concepts of Intellectual property to protect the traditional knowledge.	-	-	-	-	-	1	1	-	-	-	-	-	-	-
CO5	Explain the importance of Traditional knowledge in Agriculture and Medicine.	-	-	-	-	-	1	1	-	-	-	-	-	-	-