

## ESWAR COLLEGE OF ENGINEERING: NARASARAOPET

Approved by AICTE, New Delhi., Affiliated to JNTUK, Kakinada Kesanupalli Village, Narasaraopet – 522 601, Palnadu Dist. A.P.

## DEPARTMENT OF CSE - ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Course Outcomes Regulation R20

Year/Sem: II B.Tech I Sem

	b. reen i bem	
Course Name: Mathematics III		
Course Code: 0	Course Code: CSAM2101	
CSAM2101.1	State and prove vector Line, Surface and volume integral Theorems. State and	
	prove Stokes and Green's theorems.	
CSAM2101.2	Derive Laplace transform standard functions. Deduce inverse Laplace transform	
	functions.	
CSAM2101.3	Explain about Periodic functions, even and odd functions. Explain about Half	
	range sine and cosine series. Explain Fourier transforms. State and prove Fourier	
	integral theorem and problems.	
CSAM2101.4	Explain Fourier Transforms. State and prove Fourier integral theorem and	
	problems.	
CSAM2101.5	Explain By eliminating Orbitary constants and Orbitary functions. Derive	
	Legrangies equation and problems.	
CSAM2101.6	Derive solutions of linear P.D.E with constant coefficients and problems. Explain	
	method of separation of variables and wave & heat equations.	

Course Name: Mathematical Foundations of Computer Science	
Course Code: CSAM2102	
CSAM2102.1	Demonstrate skills in solving mathematical problems
CSAM2102.2	Comprehend mathematical principles and logic
CSAM2102.3	Demonstrate knowledge of mathematical modelling
CSAM2102.4	Proficiency in using mathematical software
CSAM2102.5	Manipulate and analyze data numerically and/or graphically using appropriate
	Software
CSAM2102.6	Communicate effectively mathematical ideas/results verbally or in writing

Course Name: Introduction to Artificial Intelligence and Machine Learning	
Course Code: CSAM2103	
CSAM2103.1	Enumerate the history and foundations of Artificial Intelligence
CSAM2103.2	Apply the basic principles of AI in problem solving
CSAM2103.3	Choose the appropriate representation of Knowledge
CSAM2103.4	Solve basic AI based problems.
CSAM2103.5	Enumerate the Perspectives and Issues in Machine Learning
CSAM2103.6	Identify issues in Decision Tree Learning

Course Name: Object Oriented Programming with Java	
Course Code: CSAM2104	
CSAM2104.1	Able to realize the concept of object oriented programming & java

	programming constructs.
CSAM2104.2	Able to describe the basic concepts of java such as operators, classes, objects.
CSAM2104.3	Able to described the basic concept of java such as
	inheritance,packages,enumeration and various keywords.
CSAM2104.4	Apply the concept of exception handling and Input/Output operations.
CSAM2104.5	Able to design the application of java & java applet.
CSAM2104.6	Able to Analyze & Design the concept of Event Handling and Abstract
	Window ToolKit.

Course Name: Database Management Systems	
Course Code: CSAM2105	
CSAM2105.1	Describe a relational database and object-oriented database
CSAM2105.2	Create, maintain and manipulate a relational database using SQL
CSAM2105.3	Describe ER model and normalization for database design
CSAM2105.4	Examine issues in data storage and query processing and can formulate
	appropriate solutions
CSAM2105.5	Outline the role and issues in management of data such as efficiency,
	privacy, security.
CSAM2105.6	
	and strategic advantage.

Course Name: Introduction to Artificial Intelligence and Machine Learning Lab	
Course Code: CSAM2106	
CSAM2106.1	Apply the basic principles of AI in problem solving using LISP/PROLOG
CSAM2106.2	Implement different algorithms using LISP/PROLOG
CSAM2106.3	Develop an Expert System using JESS/PROLOG
CSAM2106.4	Implement procedures for the machine learning algorithms
CSAM2106.5	Apply appropriate data sets to the Machine Learning algorithms
CSAM2106.6	Develop Machine Learning algorithms to solve real world problems

Course Name: Object Oriented Programming with Java Lab	
Course Code: CSAM2107	
CSAM2107	Evaluate default value of all primitive data type, Operations, Expressions,
	Control-flow, Strings
CSAM2107	Determine Class, Objects, Methods, Inheritance.
CSAM2107	Exception, Runtime Polymorphism.
CSAM2107	User defined Exception handling mechanism.
CSAM2107	Illustrating simple inheritance, multi-level inheritance, Exception handling
	mechanism
CSAM2107	Construct Threads, Event Handling, implement packages, developing
	applets

Course Name: Database Management Systems Lab	
Course Code: CSAM2108	
CSAM2108.1	Utilize SQL to execute queries for creating database and performing data manipulation operations

CSAM2108.2	Examine integrity constraints to build efficient databases
CSAM2108.3	Apply Queries using Advanced Concepts of SQL
CSAM2108.4	Build PL/SQL programs including stored procedures, functions, cursors and
	triggers
CC 43 (2100 5	
CSAM2108.5	Build PL/SQL programs including functions.

Course Name: Mobile App Development	
Course Code: CSAM2109	
CSAM2109.1	Identify various concepts of mobile programming that make it unique from
	programming for other platforms
CSAM2109.2	Critique mobile applications on their design pros and cons
CSAM2109.3	Utilize rapid prototyping techniques to design and develop sophisticated mobile
	interfaces,
CSAM2109.4	Program mobile applications for the Android operating system that use basic
CSAM2109.5	advanced phone features
CSAM2109.6	Deploy applications to the Android marketplace for distribution

Course Name: Essence of Indian Traditional Knowledge	
Course Code: CSAM2110	
CSAM2110.1	Understand the significance of Indian Traditional Knowledge.
CSAM2110.2	Classify the Indian Traditional Knowledge.
CSAM2110.3	Compare modern science with Indian Traditional Knowledge ?System.
CSAM2110.4	Analyze the role of government in protecting the Traditional Knowledge.
CSAM2110.5	Understand the impact of philosophical tradition on Indian Knowledge System.

## Year/Sem: II B.Tech II Sem

Course Name: Probability and Statistics	
Course Code: CSAM2201	
CSAM2201.1	Explain the concepts of data science and its importance
CSAM2201.2	Learn characteristics and through Correlation and regression tools
CSAM2201.3	Write the concepts of probability and their applications
CSAM2201.4	Apply discrete and continuous probability distributions
CSAM2201.5	Explain the components of classical hypothesis test
CSAM2201.6	To learn statistical inferential methods based on small and large sampling test

Course Name: Computer Organization	
Course Code: CSAM2202	
CSAM2202.1	Demonstrate and understanding of the design of the functional units of a digital
	computer system.

CSAM2202.2	Relate Postulates of Boolean algebra and minimize combinational functions.
CSAM2202.3	Recognize and manipulate representations of numbers stored in digital
	computers.
CSAM2202.4	Build the logic families and realization of logic gates.
	Design and analyze combinational and sequential circuits.
CSAM2202.5	Recall the internal organization of computers, CPU, memory unit and
	Input/Outputs and the relations between its main components.
CSAM2202.6	Solve elementary problems by assembly language programming.

Course Name: Data Warehousing and Mining	
Course Code: CSAM2203	
CSAM2203.1	Summarize the architecture of data warehouse
CSAM2203.2	Apply different preprocessing methods, Similarity, Dissimilarity measures
	for any given raw data
CSAM2203.3	Construct a decision tree.
CSAM2203.4	Construct a decision resolve the problem of model overfitting.
CSAM2203.5	Compare Apriori and FP-growth association rule mining algorithms for
	frequent item set generation
CSAM2203.6	Apply suitable clustering algorithm for the given data set

Course Name: Formal Languages and Automata Theory	
Course Code: CSAM2204	
CSE2203.1	Classify machines by their power to recognize languages.
CSE2203.2	Summarize language classes & grammars relationship among them with the
	help of Chomsky hierarchy
CSE2203.3	Employ finite state machines to solve problems in computing
CSE2203.4	Illustrate deterministic machines
CSE2203.5	Illustrate non-deterministic machines
CSE2203.6	Quote the hierarchy of problems arising in the computer science

Course Name: Managerial Economics and Financial Accountancy	
Course Code: CSAM2205	
CSAM2205.1	The Student is enhanced with the knowledge of estimating the Supply Demand and demand elasticises for a product.
CC 4 1/2205 2	·
CSAM2205.2	The knowledge of understanding of the Input-Output-Cost relationships and estimation of the least cost combination of inputs
CSAM2205.3	The Students is also ready to understand the nature of different markets and Price Output
	determination under various market conditions and also to have the knowledge of
	different Business Units regarding Product & Services
CSAM2205.4	They can understand the knowledge of formation of the company and company business
	cycle.
CSAM2205.5	The Learner is able to prepare accounts, Ledger then Financial Statements and the usage
	of various Accounting tools for Analysis.
CSAM2205.6	The Learner can able to evaluate various investment project proposals with the help of
	capital budgeting techniques for business decision making.

Course Name: R Programming Lab	
Course Code: CSAM2206	
CSAM2206.1	Access online resources for R and import new function packages into the R workspace
CSAM2206.2	Import, review, manipulate and summarize data-sets in R
CSAM2206.3	Explore data-sets to create testable hypotheses
CSAM2206.4	Identify appropriate statistical tests
CSAM2206.5	Perform appropriate statistical tests using R
CSAM2206.6	Create and edit visualizations with R

Course Name: Data Mining using Python Lab	
Course Code: CSAM2207	
	Apply preprocessing techniques on real world datasets
CSAM2207.1	
	Apply apriori algorithm to generate frequent itemsets.
CSAM2207.2	
	Apply Classification and clustering algorithms on different datasets.
CSAM2207.3	
CSAM2207.4	Choose Model building and evaluation.
CSAM2207.5	Make use of association rule mining techniques viz. Apriori and FP Growth
	algorithms and analyze on frequent itemsets generation.
CSAM2207.6	Identify and apply various clustering algorithm (with open source tools),
	interpret, evaluate and report the result.

Course Name: Web Application Development Lab	
Course Code: CSAM2208	
CSAM2208.1	Develop Single Page Applications.
CSAM2208.2	Develop NodeJS&ReactJS Reusable Service.
CSAM2208.3	Store the data in MySQL.
CSAM2208.4	Get acquainted with the latest web application development trends in the IT
	industry.
CSAM2208.5	To develop the skill in server side programming using JSP.
CSAM2208.6	Developing applications in a team environment.

Course Name: Natural Language Processing with Python	
Course Code: CSAM2209	
CSAM2209.1	Explore natural language processing (NLP) libraries in Python
CSAM2209.2	Learn various techniques for implementing NLP including
CSAM2209.3	Learn various techniques for implementing NLP text processing
CSAM2209.4	Understand how to use NLP for text analysis engineering
CSAM2209.5	Understand how to use NLP for text design engineering
CSAM2209.6	Understand how to use NLP for text feature engineering