

Department of Computer Science and Engineering

III B. Tech II Semester

SUBJECT: Machine Learning (CS601PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the foundations of machine learning and well-posed learning problems	2
CO2	Apply decision tree learning and concept learning algorithms	3
CO3	Implement neural networks and backpropagation techniques	1
CO4	Analyze Bayesian learning and instance-based learning methods	4
CO5	Demonstrate teamwork, documentation, and communication in ML-based projects	5

MAPPING

[illegible]

SUBJECT: Compiler Design (CS602PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the structure and phases of a compiler	2
CO2	Apply lexical analysis techniques using finite automata and regular expressions	3
CO3	Implement syntax analysis using top-down and bottom-up parsing methods	3
CO4	Analyze syntax-directed translation and intermediate code generation	4
CO5	Evaluate code optimization and target code generation strategies	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	-	3	-	-	-	-	-	-	-	3	3	-
CO2	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO3	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO4	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO5	2	2	2	-	2	-	-	-	-	-	-	-	2	2	-
Average	2.8	2.6	2.6	-	2.8	-	-	-	-	-	-	-	2.8	2.8	-

SUBJECT: Design and Analysis of Algorithms (CS603PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Analyze the time and space complexity of algorithms	4
CO2	Apply divide-and-conquer and greedy strategies to solve problems	3
CO3	Design dynamic programming and backtracking algorithms	3
CO4	Evaluate NP-completeness and approximation algorithms	5
CO5	Demonstrate teamwork and documentation in algorithmic problem solving	5

MAPPING

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SUBJECT: Software Testing Methodologies (CS615PE)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the principles and objectives of software testing	2
CO2	Apply path testing, transaction flow testing, and data flow testing techniques	3
CO3	Design test cases using domain testing and logic-based testing strategies	3
CO4	Evaluate software quality using metrics and test management tools	5
CO5	Demonstrate teamwork, documentation, and communication in testing projects	6

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2	-	-	-	-	-	-	-	-	3	2	-
CO2	3	3	3	3	2	-	-	-	-	-	-	-	3	2	2
CO3	2	3	2	3	3	-	-	-	-	-	-	-	3	3	2
CO4	3	3	3	3	2	-	-	-	-	-	-	-	3	2	2
CO5	2	2	2	2	-	-	-	-	-	-	-	-	2	-	3
Average	2.6	2.6	2.4	2.6	2.33	-	-	-	-	-	-	-	2.8	2.25	2.25



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SUBJECT: Disaster Preparedness & Planning Management (CE511OE)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand environmental hazards, disasters, and stress factors	2
CO2	Analyze types of natural and man-made disasters	4
CO3	Apply ecological approaches to disaster management	3
CO4	Evaluate disaster preparedness and mitigation strategies	5
CO5	Demonstrate ethical responsibility and teamwork in disaster response planning	6

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	2	2	2	-	2	-	-	-	2
CO2	2	-	-	-	-	2	-	2	2	-	2	-	-	-	2
CO3	-	-	-	-	-	-	-	-	2	-	2	-	-	-	2
CO4	-	-	-	-	-	-	-	-	3	-	2	-	-	-	2
CO5	3	-	-	-	-	-	2		3	-	2	-	-	-	2
Average	2.333	-	-	-	-	2	2	2	2.4	-	2	-	-	-	2



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SUBJECT: Machine Learning Lab (CS604PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the complexity and limitations of machine learning algorithms	2
CO2	Apply modern data analysis techniques using Python	3
CO3	Implement supervised and unsupervised learning algorithms	1
CO4	Perform experiments using real-world datasets and evaluate model performance	4
CO5	Demonstrate teamwork, documentation, and communication in ML projects	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	-	2	-	-	-	2	2	2	2	-	2	2
CO2	3	3	3	-	2	-	-	-	2	2	2	2	-	3	2
CO3	3	3	3	-	3	-	-	-	3	3	2	3	-	3	2
CO4	3	3	3	-	3	-	-	-	3	3	3	3	-	3	2
CO5	2	2	2	-	2	-	-	-	3	3	3	2	-	2	3
Average	2.8	2.8	2.8	-	2.4	-	-	-	2.6	2.6	2.4	2.4	-	2.6	2.2

SUBJECT: Compiler Design Lab (CS605PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Design and implement lexical analyzers using Lex	1
CO2	Develop syntax analyzers using Yacc and parsing techniques	2
CO3	Implement LL and LR parsers for grammar analysis	3
CO4	Generate intermediate code and perform syntax-directed translation	4
CO5	Demonstrate teamwork, documentation, and communication in compiler projects	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	-	3	-	-	-	-	-	-	-	3	3	-
CO2	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO3	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO4	3	3	3	-	3	-	-	-	-	-	-	-	3	3	-
CO5	2	2	2	-	2	-	-	-	-	-	-	-	2	2	-
Average	2.8	2.6	2.6	-	2.8	-	-	-	-	-	-	-	2.8	2.8	-



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SUBJECT: Software Testing Methodologies Lab (CS625PE)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the need for software testing and its role in software quality assurance	2
CO2	Design and execute test cases using white-box and black-box testing techniques	3
CO3	Apply path testing, boundary value analysis, and equivalence class partitioning	4
CO4	Use automation tools to perform regression and performance testing	1
CO5	Demonstrate teamwork, documentation, and communication in testing projects	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	-	2	-	-	-	2	2	2	2	-	2	2
CO2	3	3	3	-	2	-	-	-	2	2	2	2	-	3	2
CO3	3	3	3	-	3	-	-	-	3	3	2	3	-	3	2
CO4	3	3	3	-	3	-	-	-	3	3	3	3	-	3	2
CO5	2	2	2	-	2	-	-	-	3	3	3	2	-	2	3
Average	2.8	2.8	2.8	-	2.4	-	-	-	2.6	2.6	2.4	2.4	-	2.6	2.2

SUBJECT: Environmental Science (MC609)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the structure and function of ecosystems	2
CO2	Analyze natural resources and their sustainable use	4
CO3	Evaluate biodiversity and its conservation strategies	5
CO4	Examine environmental pollution and control measures	4
CO5	Demonstrate awareness of environmental ethics and disaster management	6

MAPPING

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