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Kandlakoya, Medchal Road, Hyderabad- 501 401, Telangana



### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Design & Analysis Algorithms

Regulation: R20

Year & Sem: 2<sup>nd</sup> year , I sem

Branch: CSE(AI&ML)

Course Coordinator Name: Dr.K. Mahesh

Course Code: 20CS301PC

#### Course Outcomes:

CO#	Course Outcome								
CO1	Analyze the algorithms in terms of space and time								
CO2	Design the algorithm using divide and conquer and greedy approach								
CO3	Apply dynamic programming strategy to problems.								
CO4	Apply back tracking technique and branch and bound to problems.								
CO5	Construct the algorithm using non-deterministic approaches								

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	2	2	1
CO3	3	2	1
CO4	3	2	1
CO5	3	2	2
Average	3	2	1

Note: 1-Low ,2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### DEPARTMENT OF CSE(AI&ML)

### **CO-PO Mapping**

Course Name: Design & Analysis Algorithms

Regulation: R20

Year & Sem: 2nd year, I sem

Branch: CSE(AI&ML)

Course Coordinator Name: Dr.K. Mahesh

Course Code: 20CS301PC

#### Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Analyze the algorithms in terms of space and time
CO2	Design the algorithm using divide and conquer and greedy approach
CO3	Apply dynamic programming strategy to problems.
CO4	Apply back tracking technique and branch and bound to problems.
CO5	Construct the algorithm using non-deterministic approaches

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	3	3	-	-	-	-	-	-	2
CO2	3	3	2	2	2	-	-	-	-	-	-	1
CO3	3	3	3	2	2	-	-	-	-	-	-	2
CO4	3	2	2 .	2	2	-	-	-	-	-	-	1
CO5	3	3	2	2	. 2	-	-	-	-	-	-	2
Average	3	3	2	2	2	-	1-1	-	-	-	-	2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator







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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Data Structures using C

Regulation: R20

Year & Sem: B.Tech. II year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20CS302PC

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome '
CO1	Explore the basic concepts of data structures.
CO2	Summarize the concepts of dictionary and hash table
CO3	Implement searching in various trees
CO4	Apply different sorting techniques on data
CO5	Design pattern matching algorithm for a problem.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	1	1
CO2	3	1	1
CO3	3	2	1
CO4	3	2	1
CO5	3	3	1
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### CO-PO Mapping

Course Name: Data Structures using C

Regulation: R29

Year & Sem: B.Tech. II year I Sem

Branch : CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20CS302PC

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Explore the basic concepts of data structures.
CO2	Summarize the concepts of dictionary and hash table
CO3	Implement searching in various trees
CO4	Apply different sorting techniques on data
CO5	Design pattern matching algorithm for a problem.

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	1	*	=	-	-	-	-	3
CO2	3	2	1	1	1	- "	-	-		-	-	3
CO3	3	3	1	2	1	-	-	-	-	- 8	-	3
CO4	3	3	1	2	1	=	-	-	-	-	-	3
CO5	3	3	1	2	1	-	-	-	-	-	-	3
Average	3	3	1	2	1	-	-	-	-	-	-	3

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

Module Coordinator

(20-24)
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### DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: OOPS THROUGH JAVA

Regulation: R20

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: S.RAMCHANDRAREDDY

Course Code: 20CS303PC

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Solve real world problems using OOP techniques.
CO2	Apply the packages and interfaces, streams in programs.
CO3	Develop exceptions, multithreaded applications with synchronization.
CO4	Develop the application using collection framework.
CO5	Design GUI based applications using applets and swings.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	. 3	3	2
CO2	3	3	-
CO3	3	3	-
CO4	3	3	2
CO5	3	2	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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# DEPARTMENT OF CSE(AI&ML)

### **CO-PO** Mapping

Course Name: OOPS THROUGH JAVA

Regulation: R20

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: S.RAMCHANDRAREDDY

Course Code: 20CS303PC

Course Outcomes:

CO#	Course Outcome	
CO1	Solve real world problems using OOP techniques.	
CO2	Apply the packages and interfaces, streams in programs.	
CO3	Develop exceptions, multithreaded applications with synchronization.	
CO4	Develop the application using collection framework.	
CO5	Design GUI based applications using applets and swings.	

#### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 

(20-14) Vinochamom





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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Theory of Computation

Regulation: R20

Year & Sem: 2022, III sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS304PC

Course Outcomes:

At th	e end of the Course, Student will be able to
CO#	Course Outcome
CO1	Summarize the concepts of abstract machines and their languages
CO2	Design the finite state machines from regular expressions
CO3	Design context free grammar for formal languages
CO4	Apply normalization to the context free grammar
CO5	Distinguish between decidability and un-decidability problems

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	3	2	1 .
CO3	3	2	1
CO4	3	2	1
CO5	3	2	1
Average	3	2	1

Note: 1-Low ,2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### DEPARTMENT OF CSE(AI&ML)

### **CO-PO Mapping**

Course Name: Theory Of Computation

Regulation: R20

Year & Sem: 2022, III sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS304PC

Course Outcomes:

CO#	Course Outcome							
CO1	Summarize the concepts of abstract machines and their languages							
CO2	Design the finite state machines from regular expressions							
CO3	Design context free grammar for formal languages							
CO4	Apply normalization to the context free grammar							
CO5	Distinguish between decidability and un-decidability problems							

#### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator

(20-24) M. Eavindran



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### DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name:Programming With Python

Regulation:R20

Year & Sem: II & I

Branch:CSE(AI&ML)

Course Coordinator Name: V N V Sri Harsha

Course Code:20CS305PC

Course Outcomes:

CO#	Course Outcome
CO1	Examine Python syntax and semantics and flow control.
CO2	Demonstrate proficiency in handling Strings and Arrays.
CO3	Develop Python Programs using core data structures.
CO4	Conduct experiments on file handling, exception handling and modules.
CO5	Interpret the concepts of Object-Oriented Programming in Python.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low,2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Programming With Python

Regulation:R20

Year & Sem: II & I

Branch:CSE(AI&ML)/AIML

Course Coordinator Name: V N V Sri Harsha

Course Code:20CS305PC

Course Outcomes:

At the end of the course, student will be able to								
CO#	Course Outcome							
CO1	Examine Python syntax and semantics and flow control.							
CO2	Demonstrate proficiency in handling Strings and Arrays.							
CO3	Develop Python Programs using core data structures.							
CO4	Conduct experiments on file handling, exception handling and modules.							
CO5	Interpret the concepts of Object-Oriented Programming in Python.							

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	2	1	2	-	1	1	1	2
CO2	3	3	3	3	2	1	2	:=:	1	1	1	2
CO3	3	3	3	3	2	1	2	-	1	1	1	2
CO4	3	3	3	3	2	1	2	1-1	1	1	1	2
CO5	3	3	3	3	2	1	2	-	1	1	1	2
Average	3	3	3	3	2	1	2	-	1	1	1	2

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

**Module Coordinator** 

(20-24) Vinodaniam



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Data Structure using C Lab

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: M Rayindran

Course Code: 20CS306PC

Course Outcomes:

At the	At the end of the Course, Student will be able to							
CO#	Course Outcome							
CO1	Develop C programs for basic data structures.							
CO2	Implement Linear and Circular queue							
CO3	Implement stacks.							
CO4	Implement sorting and searching algorithms							
CO5	Implement Tree Traversal Methods.							

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	2	3	2
CO4	3	2	2
CO5	3	3	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Data Structure using C Lab

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: M Ravindran

Course Code: 20CS306PC

Course Outcomes:

CO#	Course Outcome	
CO1	Develop C programs for basic data structures.	
CO2	Implement linear and Circular queue	
CO3	Implement stacks.	
CO4	Implement sorting and searching algorithms	
CO5	Implement Tree Traversal Methods.	

#### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

**Module Coordinator** 

(du-24) Ravirdran





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### DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name:Python Lab

Regulation:R20

Year & Sem: II & I

Branch:CSE(AI&ML)

Course Coordinator Name: V N V Sri Harsha

Course Code:20CS307PC

Course Outcomes:

CO#	Course Outcome
CO1	Define python syntax, semantics and flow control.
CO2	Demonstrate proficiency in handling strings, list tuples and arrays
CO3	Develop python programs using core data structures.
CO4	Conduct experiments on file handling, exception handling and modules.
CO5	Design the application specific codes using python.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	, 3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## DEPARTMENT OF CSE(AI&ML)

### **CO-PO Mapping**

Course Name: Python Lab

Regulation:R20

Year & Sem: II & I

Branch: CSE(AI&ML)

Course Coordinator Name: V N V Sri Harsha

Course Code:20CS307PC

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Define python syntax, semantics and flow control.
CO2	Demonstrate proficiency in handling strings, list tuples and arrays
CO3	Develop python programs using core data structures.
CO4	Conduct experiments on file handling, exception handling and modules.
CO5	Design the application specific codes using python.

#### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 



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### DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: OOPS THROUGH JAVA LAB

Regulation: R20

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: S.RAMCHANDRAREDDY

Course Code: 20CS308PC

Course Outcomes:

CO#	Course Outcome
O1	Explain the programs for solving real world problems using Java OOP principles.
O2	Design programs using Exceptional Handling approach.
CO3	Compile program on multithreaded applications.
CO4	Construct Graphical User Interfaces using applets and swing control.
CO5	Experiment with all mouse events.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	3	3	3
CO4	3	3	3
CO5	3	3	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: OOPS THROUGH JAVA LAB

Regulation: R22

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: S.RAMCHANDRAREDDY

Course Code: 22AM405PC

#### Course Outcomes:

CO#	Course Outcome
CO1	Explain the programs for solving real world problems using Java OOP principles.
CO2	Design programs using Exceptional Handling approach.
CO3	Compile program on multithreaded applications.
CO4	Construct Graphical User Interfaces using applets and swing control.
CO5	Experiment with all mouse events.

### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 

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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Constitution of India

Regulation: R20

Year & Sem: II-I

Branch: CSE (AI&ML)

Course Coordinator Name: Dr.M.Kashiram

Course Code: 22EN310MC

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Outline the evolution of Constitution.
CO2	Relate constitutional fundamentals with the present Era
CO3	Analyses Liberalism Federalism and Socialism.
CO4	Infer the knowledge of Administration and Governance.
CO5	Appraise and address the role of governments

#### **CO-PSO Mapping:**

	PSO1	PSO2	PSO3
CO1	-	-	1
CO2	-	3	-
CO3	-1	-	3
CO4	1	2	2
CO5	-	-	2
Average	1	2	2

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Constitution of India

Regulation: R20

Year & Sem: II-I

Branch: CSE (AI&ML)

Course Coordinator Name: Dr.M.Kashiram

Course Code: 22EN310MC

Course Outcomes:

At the	end of the Course, Student will be able to	
CO#	Course Outcome	
CO1	Outline the evolution of Constitution.	
CO2	Relate constitutional fundamentals with the present Era	
CO3	Analyses Liberalism Federalism and Socialism.	
CO4	Infer the knowledge of Administration and Governance.	
CO5	Appraise and address the role of governments	

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	1	2	-	-	2	-	3	-	-	-	1
CO2	-	1	2	-	-	2	-	3	-	1	-	1
CO3	-	-	-	1	2	2	-	3	3	-	-	-
CO4	-	. 1	2	-	-	2	-	3	-	2	-	2
CO5	1	1	2	-	2	2	2	3	2	2	2	-
Average	1	1	2	1	2	2	2	3	2.5	1	2	1

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

#### **CO-PSO Mapping**

Course Name: DBMS

Regulation: R20

Year & Sem: II & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.SWAROOPA RANI

Course Code:20CS401PC

Course Outcomes:

CO#	Course Outcome
CO1	Design a database conceptually using ER Diagrams.
CO2	Design a database using Relational Model.
CO3	Make use of SQL for managing databases.
CO4	Summarize different transaction processing and Concurrency control mechanisms.
CO5	Compare different file organization methods.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: DBMS

Regulation: R20

Year & Sem: II & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.SWAROOPA RANI

Course Code: 20CS401PC

Course Outcomes:

CO#	Course Outcome
CO1	Design a database conceptually using ER Diagrams.
CO2	Design a database using Relational Model.
CO3	Make use of SQL for managing databases.
CO4	Summarize different transaction processing and Concurrency control mechanisms.
CO5	Compare different file organization methods.

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	:	-	-	-	-	-	-
CO2	3	3	3	3	3	-	-	-	-	-	-	-
CO3	3	3	3	3	3	-	-	-	1-1	-	-	-
CO4	3	3	3	3	2	-	-	-	-	-	-	-
CO5	3	3	3	3	3	-	-	-	-	-	-	-
Average	3	3	3	3	3	-	-	-	-	-	-	-

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

Module Coordinator

(20-24) Pyasanna kumai





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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: Analog and Digital Electronics

Regulation: R20

Year & Sem: II-II

Branch: CSE (AI&ML)

Course Coordinator Name: K.Prasanna Kumari

Course Code: 20EC402PC

Course Outcomes:

CO#	Course Outcome	
CO1	Understand the utilization of components.	
CO2	Analyze small signal amplifier circuits.	
CO3	Learn postulates of Boolean algebra to the digital circuit functions	
CO4	Design and analyze combinational circuits	
CO5	Know about the sequential circuits.	

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
COI	3	3	1
CO2	3	2	1
CO3	3	3	1
CO4	3	2	1
CO5	3	2	1
Average	3	2.4	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PO Mapping**

Course Name: Analog and Digital Electronics

Regulation: R20

Year & Sem : II-II

Branch: CSE (AI&ML)

Course Coordinator Name: K.Prasanna Kumari

Course Code: 20EC402PC

Course Outcomes:

At the	end of the Course, Student will be able to		
CO#	Course Outcome		
CO1	Understand the utilization of components.		
CO2	Analyze small signal amplifier circuits.		
CO3	Learn postulates of Boolean algebra to the digital circuit functions		
CO4	Design and analyze combinational circuits		
CO5	Know about the sequential circuits.		

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	-	-	-	-	2	-	-	-	2
CO2	3	3	3	-	-	-	-	2	-	-	-	2
CO3	3	2	2	-	-	-	-	2	-	-	-	2
CO4	3	2	3	2	-	-	-	2	-	-	-	2
CO5	3	2	3	2	-	-	-	2	-	-	-	2
Average	3	2.4	2.6	2	-	-	-	2	-	0=0		2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Computer Oriented Statistical Methods

Regulation: R20

Year & Sem: II & II sem

Branch: CSE(AI&ML)

Course Coordinator Name: M. Nagesh

Course Code:20CS405PC

Course Outcomes:

CO#	Course Outcome
CO1	Differentiate among random variables involved in the probability models
CO2	Describe about Sampling Distributions
CO3	Perform Test of Hypothesis and understand the concept of Proportions.
CO4	Evaluate the Solution for system of equations and to fit a curve.
CO5	Achieve the knowledge to test the hypothesis and inferences

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	2
CO2	3	3	2
CO3	3	3	2
CO4	3	3	2
CO5	3	3	2
Average	3	3	2

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

Module Coordinator



### **CMR TECHNICAL CAMPUS UGC AUTONOMOUS**

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Computer Oriented Statistical Methods

Regulation:R20

Year & Sem: II, II sem

Branch:CSE(AI&ML)

Course Coordinator Name: M. Nagesh

Course Code: 20CS405PC

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Differentiate among random variables involved in the probability models
CO2	Describe about Sampling Distributions
CO3	Perform Test of Hypothesis and understand the concept of Proportions.
CO4	Evaluate the Solution for system of equations and to fit a curve
CO5	Achieve the knowledge to test the hypothesis and inferences

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	2	2	1	1	1	1	1	1
CO2	3	3	3	3	2	2	1	1	1	1	1	1
CO3	3	3	3	3	2	2	2	1	1	1	1	1
CO4	3	3	3	3	2	2	2	1	1	1	1	1
CO5	3	3	3	3	2	2	2	1	1	1	1	1
Average	3	3	3	3	2	2	2	1	1	1	1	1

Note: 1-Low, 2-Moderate, 3-High

Course Coordinator

Module Coordinator



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ESTD: 2009

## **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Operating Systems

Regulation: R2

Year & Sem: B.Tech. II year II Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20CS404PC

Course Outcomes:

CO#	Course Outcome								
CO1	Illustrate the operating system concepts								
CO2	Compare different CPU Scheduling Algorithms								
CO3	Summarize process management and synchronization mechanisms								
CO4	Explore different memory management techniques								
CO5	Design file system interface and operations.								

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	3	2	1
CO3	3	2 .	1
CO4	3	2	1
CO5	3	2	1
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Operating Systems

Regulation: R20

Year & Sem: B.Tech. II year II Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20CS404PC

Course Outcomes:

At the	At the end of the course, student will be able to								
CO#	Course Outcome								
CO1	Illustrate the operating system concepts								
CO2	Compare different CPU Scheduling Algorithms								
CO3	Summarize process management and synchronization mechanisms								
CO4	Explore different memory management techniques								
CO5	Design file system interface and operations.								

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	1	-	-	-	-	-	-	3
CO2	3	1	1	1	1	-	-	-	-	-	-	3
CO3	3	1	1	1	1	-	-	-	-	-	-	3
CO4	3	1	1	1	1	-	-	-	-	-	-	3
CO5	3	1	1 .	1	1	-	-	-	-	-	-	3
Average	3	1	1	1	1	-	-	-	-	-	-	3

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator

(20-24) vinoda mem



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Computer Organization

Regulation: R20

Year & Sem:

**EXPLORE TO INVENT** 

2022, IV sem

Branch: CSE(AI&ML)

Course Coordinator Name: Dr. G Vinoda Reddy

Course Code: 20CS405PC

Course Outcomes:

CO#	Course Outcome
CO1	Understandthebasics of instructions sets and their impact on process or design.
CO2	Demonstrate an understanding of the design of the functional units of a digital computer system.
CO3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory
CO4	Design a pipeline for consistent execution of instructions with minimum hazards
CO5	Recognize and manipulate representations of numbers Stored in digital computers

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	2
CO2	3	3	2
CO3	3	3	2
CO4	3	3	2
CO5	3	3	2
Average	3	3	2

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



### **CMR TECHNICAL CAMPUS UGC AUTONOMOUS**

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO** Mapping

Course Name: Computer Organization

Regulation:R20

Year & Sem: 2022, IV sem

Branch:CSE(AI&ML)

Course Coordinator Name: Dr. G Vinoda Reddy

Course Code: 20CS405PC

#### Course Outcomes:

CO#	Course Outcome
CO1	Understandthebasicsofinstructionssetsandtheirimpactonprocessordesign.
CO2	Demonstrate an understanding of the design of the functional units of a digital computer system.
CO3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory
CO4	Design a pipeline for consistent execution of instructions with minimum hazards
CO5	Recognize and manipulate representations of numbers Stored in digital computers

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	3	3	1	1	1	2	1	2	3
CO2	3	3	3	2	2	1	1	1	2	1	2	3
CO3	3	3	3	2	2	1	1	1	2	1	2	3
CO4	3	2	3	2	2	1	1	1	2	1	2	3
CO5	3	2	3	2	2	1	1	1	2	1	2	3
Average	3	2	3	2	2	1	1	1	2	1	2	3

Low, 2- Moderate, 3- High

Module Coordinator

(20-24) vinodaman



## CMR TECHNICAL CAMPUS UGC AUTONOMOUS

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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name:: Operating System Lab

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: M Ravindran

Course Code: 20CS406PC

Course Outcomes:

	Course Outcome
CO1	Implement Linux System calls using C
CO2	Simulate basic operating system concepts like scheduling, memory management.
CO3	Implement the Producer – Consumer problem
CO4	Simulate Bankers Algorithm for Deadlock
CO5	Simulate the memory management techniques

### CO-PSO Mapping:

1	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	2	3	2
CO4	3	2	2
CO5	3	3	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name:: Operating System Lab

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: M Ravindran

Course Code: 20CS406PC

Course Outcomes:

CO#	Course Outcome
CO1	Implement Linux System calls using C
CO2	Simulate basic operating system concepts like scheduling, memory management.
CO3	Implement the Producer – Consumer problem
CO4	Simulate Bankers Algorithm for Deadlock
CO5	Simulate the memory management techniques

#### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 

Ravindran

ESTD: 2009



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## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: DBMS Lab

Regulation: R20

Year & Sem: II & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.SWAROOPA RANI

Course Code: 20CS407PC

Course Outcomes:

CO#	Course Outcome
CO1	Design database schema for a given application and apply normalization.
CO2	Acquire skills in using SQL commands for data definition and data manipulation.
CO3	Develop solutions for database applications using procedures.
CO4	Make use of Cursors and triggers to demonstrate database applications.
CO5	Perform queries using Aggregation function.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

Module Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO** Mapping

Course Name: DBMS Lab

Regulation: R20

Year & Sem: II & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.SWAROOPA RANI

Course Code: 20CS407PC

Course Outcomes:

CO#	Course Outcome
CO1	Design database schema for a given application and apply normalization.
CO2	Acquire skills in using SQL commands for data definition and data manipulation.
CO3	Develop solutions for database applications using procedures.
CO4	Make use of Cursors and triggers to demonstrate database applications.
CO5	Perform queries using Aggregation function.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	-	-	-	-	-	-	-
CO2	3	3	3	3	3	-	-	-	-	-	-	-
CO3	3	. 3	3	3	3	-	-	-	1-1	-	-	
CO4	3	3	3	3	3	-	-	-	-	-	-	-
CO5	3	3	3	3	3	-	-	-	-	-	-	-
Average	3	3	3	3	3	-	-	1-1	-	-	-	-

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

Module Coordinator

(20-24) prosono yurovi

ESTD: 2009



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### CO-PSO Mapping

Course Name: Analog and Digital Electronics Lab

Regulation: R20

Year & Sem: II-II

Branch: CSE (AI&ML)

Course Coordinator Name: K. Prasanna Kumari

Course Code: 20EC408PC

Course Outcomes:

CO#	Course Outcome
CO1	Able to understand the basics of semiconductors and the characteristics of semiconductor diodes.
CO2	Able to design and analyze a transistor in different configurations.
CO3	Realization of Boolean expressions using gates and universal gates using appropriate experimentation setup.
CO4	Design and realization of various combinational circuits using appropriate experimentation setup.
CO5	Design and realization of a synchronous and asynchronous counter using flip-flops using appropriate experimentation setup.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	-
CO2	3	2	1
CO3	3	2	-
CO4	. 3	2	1
CO5	3	2	-
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Analog and Digital Electronics Lab

Regulation: R20

Year & Sem: II-II

Branch: CSE (AI&ML)

Course Coordinator Name: K.Prasanna Kumari

Course Code: 20EC408PC

Course Outcomes:

CO#	Course Outcome								
CO1	Able to understand the basics of semiconductors and the characteristics of semiconductor diodes.								
CO2	Able to design and analyze a transistor in different configurations.								
CO3	Realization of Boolean expressions using gates and universal gates using appropriate experimentation setup.								
CO4	Design and realization of various combinational circuits using appropriate experimentation setup.								
CO5	Design and realization of a synchronous and asynchronous counter using flip-flops using appropriate experimentation setup.								

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	3	-	1	-	-	-	-	-	-	_	-
CO2	-	2	-	1	-	-	-	-	-	1-1	-	-
CO3	3	2	-	2	-	-	-	-	-	-	-	-
CO4	2	-	-	1	-	-	-	-	-	-	-	-
CO5	-	2	2	2		-	-	-	-	-	-	-
Average	2.5	2.25	2	1.4	-	-	-	-	-	-	-	-

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

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Module Goordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Gender Sensitization Lab

Regulation: R20

Year & Sem: II-II

Branch: CSE (AI&ML)

Course Coordinator Name:k.Jyothi

Course Code: 22EN410MC

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Students will have developed a better understanding of important issues related to genderin contemporary India.
CO2	Students will attain a finer grasp of how gender discrimination works in our society andhow to counter it
CO3	Students will acquire insight into the gendered division of labour and its relation to politics and economics
CO4	Men and women students and professionals will be better equipped to work and live together as equals .
CO5	Students will develop a sense of appreciation of women in all walks of life

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	-	-	1
CO2	-	3	-
CO3	·1	-	3
CO4	1	2	2
CO5	-	-	2
Average	1	2.5	2

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PO Mapping**

Course Name: Gender Sanitization Lab

Regulation: R22

Year & Sem: II-II

Branch: CSE (AI&ML)

Course Coordinator Name: K.Jyothi

Course Code: 22EN410MC

Course Outcomes:

CO#	Course Outcome
CO1	Students will have developed a better understanding of important issues related to genderin contemporary India.
CO2	Students will attain a finer grasp of how gender discrimination works in our society andhow to counter it
CO3	Students will acquire insight into the gendered division of labour and its relation to politics and economics
CO4	Men and women students and professionals will be better equipped to work and live together as equals .
CO5	Students will develop a sense of appreciation of women in all walks of life

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	1	2	-	1-1	2	-	3	=	-	-	1
CO2	-	1	2	-	-	2	-	3	-	1	-	1
CO3	-	-	-	1	2	2	-	3	3	-	-	-
CO4	-	1	2	-	-	2	-	3	-	2	-	2
CO5	1	1	2	-	2	2	2	3	2	2	2	-
Average	1	1	2	2	2	2	2	3	2	2	2	2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 

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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Data Mining

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: GANGARAM.G

Course Code: 20DS504PC:

Course Outcomes:

At the	end of the course, student will be able to									
CO#	Course Outcome									
CO1	Able to install weka tool and implement the different algorithms using data mining concept									
CO2	Create model using different Data Mining Techniques									
CO3	Apply classification mining algorithms as a component to the existing tools.									
CO4	Apply clustering mining techniques for realistic data.									
CO5	Implement dissension tree concept for developing different applications.									

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	2	3	2
CO4	3	2	2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Data Mining

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: GANGARAM.G

Course Code: 20DS504PC

Course Outcomes:

CO#	Course Outcome
CO1	Able to install weka tool and implement the different algorithms using data mining concept
CO2	Create model using different Data Mining Techniques
CO3	Apply classification mining algorithms as a component to the existing tools.
CO4	Apply clustering mining techniques for realistic data.
CO5	Implement dissension tree concept for developing different applications.

### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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ESTD: 2009



## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: COMPUTER NETWORKS

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: B.PRASHANTH

Course Code: 20CS502PC

Course Outcomes:

CO#	Course Outcome
CO1	Discuss the functionalities of each layer in the OSI and TCP/IP reference model.
CO2	Solve the essential protocols of computer networks and design
CO3	Analyze the routing mechanisms using different algorithms.
CO4	Obtain the skill of subnetting and routing mechanisms.
CO5	Design and implementation application layer.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	-
CO2	3	3	-
CO3	3	3	-
CO4	3	3	-
CO5	3	3	-
Average	3	3	-

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### DEPARTMENT OF CSE(AI&ML)

### CO-PO Mapping

Course Name: COMPUTER NETWORKS

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: B.PRASHANTH

Course Code: 20CS502PC

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Discuss the functionalities of each layer in the OSI and TCP/IP reference model.
CO2	Solve the essential protocols of computer networks and design
CO3	Analyze the routing mechanisms using different algorithms.
CO4	Obtain the skill of subnetting and routing mechanisms.
CO5	Design and implementation application layer.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	2	3	-	-	-	-	2	1	3
CO2	3	3	3	3	3	-	-	- 1	-	2	1	3
CO3	3	3	3	3	3	-	-	-	-	2	1	3
CO4	3	3	3	3	3	-	-	-	-	2	1	3
CO5	3	3	3	3	3	-	-	-	-	2	1	3
Avg	3	3	3	2.8	3	-	-	-	-	2	1	3

Note: 1-Low, 2-Moderate, 3-High

Course Coordinator

Module Coordinator



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## DEPARTMENT OF CSE (AI&ML)

Course Name: WEB TECHNOLOGIES

Regulation: R20

Year & Sem: III-I

Branch: CSE (AI&ML)

Course Coordinator Name: N.SATEESH

Course Code: 20CS503PC

### CO-PO Mapping

At the end of the course, student will be able to								
CO#	Course Outcome							
CO1	Apply server-side scripting with PHP language							
CO2	Understand XML and how to parse and use XML Data with Java.							
CO3	To introduce Server-side programming with Java Servlets.							
CO4	Implement JSP pages using Cookies and Session tracking.							
CO5	Design client-side scripting, validation of forms and AJAX programming							

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	-	-	-	-	-	-	-	-	-
CO2	3	2	3	-	-	-	-	-	-	-	-	-
CO3	3	2	3	-	-	-	-	- ,	-	-	-	-
CO4	3	3	3	-	-	-	-	-	-	-	-	-
CO5	3	2	3,	-	-	-	-	-	-	-	-	-
Average	3	2.3	2.8	-	-	-	-	-	-	-	-	-

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE (AI&ML)**

Course Name: CN & WT LAB

Regulation: R20

Year & Sem: III-I

Branch: CSE (AI&ML)

Course Coordinator Name: N.SATEESH

Course Code: 20CS505PC

### **CO-PO Mapping**

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Implement data link layer farming methods
CO2	Understand how errors detected and corrected that occur in transmission
CO3	Implement and analyze routing and congestion issues in network design
CO4	Design web pages through coding using HTML and PHP
CO5	Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.
CO6	Have a Good grounding of Web Application Terminologies, Internet Tools

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	3,						1			
CO2	2		3									
CO3	2		3		. 3							
CO4	3	3	3						2			
CO5	3	2	3		2							
CO6	3	2	3		2				2			
Average	2.5	2.25	3		2.3				1.6			

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Data Analytics

Regulation: R20

Year & Sem: 3rd year, I sem

Branch: CSE(AI&ML)

Course Coordinator Name: Dr.K. Mahesh

Course Code: 20CS513PE

#### Course Outcomes:

CO#	Course Outcome
CO1	Understand various Data Sources and Pre-processing mechanisms.
CO2	Depict data analysis/statistical analysis.
CO3	Design Data Architecture.
CO4	Understand the impact of data analytics for business decisions and strategy.
CO5	Design standard data visualization and formal inference procedures

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2 -	1
CO2	2	2	1
CO3	3	2	1,
CO4	3	2	1
CO5	3	2	2
Average	3	2	1

Note: 1-Low ,2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Data Analytics

Regulation: R20

Year & Sem:3rd, I sem

Branch: CSE(AI&ML)

Course Coordinator Name: Dr.K. Mahesh

Course Code: 20CS513PE

#### Course Outcomes:

CO#	Course Outcome '
CO1	Understand various Data Sources and Pre-processing mechanisms.
CO2	Depict data analysis/statistical analysis.
CO3	Design Data Architecture.
CO4	Understand the impact of data analytics for business decisions and strategy.
CO5	Design standard data visualization and formal inference procedures

### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: Distributed Database

Regulation: R20

Year & Sem: 2022, V sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS524PE

Course Outcomes:

CO#	Course Outcome
CO1	Understand the aspects of distributed database systems
CO2	Interpret query processing and optimization in distributed databases
CO3	Summarize the transaction management process
CO4	Recognize about parallel databases and reliability.
CO5	Understand the design aspects of the object-oriented database systems.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	3	2	1
CO3	3	2	2
CO4	3	2	1 .
CO5	3	2	1
Average	3	2	1

Note: 1-Low ,2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Distributed Database

Regulation: R20

Year & Sem:2022, V sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS524PE

Course Outcomes:

CO#	Course Outcome								
CO1	Understand the aspects of distributed database systems								
CO2	Interpret query processing and optimization in distributed databases								
CO3	Summarize the transaction management process								
CO4	Recognize about parallel databases and reliability.								
CO5	Understand the design aspects of the object-oriented database systems.								

### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Data Mining Lab

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: GANGARAM.G

Course Code: 20DS504PC:

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Able to install weka tool and implement the different algorithms using data mining concept
CO2	Create model using different Data Mining Techniques
CO3	Apply classification mining algorithms as a component to the existing tools.
CO4	Apply clustering mining techniques for realistic data.
CO5	Implement dissension tree concept for developing different applications.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	. 3	3
CO3	2	3	2
CO4	3	2	2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PO Mapping**

Course Name: Data Mining Lab

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: GANGARAM.G

Course Code: 20DS504PC

Course Outcomes:

CO#	Course Outcome
CO1	Able to install weka tool and implement the different algorithms using data mining concept
CO2	Create model using different Data Mining Techniques
CO3	Apply classification mining algorithms as a component to the existing tools.
CO4	Apply clustering mining techniques for realistic data.
CO5	Implement dissension tree concept for developing different applications.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	-		-	-	-	-	3
CO2	3	3	2	2	3	-		-	-	-	-	3
CO3	3	3	3	3	3	-		1 - 1	-	-	:	3
CO4	3	. 2	3	3	3	-		-	1-1	-	-	3
CO5	3	3	3	3	3	-		-	1-1	-	-	3
Average	3	3	3	3	3	-	-	-	-	-	-	3

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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ESTD: 2009

### **DEPARTMENT OF CSE (AI&ML) CO-PSO Mapping**

Course Name: CN & WT LAB

Regulation: R20

Year & Sem: III-I

Branch: CSE (AI&ML)

Course Coordinator Name: N.SATEESH

Course Code: 20CS505PC

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Implement data link layer farming methods
CO2	Understand how errors detected and corrected that occur in transmission
CO3	Implement and analyze routing and congestion issues in network design
CO4	Design web pages through coding using HTML and PHP
CO5	Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.
CO6	Have a Good grounding of Web Application Terminologies, Internet Tools

### CO-PSO Mapping:

- 1	PSO1	PSO2	PSO3
CO1	2	2	
CO2	3	2	
CO3	2	2	
CO4	3	2	
CO5	3	2	
Average	2	2	
	2.5	2	

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE (AI&ML)**

Course Name: CN & WT LAB

Regulation: R20

Year & Sem: III-I

Branch: CSE (AI&ML)

Course Coordinator Name: N.SATEESH

Course Code: 20CS505PC

#### **CO-PO Mapping**

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Implement data link layer farming methods
CO2	Understand how errors detected and corrected that occur in transmission
CO3	Implement and analyze routing and congestion issues in network design
CO4	Design web pages through coding using HTML and PHP
CO5	Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.
CO6	Have a Good grounding of Web Application Terminologies, Internet Tools

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	3						1			
CO2	2		3									
CO3	2		3		3							
CO4	3	3	3						2			
CO5	3	2	3		2							
CO6	3	2	3		2				2			
Average	2.5	2.25	3		2.3				1.6			

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

**Module Coordinator** 



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(20-24) M. Rayindran

### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: R Programming Lab

Regulation: R20

Year & Sem: 2022, V Sem

Branch: AIML

Course Coordinator Name: Shaik Sharif

Course Code: 20DS506PC

Course Outcomes:

CO#	Course outcomes
CO1	Implement basic concepts of R Programming that includes conditional, looping lists, Strings, Functions, Frames, Arrays, and File programming.
CO2	Implement the concepts of R script to extract the data from data frames and file operations.
CO3	Apply descriptive statistic on different data sets.
CO4	Make Use of R Graphics and Tables to visualize results of various statistical operations on data.

### CO-PSO Mapping:

	PO1	PO2	PO3
CO1	3	2	3
CO2	3	3	3
CO3	3	3	3
CO4	3	2	3
CO5	3	2	3
Average	3	2	3

Note:1-Low,2-Moderate,3-High.

Course Coordinator

**Module Coordinator** 

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: R Programming Lab

Regulation: R20

Year & Sem: 2022, V Sem

Branch: AIML

Course Coordinator Name: Shaik Sharif

Course Code: 20DS506PC

Course Outcomes:

CO#	Course outcomes
CO1	Implement basic concepts of R Programming that includes conditional, looping lists, Strings, Functions, Frames, Arrays, and File programming.
CO2	Implement the concepts of R script to extract the data from data frames and file operations.
CO3	Apply descriptive statistic on different data sets.
CO4	Make Use of R Graphics and Tables to visualize results of various statistical operations on data.

### CO-PSO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	3	3	-	-	-	-	-	-	-
CO2	3	3	3	2	2	-	-	-	-	-	-	-
CO3	3	3	3	2	2	-	-	-	-	-	-	-
CO4	3	2	3	2	2	-	-	-	-	-	-	-
CO5	3	2	3	2	2	-	-	-	-	-	-	-
Average	3	2	3	2	2	-	-	-	-	-	-	(=)

Note:1-Low,2-Moderate,3-High.

Course Coordinator

**Module Coordinator** 

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## **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: INTELLECTUAL PROPERTY RIGHTS

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: B.DURGABHAVANI

Course Code: 20MC5091P

Course Outcomes:

CO#	Course Outcome
CO1	Distinguish and Explain various forms of IPR
CO2	Interpret the trade Marks, copy rights, patents and agencies
CO3	Apply statutory provisions to protect
CO4	Use of rules and properties of IPR for grants.
CO5	Develop skill of making search using modern tools and technics

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	2
CO2	3	2	2
CO3	3	2	2
CO4	3	2	2
CO5	3	2	2
Average	3	2	2

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO** Mapping

Course Name: INTELLECTUAL PROPERTY RIGHTS

Regulation: R20

Year & Sem: III & I

Branch: CSE (AI&ML)

Course Coordinator Name: B.DURGA BHAVANI

Course Code: 20MC5091P

Course Outcomes:

At the	end of the course ,student will be able to
CO#	Course Outcome
CO1	Distinguish and Explain various forms of IPR
CO2	Interpret the trade Marks, copy rights, patents and agencies
CO3	Apply statutory provisions to protect
CO4	Use of rules and properties of IPR for grants.
CO5	Develop skill of making search using modern tools and technics.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1	1	2	1	-	-	2	3	2	1	3
CO2	3	1	1	2	1	-	1	2	3	2	-	3
CO3	2	1	1	1	1	-	-	2	3	2	-	3
CO4	2	1	1	1	3	-	-	2	3	2	-	3
CO5	2	1	1	1	3	-	-	2	3	2		3
Average	2.2	1	1	1.4	3	-	0.2	2	3	2	0.2	3

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: ARTIFICIAL INTELLIGENCE

Course Coordinator Name: B.PRASHANTH

Regulation: R20

Branch: CSE (AI&ML)

Course Code: 20AI601PC

### Course Outcomes:

Year & Sem: III & II

At the	At the end of the Course, Student will be able to							
CO#	Course Outcome							
CO1	Ability to formulate problems expressed in natural language.							
CO2	Select a search algorithm for a problem and estimate its performance.							
CO3	Demonstrate the skill for representing knowledge.							
CO4	Develop the ability to apply AI techniques to solve problems.							
CO5	Discuss about Probabilistic theory							

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	2	3	2
CO4	3	2	2
CO5	3	3	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

### CO-PO Mapping

Course Name: ARTIFICIAL INTELLIGENCE

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.PRASHANTH

Course Code: 20AI601PC

Course Outcomes:

At the	end of the course,student will be able to
CO#	Course Outcome
CO1	Ability to formulate problems expressed in natural language.
CO2	Select a search algorithm for a problem and estimate its performance.
CO3	Demonstrate the skill for representing knowledge.
CO4	Develop the ability to apply AI techniques to solve problems.
CO5	Discuss about Probabilistic theory

### CO-PO Mapping:

	co ro mapping.											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	-		-	-	-	-	3
CO2	3	3	2	2	3	-		-	-	-	-	3
CO3	3	3	3	3	3	-		-	-	-	-	3
CO4	3	2	3	3	3	-		-	-	-	-	3
CO5	3	3	3	3	3	-		-	-	-	-	3
Average	3	3	3	3	3					,		3

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 

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ESTD: 2009

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## **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: Compiler Design

Regulation: R20

Year & Sem: 2023, VI sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS602PC

Course Outcomes:

CO#	Course Outcome	
CO#	Course Outcome	
CO1	Compute tokens and regular expressions for lexical analysis.	
CO2	Implement top-down and bottom-up parsers.	
CO3	Construct intermediate code for procedures.	
CO4	Optimize the code generation	
CO5	Analyze the data flow.	

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	3	2	1
CO3	3	2	2
CO4	3	2	1
CO5	3	2	1
Average	3	2	1

Note: 1-Low ,2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Compiler Design

Regulation: R20

Year & Sem: 2023, VI sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS602PC

Course Outcomes:

CO#	Course Outcome							
CO1	Compute tokens and regular expressions for lexical analysis.							
CO2	Implement top-down and bottom-up parsers.							
CO3	Construct intermediate code for procedures.							
CO4	Optimize the code generation							
CO5	Analyze the data flow.							

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8.	PO9	PO10	PO11	PO12
CO1	3	2	3	3	3	-	-	-	-	-	-	2
CO2	3	3	3	2	2	-	-	-	-	-	-	1
CO3	3	3	2	2	2	-	-	-	-	-	-	2
CO4	3	2	3 .	2	2	-	1-	-	-	-	-	1
CO5	3	3	3	2	2	-	1-1	-	-	-	-	2
Average	3	3	3	2	2	-		-	-	-	-	2

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: SOFTWARE ENGINEERING

Regulation: R20/R22

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: U.SARITHA

Course Code: 22AM302PC

Course Outcomes:

CO#	Course Outcome
CO1	Define the end-user requirements into the system
CO2	Translate and apply the process model based on software requirements.
CO3	Build the design of a systematic models
CO4	Categories the testing strategies and generate a report.
CO5	Formulate the metrics for process and plan

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	2
CO2	3	2	1
CO3	3	2	2
CO4	3	2	2
CO5	3	2	3
Average	3	2	2

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO** Mapping

Course Name: SOFTWARE ENGINEERING

Regulation: R20/R22

Year & Sem: II & I

Branch: CSE (AI&ML)

Course Coordinator Name: U.SARITHA

Course Code: 22AM302PC

Course Outcomes:

At the	At the end of the course, student will be able to								
CO#	Course Outcome								
CO1	Define the end-user requirements into the system								
CO2	Translate and apply the process model based on software requirements.								
CO3	Build the design of a systematic models								
CO4	Categories the testing strategies and generate a report.								
CO5	Formulate the metrics for process and plan								

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	2	3	2	1	1 - 1	2	2	2	3
CO2	3	3	3	2	3		1		-	3	3	3
CO3	3	3	3	3	3	1	2	2	3	3	2	3
CO4	3	3	3	3	3	2	-	-	3	-	3	3
CO5	3	3	3	3	3	-	-	-	2	-	2	3
Average	3	3	2.8	2.6	3	1	0.8	2	2	1.6	2.4	3

Note: 1-Low, 2-Moderate, 3-High

**Course Coordinator** 

Module Coordinator

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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: - Software Testing Methodologies

Regulation: R20

Year & Sem: V & II

Branch: CSE (AI&ML)

Course Coordinator Name: HAFEENA.MD

Course Code: 20DS501PC

Course Outcomes:

CO#	Course Outcome
CO1	Design the best test strategy in accordance with the development model.
CO2	Apply transaction-flow and domain path testing strategies.
CO3	Illustrate the logic-based testing method.
CO4	Apply the network-flow testing for the application.
CO5	Develop automated testing using the Jmeter or WinRunner tools.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	2	3
CO3	2	3	2
CO4	3	2	2
CO5	3	2	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

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Module Coordinator



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## **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name:- Software Testing Methodologies

Regulation: R20

Year & Sem: V & II

Branch: CSE (AI&ML)

Course Coordinator Name: HAFEENA.MD

Course Code: 20DS501PC

Course Outcomes:

CO#	Course Outcome
CO1	Design the best test strategy in accordance with the development model.
CO2	Apply transaction-flow and domain path testing strategies.
CO3	Illustrate the logic-based testing method.
CO4	Apply the network-flow testing for the application.
CO5	Develop automated testing using the Jmeter or WinRunner tools.

### CO-PO Mapping:

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

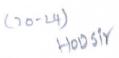
Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

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## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: ARTIFICIAL INTELLIGENCE LAB

Regulation: R20

Year & Sem: III & II

Branch: CSE (AI&ML)

Course Coordinator Name: B.PRASHANTH

Course Code: 20AI604PC

Course Outcomes:

At the end of the Course, Student will be able to								
CO#	Course Outcome							
CO1	Develop skills in different Learning Algorithms in AI.							
CO2	Apply the basic principles of AI in problem solving using LISP/PROLOG							
CO3	Implement different algorithms using LISP/PROLOG							
CO4	Implement an Expert System using JESS/PROLOG							
CO5	Implement an Expert System using RVD/PROLOG							

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
COL	3	3	2
CO2	3	3	3
CO3	3	3	3
CO4	3	3	3
CO5	3	3	3
Average	3	3	3

Note: 1-Low ,2- Moderate , 3-High

Course Coordinator

**Module Coordinator** 



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## **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: ARTIFICIAL INTELLIGENCE LAB

Course Coordinator Name: B.PRASHANTH

Course Outcomes:

Year & Sem: III & II

Regulation: R20

Branch: CSE (AI&ML)

Course Code: 20AI604PC

At the	At the end of the course, student will be able to							
CO#	Course Outcome							
CO1	Develop skills in different Learning Algorithms in AI,							
CO2	Apply the basic principles of AI in problem solving using LISP/PROLOG							
CO3	Implement different Algorithms using LISP/PROLOG							
CO4	Implement an Expert System using JESS/PROLOG							
CO5	Implement an Expert System using RVD/PROLOG							

### CO-PO Mapping:

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

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

**Module Coordinator** 

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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name:- Software Testing Methodologies Lab

Regulation: R20

Year & Sem: V & II

Branch: CSE (AI&ML)

Course Coordinator Name: HAFEENA.MD

Course Code: 20DS501PC

Course Outcomes:

CO#	Course Outcome
CO1	Design the best test strategy in accordance with the development model.
CO2	Apply transaction-flow and domain path testing strategies.
CO3	Illustrate the logic-based testing method.
CO4	Apply the network-flow testing for the application.
CO5	Develop automated testing using the Jmeter or WinRunner tools.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	3	-		-	-	-	-	3
CO2	3	3	2	2	3	-		-	-	-	-	3
CO3	3	3	3	3	3	-		-	-	-	-	3
CO4	3	2	3	3	3	-		-	-	-	×-	3
CO5	3	3	3	3	3	-		-	-	-	-	3
Average	3	3	3	3	3							3

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

### **CO-PSO Mapping**

Course Name: - Software Testing Methodologies Lab

Regulation: R20

Year & Sem: V & II

Branch: CSE (AI&ML)

Course Coordinator Name: HAFEENA.MD

Course Code: 20DS501PC

Course Outcomes:

CO#	CO# Course Outcome						
CO1	Design the best test strategy in accordance with the development model.						
CO2	Apply transaction-flow and domain path testing strategies.						
CO3	Illustrate the logic-based testing method.						
CO4	Apply the network-flow testing for the application.						
CO5	Develop automated testing using the Jmeter or WinRunner tools.						

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	2	3
CO3	2	3	2
CO4	3	2	2
CO5	3	2	3
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 





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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: Business Economics & Financial Analysis

Regulation: R20

Year & Sem: IV-I

Branch: CSE (AI&ML)

Course Coordinator Name: D. Kanaka Durga

Course Code: 20MB701PC

Course Outcomes:

CO#	Course Outcome
CO1	Understand the various Forms of Business and the impact of economic variables on the Business.
CO2	Comprehend the demand and supply analysis
CO3	Explore the usage of marketing and pricing of a product
CO4	Maintaining the financial accounts of a firm or company.
CO5	Monitoring the accounts through ratios.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	-	-	3
CO2	-	-	3
CO3		-	3
CO4	-	-	2
CO5	-	-	2
Average	-	-	2.6

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## DEPARTMENT OF CSE (AI&ML)

### **CO-PO Mapping**

Course Name: Business Economics & Financial Analysis

Regulation: R20

Year & Sem:

Branch: CSE (AI&ML)

Course Coordinator Name: D.Kanaka Durga

Course Code: 20MB701PC

Course Outcomes:

CO#	Course Outcome
CO1	Understand the various Forms of Business and the impact of economic variables on the Business.
CO2	Comprehend the demand and supply analysis
CO3	Explore the usage of marketing and pricing of a product
CO4	Maintaining the financial accounts of a firm or company.
CO5	Monitoring the accounts through ratios.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	-	-	-	-	-	-	-	-	-	3	-
CO2	-	-	-	-	-	-	-	-	-	-	3	-
CO3	-	-	-	-	-	-	-	-	-	-	3	-
CO4	-	-	-	-	-	-	-	-	-	-	3	-
CO5	-	-	-	-	-	-	7-1	-	-	-	3	-
Average	-	-	-	-	-	-	-		-	-	3	-

Note: 1- Low, 2- Moderate, 3- High-

**Course Coordinator** 

**Module Coordinator** 





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## DEPARTMENT OF CSE(AI&ML)

### **CO-PSO Mapping**

Course Name: MACHINE LEARNING

Regulation: R20

Year & Sem: B.Tech. IV year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ms. MAMATHA B

Course Code: 20CS702PC

Course Outcomes:

CO#	Course Outcome	
CO1	Interpreting the concept of computational intelligence.	
CO2	Description of artificial neural networks and their usage.	
CO3	Implement basic machine learning algorithms.	
CO4	Implement instant-based learning by set rules.	
CO5	Describes reinforcement learning algorithms for analysis.	

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: MACHINE LEARNING

Regulation: R20

Year & Sem: B.Tech. IV year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ms. MAMATHA B

Course Code: 20CS702PC

### Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Interpreting the concept of computational intelligence.
CO2	Description of artificial neural networks and their usage.
CO3	Implement basic machine learning algorithms.
CO4	Implement instant-based learning by set rules.
CO5	Describes reinforcement learning algorithms for analysis.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	2	2	-	-	-	-	-	-	1
CO2	3	2	2	2	2	-	-	-	-	-	-	1
CO3	3	3	3	3	2	-	-	-	-	-	-	1
CO4	3	3	3	3	2	1-1	-	1-1	-	-	-	1
CO5	3 .	3	2	2	2	1 - 1	1-	-	-	-	-	1
Average	3	2.8	2.4	2.4	2	-	-	-	-	-	-	1

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

**Module Coordinator** 

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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PSO Mapping**

Course Name: Cloud Computing

Regulation: R20

Year & Sem: 2023, VII sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS741PE

Course Outcomes:

CO#	Course Outcome
CO1	Understand the cloud computing paradigms.
CO2	Demonstrate an Understand various service delivery models of a cloud computing architecture
CO3	Identify the cloud infrastructure management and migration tools
CO4	Understand the cloud service ways in which the cloud can be programmed.
CO5	Recognize cloud service providers.

### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1 .
CO2	3	2	1 .
CO3	3	2	2
CO4	3	2	1
CO5	3	2	1
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

Module Coordinator



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### **DEPARTMENT OF CSE(AI&ML)**

### **CO-PO Mapping**

Course Name: Cloud Computing

Regulation: R20

Year & Sem:2023, VII sem

Branch: CSE(AI&ML)

Course Coordinator Name: G Parvathi Devi

Course Code: 20CS741PE

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Understand the cloud computing paradigms.
CO2	Demonstrate an Understand various service delivery models of a cloud computing architecture
CO3	Identify the cloud infrastructure management and migration tools
CO4	Understand the cloud service ways in which the cloud can be programmed.
CO5	Recognize cloud service providers.

### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	3	3	3	-	-	-	-	-	-	2
CO2	3	3	3	2	2	1-1			-	-	-	1
CO3	3	3	2	2	2	11	n <b>-</b> 1	p.= 32	-	-	-	2
CO4	3	2	3	2	2	-	-	- :	-	-	-	1
CO5	3	3	3	2	2	-		-	-	-	-	2
Average	3	3	3	2	2		-	-	-	-	-	2

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

Module Coordinator



#### **CMR TECHNICAL CAMPUS UGC AUTONOMOUS**

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### **DEPARTMENT OF CSE(AI&ML)**

#### CO-PSO Mapping

Course Name: DEEP LEARNING

Regulation: R20

Year & Sem: B.Tech. IV year I Sem?

Branch: CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20AI751PE

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Describe the concepts of Neural Networks
CO2	Select the Learning Networks in modeling real-world systems
CO3	Apply optimization strategies for large scale applications
CO4	Use an efficient algorithm for Deep Models
CO5	Implement Deep learning models in various domains.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	1	1
CO2	3	1	1
CO3	3	2	1
CO4	3	2	1
CO5	3	2	1
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



#### CMR TECHNICAL CAMPUS UGC AUTONOMOUS

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### **DEPARTMENT OF CSE(AI&ML)**

#### **CO-PO Mapping**

Course Name: DEEP LEARNING

Regulation: R2

Year & Sem: B.Tech. IV year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ravindran M

Course Code: 20AI751PE

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Describe the concepts of Neural Networks
CO2	Select the Learning Networks in modeling real-world systems
CO3	Apply optimization strategies for large scale applications
CO4	Use an efficient algorithm for Deep Models
CO5	Implement Deep learning models in various domains.

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	. 1	-	-	-	-	-	-	3
CO2	3	2	1	1	1	·-	-	-	-	-	-	3
CO3	3	2	1	2	1	-	-	-	-	-	-	3
CO4	3	2	1	2	1	-	-	-	-	-	-	3
CO5	3	2	2	2	1	-	-	-	-	-	-	3
Average	3	2	1	2	1	- (	-	-	-	-	-	3

Note: 1-Low, 2-Moderate, 3-High

Course Coordinator

**Module Coordinator** 

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## CMR TECHNICAL CAMPUS UGC AUTONOMOUS

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## DEPARTMENT OF CSE(AI&ML)

#### **CO-PO** Mapping

Course Name: INFORMATION RETRIEVAL SYSTEM

Regulation: R20

Year & Sem: B. Tech. IV year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Ramesh A

Course Code: 20DS721OE

Course Outcomes:

At the	end of the course, student will be able to
CO#	Course Outcome
CO1	Understand IR principles large collections of data.
CO2	Design the data model using statistical approaches.
CO3	Apply automatic document clustering on IR.
CO4	Design an information Retrieval system for web search tasks
CO5	Apply visualization tools for multimedia information retrieval.

#### CO-PO Mapping:

					*							
	PO1	PO2	PO3	PO4	PO5	·PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	2	3	-	-	-	-	-	-,	3
CO2	3	3	3	2	3	-	-	-	-	-	-	3
CO3	3	3	3	2	3	-	-	-	-	-	-	3
CO4	3	3	2	2	3		-	-	-	-		3
CO5	3	3	2	2	3	- "	-	-	- '	-	-	3
Average	3	3	2.6	2	3	-	-	-	-	-	-	3

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Module Coordinator



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# DEPARTMENT OF CSE(AI&ML)

#### CO-PSO Mapping

Course Name: INFORMATION RETRIEVAL SYSTEM

Regulation: R20

Year & Sem: B.Tech. IV year I Sem

Branch: CSE(AI&ML)

Course Coordinator Name: RAMESH A

Course Code: 20DS721OE

Course Outcomes:

At the	end of the Course, Student will be able to
CO#	Course Outcome
CO1	Understand IR principles large collections of data.
CO2	Design the data model using statistical approaches.
CO3	Apply automatic document clustering on IR.
CO4	Design an information Retrieval system for web search tasks.
CO5	Apply visualization tools for multimedia information retrieval.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	1
CO2	3	3	1
CO3	3	3	1
CO4	3	3	1
CO5	3	3	1
Average	3	3	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

Module Coordinator



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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: Machine Learning Lab

Regulation: R20

Year & Sem: IV & I

Branch: CSE (AI&ML)

Course Coordinator Name: MS. Mamatha B

Course Code: 20AI703PC

Course Outcomes:

CO#	Course Outcome
CO1	Identify the complexity of Machine Learning algorithms and their limitations
CO2	Extract the data from the database using python
CO3	Apply common Machine Learning algorithms in practice and implementing their own;
CO4	Implement the finite words classification system using Back-propagation algorithm
CO5	Build the predictive model from data and analyze their performance

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	3	3
CO2	3	3	3
CO3	2	3	2
CO4	3	2	2
CO5	3	3	2
Average	3	3	3

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PO Mapping**

Course Name: Machine Learning Lab

Regulation: R20

Year & Sem: IV & I

Branch: CSE (AI&ML)

Course Coordinator Name: Ms. Mamatha B

Course Code: 20AI703PC

Course Outcomes:

CO#	Course Outcome
CO1	Identify the complexity of Machine Learning algorithms and their limitations
CO2	Extract the data from the database using python
CO3	Apply common Machine Learning algorithms in practice and implementing their own;
CO4	Implement the finite words classification system using Back-propagation algorithm
CO5	Build the predictive model from data and analyze their performance

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	.3	3	3	3	3	-		-	-	-	-	3
CO2	3	3	2	2	3	-		-	-	-	-	3
CO3	3	3	3	3	3	-		-	-	-	-	3
CO4	3	2	3	3	3	-		-	-	-	-	3
CO5	3	3	3	3	3	-		-	7-1	-	-	3
Average	3	3	3	3	3							3

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

Module Coordinator

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ESTD: 2009



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## **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: Organizational Behaviour

Regulation: R20

Year & Sem: IV-II

Branch: CSE (AI&ML)

Course Coordinator Name: Dr. Mallika Rao . P

Course Code: 20MB801HS

Course Outcomes:

CO#	Course Outcome
CO1	Introducing environmental and organizational behavior
CO2	Describing the personality and process attributes at a cognitive level
CO3	Usage of decision making at individual and team levels.
CO4	Comprehend power and politics.
CO5	Analyzing the leading performance.

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	-	-	3
CO2	-	-	3
CO3	-	-	3
CO4		-	2
CO5	-	-	2
Average	-	-	2.6

Note: 1-Low, 2- Moderate, 3-High

Course Coordinator

**Module Coordinator** 



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### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PO Mapping**

Course Name: Organizational Behaviour

Regulation: R20

Year & Sem: IV-II

Branch: CSE (AI&ML)

Course Coordinator Name: Dr. Mallika Rao, P

Course Code: 20MB801PC

Course Outcomes:

CO#	Course Outcome	
CO1	Introducing environmental and organizational behavior	
CO2	Describing the personality and process attributes at a cognitive level	
CO3	Usage of decision making at individual and team levels.	
CO4	Comprehend power and politics.	
CO5	Analyzing the leading performance.	

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	-	-	-	-	-	-	-	-	-	3	-
CO2	-	-	-	-	-	-	-	-	-	-	3	-
CO3	-	-	-	-	-	-	-	-	-	-	3	-
CO4	-	-	-	-	-	-	-	-	-	-	3	-
CO5	-	-	-	-	-	-	-	-	-	-	3	-
Average	-	-	-	-	-	-	-	_	-	-	3	_

Note: 1- Low, 2- Moderate, 3- High

Course Coordinator

Dr. MallikaRao

**Module Coordinator** 



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#### **DEPARTMENT OF CSE (AI&ML)**

#### **CO-PSO Mapping**

Course Name: CYBER FORENSICS

Regulation: R20

Year & Sem: IV& II

Branch: CSE (AI&ML)

Course Coordinator Name: R.LAVANYA

Course Code: 20CS862PE

At the	At the end of the Course, Student will be able to								
CO#	Course Outcome								
CO1	Understand the usage of computer in forensic								
CO2	Explain initial response and forensic duplication								
CO3	Analyze the forensic analysis and validation								
CO4	Usage of forensic tools And Understanding mobile forensics								
CO5	Understanding the working with DOS System								

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	2
CO2	3	2	2
CO3	3	2	2
CO4	3	2	2
CO5	3	2	2
Average	3	2	2

Note: 1-Low 2- Moderate, 3-High

**Course Coordinator** 

Module Coordinator



#### CMRTECHNICALCAMPUS UGC AUTONOMOUS

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#### DEPARTMENTOFCSE (AI&ML)

#### **CO-PO Mapping**

CourseName: CYBER FORENSICS

Regulation: R20

Year&Sem: IV & II

Branch: CSE (AI&ML)

Course Coordinator Name: R.LAVANYA

Course Code: 20CS862PE

Course Outcomes:

At the	At the end of the course ,student will be able to							
CO#	Course Outcome							
CO1	Understand the usage of computer in forensic							
CO2	Explain initial response and forensic duplication							
CO3	Analyze the forensic analysis and validation							
CO4	Usage of forensic tools And Understanding mobile forensics							
CO5	Understanding the working with DOS System							

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	2	1	-	-	2	3	2	1	3
CO2	2	1	1	2	1	-	1	2	3	2	-	3
CO3	2	1	1	1	1	-	-	2	3	2	-	3
CO4	2	1	1	1	3	-	-	2	3	2	-	3
CO5	2	1	1	1	3	-	7 - 1	2	3	2		3
Average	2.2	1	1	1.4	3	-	0.2	2	3	2	0.2	3 .

Note: 1- Low, 2- Moderate, 3- High

**Course Coordinator** 

Module Coordinator



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## **DEPARTMENT OF CSE(AI&ML)**

#### **CO-PSO Mapping**

Course Name: SCRIPTING LANGUAGES

Regulation: R20

Year & Sem: B. Tech. IV year II Sem

Branch: CSE(AI&ML)

Course Coordinator Name: RAMESH A

Course Code: 20CS832OE

Course Outcomes:

At the end of the Course, Student will be able to							
CO#	Course Outcome						
CO1	Comprehend the SOAP architecture and web services.						
CO2	Describe the Ruby scripting language.						
CO3	Apply the basic Perl programming language.						
CO4	Implement the advanced programming in PERL.						
CO5	Apply TCL programming.						

#### CO-PSO Mapping:

	PSO1	PSO2	PSO3
CO1	3	2	1
CO2	3	2	1
CO3	3	2	1
CO4	3	2	1
CO5	3	2 .	1
Average	3	2	1

Note: 1-Low, 2- Moderate, 3-High

**Course Coordinator** 

**Module Coordinator** 



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## **DEPARTMENT OF CSE(AI&ML)**

#### CO-PO Mapping

Course Name: SCRIPTING LANGUAGES

Regulation: R20

Year & Sem: B. Tech. IV year II Sem

Branch: CSE(AI&ML)

Course Coordinator Name: Mr. Ramesh A

Course Code: 20CS832OE

Course Outcomes:

CO#	# Course Outcome								
CO1	Comprehend the SOAP architecture and web services.								
CO2	Describe the Ruby scripting language.								
CO3	Apply the basic Perl programming language.								
CO4	Implement the advanced programming in PERL.								
CO5	Apply TCL programming.								

#### CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	1	-	-	-	-	-	-	1
CO2	3	3	3	3	2	-	-	-	-	-	-	1
CO3	3	3	3	3	1		-	-	-	-	-	1
CO4	3	3	3	2	2	-1 4	-	-		-	-	1
CO5	3	3	3	2	2	-		i <b>-</b> i			-	1
Average	3	3	3	3	1.6	-	-	-	1. <b>-</b> 0	-	-	1

Note: 1-Low, 2-Moderate, 3-High

Course Coordinator

Module Coordinator