

(Formerly St.Mary's Engineering College, St.Mary's P.G. Centre & St.Mary's College of Pharmacy)
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Chebrolu (Village & Mandal), Guntur (Dt.) - 522 212, A.P., INDIA. Website: www.stmarysguntur.com
Phone: 08644-254477, 88, Mobile: 9030235630, 96667 77091, 99483 99402, 99514 28677, Fax: 040-66809093

#### **Course Outcomes:**

Subject	CO No	Course outcome	Level	Bloom's Taxonomy(New)
	C214.1	Apply principles of NumPy and Pandas to the analysis of data	LL2	Understanding
FDS	C214.2	Make use of various file formats in loading and storage of data.	LL1	Remembering
	C214.3	Identify and apply the need and importance of pre-processing techniques.	LL3	Applying
	C214.4	Show the results and present them in a pictorial format.	LL4	Analyzing

#### **CO-PO Mapping & CO-PSO Mapping**

									PO				PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	9	PO10	PO11	PO12	1	PSO2	PSO3
C214.													2		
1	3	2													
C214.													2		
2	3	2	1												
C214.													2		
3	3	2	1												
C214.													2		
4	3	2	1												
	3	2	1									1	2		

### \* 3-Strong 2-Moderate 1-Slight

#### **Mapping Reasons:**

- 1. CO-1 is completely related to Apply principles of NumPy and Pandas to the analysis of data, so CO 1strongly map with PO-1, moderately mapped with PO-2.
- 2. CO-2 is strongly related to Make use of various file formats in loading and storage of data., so CO-2 strongly maps with PO-1, moderately mapped with PO-2 and slightly mapped with PO-3.
- 3. CO-3 is strongly related to Identify and apply the need and importance of pre-processing techniques. So CO-3 strongly maps with PO-1, moderately mapped with PO-2 and slightly mapped with PO-3.
- 4. CO-4 is strongly related to Show the results and present them in a pictorial format, so CO-4 strongly maps with PO-1, moderately mapped with PO-2 and slightly mapped with PO-3.

### **CO's-PSO's Mapping Reasons:**



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- 1. CO-1 is completely related to Apply principles of NumPy and Pandas to the analysis of data, so CO-1 moderately mapped with PSO-1.
- 2. CO-2 is strongly related to Make use of various file formats in loading and storage of data, so CO-1 moderately mapped with PSO-1.
- 3. CO-3 is strongly related to Identify and apply the need and importance of pre-processing techniques, so CO 1 moderately mapped with PSO-1.
- 4. CO-4 is strongly related to Show the results and present them in a pictorial format, so CO 1 moderately mapped with PSO-1.



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### **INFORAMTION RETREIVAL SYSTEMS**

#### **III. COURSE OBJECTIVES:**

1	Demonstrate genesis and diversity of information retrieval situations for text and hyper media.
2	Describe hands-on experience store, and retrieve information from www using semantic approaches.
3	Demonstrate the usage of different data/file structures in building computational search engines.
4	Analyze the performance of information retrieval using advanced techniques such as classification, clustering, and filtering over multimedia.
5	Analyze ranked retrieval of a very large number of documents with hyperlinks between them.
6	Demonstrate Information visualization technologies like Cognition and perception in the Internet or Web search engine.

### **COURSE OUTCOMES**

C325.1	To understand the different information retrieval models.
C325.2	To know about evaluation methods of the information retrieval model.
C325.3	To know about text categorization and its implementation
C325.4	To demonstrate the challenges associated with each topic on new domain of retrieval and classification



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### **CO-PO MAPPING:**

PO/CO NO:	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C325.1			3									
C325.2			2									
C325.3			3		3							
C325.4		2			3							

1: LOW 2: MODERATE 3: HIGH



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### MATHEMATICAL FOUNDATION FOR COMPUTER SCIENCE

Course Code	Course Outcome	Level	Bloom's Taxonomy(New)
CO2.1.4.1	Verify the validity of a logical flow of arguments.	L2	Understanding
CO2.1.4.2	Identify various types of relations and their	L4	Analyzing
	properties		
CO2.1.4.3	Solve recurrence relations of various types.	L3	Applying
CO2.1.4.4	Identify algebraic structures and learn modular	L4	Analyzing
	arithmetic.		
CO2.1.4.5	Understand various concepts of graphs and	L2	Understanding
	spanning trees.		

Course Outcomes – Program Outcomes mapping

PO/PSO	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
CO2.1.4.1	3	3	2	3								2	2		
CO2.1.4.2	3	2										1			
CO2.1.4.3	3	3	2	3								1	2		
CO2.1.4.4	3	2										1	2		
CO2.1.4.5	3	1	3	3								3	3		
	3	2.2	2.3	3								1.6	2.5		
* 3-Str	ng	2.	-Mode	erate		I	1-Slig	ht		I	I	I	ı	I	

### Mapping Reasons (CO-PO)

- 1. CO-1 is completely related to Verify the validity of a logical flow of arguments, so CO 1 strongly map with PO-1,PO2 and PO4, and moderately mapped with PO3 and PO12
- 2. CO-2 is strongly related to identify various types of relations and their properties, so CO-2 strongly maps with PO-1 and moderately map with PO-2 and slightly mapped with PO12.
- 3. CO-3 is strongly related to Solve recurrence relations of various types, so CO-3 strongly map with PO-1,PO2 and PO4, and moderately mapped with PO3 and slightly mapped with PO12



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- 4. CO-4 is strongly related to identify algebraic structures and learn modular arithmetic, so CO-4 strongly maps with PO-1 and moderately map with PO-2 and slightly mapped with PO12.
- 5. CO-5 is strongly related to Understand various concepts of graphs and spanning trees, so CO-5 strongly map with PO1, PO3, PO4 and PO12, Slightly mapped with PO2

#### **Mapping Reasons (CO-PSO)**

- 1. CO-1 is completely related to Verify the validity of a logical flow of arguments, so CO 1 moderately mapped with PSO1
- 2. CO-3 is strongly related to Solve recurrence relations of various types, so CO-3 moderately mapped with PSO1
- 3. CO-4 is strongly related to identify algebraic structures and learn modular arithmetic, so CO-4 moderately mapped with PSO1
- 4. CO-5 is strongly related to Understand various concepts of graphs and spanning trees, so CO-5 strongly mapped with PSO1

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Name of Faculty: Dr. JAIDEEP GERA Class: IV CSE

Name of Course: Machine learning

#### **CO-PO MAPPING**

C423.1	Familiarity with a set of well-known supervised, unsupervised and semi-supervised
C423.2	learning algorithms
C423.3	The ability to implement some basic machine learning algorithms
C423.4	Understanding of how machine learning algorithms are evaluated

								РО				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	8	PO9	PO10	PO11	PO12
C423.	2				1							1
C423. 2		2	3		3				2			
C423.		3	2	2	3				2			
C423. 4		2	3		3				2			

#### **CO-PSO MAPPING**

	PSO1	PSO2	PSO3
C423.1	2		



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C423.2	2	
C423.3	2	
C423.4	2	



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## **Department of Computer Science and Engineering Course Outcomes**

Course Name: 412(SADP) Academic Year: 2020-2021 Regulation: R16

### **Course Outcomes**

C412.1	Understand the Software Architecture and its Structural Patterns	L2: Comprehension
C412.2	Analyze the architecture and build the system	L3: Application
C412.3	Design Creational and Structural Patterns	L3: Application
C412.4	Understand about Behavioral design patterns	L2: Comprehension
C412.5	Utilizing the Architectural Structures for software system	L3: Application

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Class: III Year / I Sem- CSE Name of Faculty: S JALAIAH

Name of Course: STM

### **COURSE OBJECTIVES:**

PE3101.1: To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods.

**PE3101.2:** To discuss various software testing issues and solutions in software with verification and validation activities like unit test; integration, functional, system, acceptance testing and regression.

PE3101.3: To choose and apply various static and dynamic testing techniques based on the software project needs to be tested.

PE3101.4: To learn how to planning a test project, design test cases and data, conduct testing operations, manage software problems and defects, generate a testing report.

PE3101.5: To gain the techniques and skills on how to use modern software testing tools to support various testing projects.

CE125.1: Understand the difference between object oriented programming and procedural programming.

CE125.2: Be able to build C++ classes using encapsulation and design principles.

CE125.3: Be able to develop C++ classes using appropriate inheritance and polymorphism,

operator overloads.

CE125.4: Be able to program using more advanced C++ features such as generic programming and

exception handling, STL

CE125.5: Be able to design solutions for the problems in Operating system, Computer networks and real world problems.

C

CE125.1: Understand the difference between object oriented programming and procedural programming.

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CE125.5: Be able to design solutions for the problems in Operating system, Computer networks and real world problems.

 $\mathbf{C}$ 

CE125.1: Understand the difference between object oriented programming and procedural programming.

CE125.2: Be able to build C++ classes using encapsulation and design principles.

CE125.3: Be able to develop C++ classes using appropriate inheritance and polymorphism,

operator overloads.

CE125.4: Be able to program using more advanced C++ features such as generic programming and

exception handling, STL

CE125.5: Be able to design solutions for the problems in Operating system, Computer networks and real world problems.

C

#### **COURSE OUTCOMES:**

- **PE3101.1:** To apply software testing knowledge and engineering methods and to compare various software testing problems, and solve these problems by applying static and dynamic testing techniques to a software project. (Knowledge-1, Comprehension-2, Application-3)
- **PE3101.2:** To compare various software testing problems, and solve these problems by applying static and dynamic testing techniques to a software project. (Comprehension-2, Application-3)
- **PE3101.3:** To use various communication methods and skills to communicate with their teammates to conduct their practice-oriented software testing projects. (Application -3)
- **PE3101.4:** To write the test cases and to produce the quality software by using quality metrics and to describe suitable Test Strategies, Criteria to test the soft ware (**Application-3**, **Analysis-4**, **Synthesis-5**)
- **PE3101.5:** To state and select the software testing methods, modern software testing tools for their software testing projects. (Evaluation-6)

### MAPPING OF CO's WITH PO's

PO/CO NO:	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PE3101.1	2											2
PE3101.2		3	3	2								



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PE3101.5		3	2	3				2	
PE3101.4	3	3	2					2	
PE3101.3	2						3	1	

Note: 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

#### **JUSTIFICATIONS FOR CO-PO MAPPING**

MAPPING	LOW/MEDIUM/HIGH	JUSTIFICATION
PE3101.1-PO1	2(MEDIUM)	
PE3101.1-PO2	2(MEDIUM)	
PE3101.1-PO12	3(HIGH)	
PE3101.2-PO1	1(LOW)	
PE3101.2-PO2	3(HIGH)	
PE3101.2-PO3	3(HIGH)	
PE3101.2-PO4	2(MEDIUM)	
PE3101.3-PO7	2(MEDIUM)	
PE3101.3-PO9	3(HIGH)	
PE3101.3-PO10	3(HIGH)	
PE3101.3-PO11	2(MEDIUM)	
PE3101.4-PO3	2(MEDIUM)	
PE3101.4-PO4	3(HIGH)	
PE3101.4-PO8	2(MEDIUM)	
PE3101.5-PO7	2(MEDIUM)	
PE3101.5-PO11	3(HIGH)	
PE3101.5-PO12	2(MEDIUM)	



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Name of Faculty: A SIVA SHANKAR

**Class: IV CSE** 

Name of Course: Web Technologies

#### **COURSE OUTCOMES**

s.NO	DESCRIPTION	Taxonomy Level
C413.1	Understand HTML tags and CSS properties to design web pages	Understanding(TL2)
C413.2	Describe the basic concepts of Java Scripts to design dynamic web pages	Evaluating (TL5)
C413.3	Design to create structure of web page, to store the data in web document, and transport information through web.	Understanding(TL2)
C413.4	Familiarize the concepts of PHP	Applying(TL3)
C413.5	Familiarize the concepts of PERL and Ruby	Applying(TL3)
C413.6	Write simple client-side scripts using AJAX	Creating(TL6)