

SCHEME OF EXAMINATION

Course Code	Course Title	Hours		Examination				Credits
		Theory	Practical	Hours	CIA	ESE	Total	
I SEMESTER								
21PCS101	Design & Analysis of Algorithms	4	-	3	50	50	100	4
21PCS102	Data Mining and Warehousing	5	-	3	50	50	100	5
21PCS103	Advanced Operating System	4	-	3	50	50	100	4
21PCS104	Advanced Database Management System	2	4	3	50	50	100	4
21PCS105	Programming Lab I: Design & Analysis of Algorithms	-	4	3	50	50	100	3
21PCS1E1	Elective I: Advanced Networks	5	-	3	50	50	100	5
21PCS1E2	Elective I: Wireless Networks							
21PCS1E3	Elective I: Mobile Computing							
Total		20	08		300	300	600	25
II SEMESTER								
21PCS206	Android Programming	4	-	3	50	50	100	4
21PCS207	Cloud Computing	4	-	3	50	50	100	4
21PCS208	Big Data Analytics	3	2	3	50	50	100	4
21PCS209	Advanced Java Programming	2	4	3	50	50	100	4
21PCS210	Programming Lab II: Android Programming	-	3	3	50	50	100	3
21PCS2E1	Elective II: Software Project Management	4	-	3	50	50	100	4
21PCS2E2	Elective II: Software Engineering and Testing							
21PCS2E3	Elective II: Object Oriented Analysis and Design with UML							
21PCS2P1	Pilot Project – I	-	2	-	50	50	100	2
21PCS2N1/ 21PCS2N2	Non Major Elective I: Web Designing Lab/ Advanced Internet Technologies Lab	-	2	2	25	25	50	2
Total		17	13		375	375	750	27

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III SEMESTER								
21PCS311	Internet of Things	4	-	3	50	50	100	4
21PCS312	Network Security & Cryptography	4	-	3	50	50	100	4
21PCS313	Python Programming	2	4	3	50	50	100	4
21PCS314	Digital Image Processing	4	-	3	50	50	100	4
21PCS315	Programming Lab III: Internet of Things	-	3	3	50	50	100	3
21PCS316	Programming Lab IV: Digital Image Processing using MATLAB	-	4	3	25	25	50	2
21PCS3E1	Elective III: Artificial Intelligence & Machine Learning	5	-	3	50	50	100	5
21PCS3E2	Elective III: Data Science							
21PCS3E3	Elective III: Robotic Process Automation for Business							
Total		19	11		325	325	650	26
IV SEMESTER								
21PCS4P2	Project Work and Viva-Voce	-	3	-	100	100	200	12
GRAND TOTAL							2200	90

Programme Code:		M.Sc CS	Programme Title:	Master of Science (Computer Science)
Course Code:	21PCS4P2	Course Title:	Project Work and Viva - Voce	Batch : 2021-2023
Lecture Hrs./Week Or Practical Hrs./Week	3	Tutorial Hrs/Sem	-	Semester: IV
				Credits: 12

Course Objective

To enable the students to understand and select the task based on their core skills, also knowledge about analytical skill for solving the selected task. Students get confidence for implementing the task and solving the real time problems.

Course Outcomes (CO)

On successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO1	Understand and formulate a real world problem and develop its requirements	K2
CO2	Analyze the problem requirements	K3
CO3	Design solution for a set of requirements	K3,K4
CO4	Apply test cases and validate the conformance of the developed prototype against the original requirements of the problem	K4,K5
CO5	Responsible member and possibly a leader of a team in developing software solutions	K5

MAPPING

PO/PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	H	H	M	H	H	H	H	H	M	H	H	H	H	H	H
CO2	M	M	H	M	H	H	M	H	H	H	M	H	H	M	H
CO3	H	H	H	H	M	H	H	H	M	H	H	M	H	H	H
CO4	H	H	H	H	H	M	H	M	H	M	H	H	M	H	M
CO5	H	H	M	H	M	M	H	H	H	M	H	M	M	H	H

H: High; M: Medium; L: Low.

PROJECT and VIVA VOCE

Guidelines

Introduction

The title of the project work and the organization will be finalized at the end of fifth Semester. Each student will be assigned with a Faculty for guidance. The Project work and coding will be carried by using the facility of computer science lab as well as in the organization. Periodical review will be conducted to monitor the progress of the project work. Project report will be prepared and submitted at the end of the semester. External examiner appointed by the Controller of Examination will conduct the viva voce examination along with respective guide.

Area of Work

- Web Based Development
- Mobile app development
- Website development
- IoT Projects
- Big Data and Data Mining Projects
- Cloud Computing Projects
- Networking Projects
- Artificial Intelligence and Machine learning Projects
- Data Analytics Projects using Python, R, Tableau etc..
- System Software
- Web Security Projects
- Image Processing

Methodology

Arrangement of Contents:

The sequence in which the project report material should be arranged and bound as follows:

1. Cover Page & Title Page
2. Bonafide Certificates
3. Declaration
4. Acknowledgement
5. Synopsis
6. Table of Contents
7. Chapters
8. Appendix
9. References

Format of Table of Contents

TABLE OF CONTENTS

Chapter No.	Title	Page No.
i	Certificates	
ii	Declaration	
iii	Acknowledgement	
iv	Synopsis	
1.	Introduction	
	1.1 Introduction	
	1.2 Objective of the Project	
	1.3 Company Profile	
	1.4 System Specification	
	1.4.1 Hardware Specification	
	1.4.2 Software Specification	
2	System Study	
	2.1 Existing System	
	2.1.2 Drawbacks	
	2.2 Proposed System	
	2.3 Planning and Scheduling	

System Design

3.2 Overview of the Project

- 3.1 Modules of the Project
- 3.2 Input Design Format
- 3.3 Output Design
- 3.4 Table Design
- 3.5 Supporting Diagrams (ER/DFD/UseCase)

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Implementation and Testing

- 4.1 Coding Methods
- 4.2 Testing Approach
- 4.3 Implementation and Maintenance

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Project Evaluation

- 5.1 Project Outcome
- 5.2 Limitation of the Project
- 5.3 Further Scope of the Project

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Conclusion

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Appendix

7.1 Source Code

7.2 Screenshots and Reports

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References

Size of the Project

The Project Report contents should be Maximum of not exceeding 70 pages.

Course Designed by	Verified by HOD	Checked by	Approved by
Name and Signature	Name with Signature	CDC	COE
Name: Dr.M.Sakthi	Name: Dr.M.Sakthi	Name: K. Srinivasan	Name: Dr.R.Manicka Chezian
Signature:	Signature:	Signature:	Signature:

Supportive Courses

1	Semester I	#SWAYAM/ MOOC	Any Online Course(Compulsory)
2	SemesterII	#VALUE ADDED COURSE	Block Chain and Cryptocurrency/ Digital Entrepreneurship(Compulsory)
3	Any Semester	#CERTIFICATE COURSE	Software Testing Lab - Selenium (Optional)
4	Any Semester	#ADVANCED LEARNER COURSE	User Interface Design Lab Figma- (Optional)