தருமம் கற்று வளமாய் வாழ..!

ST ALPHONSA COLLEGE
OF ARTS AND SCIENCE

An Institution run by the Syro Malabar Catholic Diocese of Thuckalay
(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)
Soosaipuram, Karinkal, Kanyakumari District,Tamilnadu - 629 157
Website: www.stalphonsa.edu.in | Email: stalphons2014@gmail.com | Ph: 04651 - 255540 | Mob: 94449 68233

PROGRAMME OUTCOME

M.Sc., COMPUTER SCIENCE

- Basic fundamental knowledge in Mathematical problem solving and in-depth knowledge in computer science.
- Communicate computer science concepts, designs, and solutions effectively and professionally
- An ability to identify, analyzes, design, optimize and implement system solutions using appropriate algorithms of varying complexity.
- Apply knowledge of computing to produce effective designs and solutions for specific problems
- Basic knowledge in hardware/network/software methods and tools for solving real-life and R&D problems with an orientation to lifelong learning.
- An ability to work in multidisciplinary teams in small- and large-scale projects by utilizing modern software tools and emerging technologies to develop complex products for the societal needs.

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COURSE OUTCOME (Academic Year 2023-2024)

I M. Sc. Computer Science

Sem.	Subject No.	Subject Status	Subjects	Subject Code	Contact Hrs./Week	Credit
I	1	Core-1	Analysis & Design of Algorithms	WCSM11	5	4
	2	Core-2	Object Oriented Analysis and Design & C++	WCSM12	5	4
	3	Core-3	Python Programming	WCSM13	4	4
	4	Elective – I	Advanced Software Engineering	WCSE11	4	4
	5	Elective – I	Advanced Computer Networks	WCSE12	4	4
	6	Lab I	Algorithm And OOPS Lab	WSL11	4	2
	7	Lab II	Python Programming Lab	WSL12	4	2
	8	Ability Enhancement Course AEC-I	Effective Communication in English	WCSAEC1	2	1
	9	Skill Enhancement Course– SEC I	Basics of Web Design	WCSSEC1	2	1
			Total		**30**	**24**

COURSE OUTCOME

Subject Code: WCSM11 **Subject:** Design and Analysis of Algorithms on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Get knowledge about algorithms and determines their time complexity. Demonstrate specific search and sort algorithms using divide and conquer technique.	K1,K2
2.	Gain good understanding of Greedy method and its algorithm.	K2,K3
3.	Able to describe about graphs using dynamic programming technique.	K4,K5
4.	Demonstrate the concept of backtracking & branch and bound technique.	K5,K6
5.	Explore the traversal and searching technique and apply it for trees and graphs.	K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: WCSM12 **Subject:** Object Oriented Analysis and Design & C++ on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the concept of Object-Oriented development and modeling techniques	K1,K2
2.	Gain knowledge about the various steps performed during object design	K2,K3
3.	Abstract object -based views for generic software systems	K3
4.	Link OOAD with C++ language	K4,K5
5.	Apply the basic concept of OOPs and familiarize to write C++ program	K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: WCSM13 **Subject:** Python Programming on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the basic concepts of Python Programming	K1,K2
2.	Understand File operations, Classes and Objects	K2,k3
3.	Understand File operations, Classes and Objects	K3,K4
4.	Understand File operations, Classes and Objects	K5
5.	Develop Client Server Networking applications	K5,k6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: WCSE11 **Subject:** Core Lab I: Algorithm and Oops Lab on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the concepts of object oriented with respect to C++	K1,K2
2.	Able to understand and implement OOPS concepts	K2,k3
3.	Implementation of data structures like Stack, Queue, Tree, List using C++	K3,K4
4.	Application of the data structures for Sorting, Searching using different techniques.	K5,k6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: WCSE12 **Subject:** Core Lab II: Python

Programming Lab on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Able to write programs in Python using OOPS concepts	K1,K2
2.	To understand the concepts of File operations and Modules in Python	K2,k3
3.	Implementation of lists, dictionaries, sets and tuples as programs	K3,K4
4.	To develop web applications using Python	K5,K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

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COURSE OUTCOME

I M.Sc. Computer Science (Academic Year 2023-2024)

Even Semester

Sem.	Subject No.	Subject Status	Subjects	Subject Code	Contact Hrs/ Week	Credit
II	10	Core-10	Data Mining And Warehousing		4	4
	11	Core-11	Advanced Operating Systems		4	4
	12	Core-12	Advanced Java Programming		4	4
	13	Elective -1 (Select Any two)	1. Advanced Software Engineering 2. Advanced Computer Networks 3. Artificial Intelligence & 4. Machine Learning 5. Internet Of Things		4	6
	14	Core-13 Practical-3	Practical III: Data Mining Using R		4	2
	15	Core-14 Practical-4	Practical IV: Advanced Java Lab		4	2
	16	Ability Enhancement Course AEC-II	English for Competitive Exams		2	1
	17	Skill Enhancement Course – SEC II Web Development	Web Development using PHP		2	1
			Total		**30**	**24**

COURSE OUTCOME

Subject Code: **Subject:** Data mining and warehousing on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the basic data mining techniques and algorithms	K1,K2
2.	Understand the Association rules, Clustering techniques and Data warehousing contents	K2,K3
3.	Compare and evaluate different data mining techniques like classification, prediction, Clustering and association rule mining	K4,K5
4.	Design data warehouse with dimensional modeling and apply OLAP operations	K5,K6
5.	Identify appropriate data mining algorithms to solve real world problems	K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: **Subject:** Advanced Operating Systems on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the design issues associated with operating systems	K1,K2
2.	Master various process management concepts including scheduling, deadlocks and distributed file systems	K2,K3
3.	Prepare Real Time Task Scheduling	K4,K5
4.	Analyze Operating Systems for Handheld Systems	K5,K6
5.	Analyze Operating Systems like LINUX and IOS	K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: **Subject:** Advanced Java Programming on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand the advanced concepts of Java Programming	K1,K2
2.	Understand JDBC and RMI concepts	K2,K3
3.	Apply and analyze Java in Database	K4,K5
4.	Handle different event in java using the delegation event model, event listener and class	K5,K6
5.	Design interactive applications using Java Servlet, JSP and JDBC	K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: **Subject:** Practical iii: Data mining using R on successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Able to write programs using R for Association rules , Clustering techniques	K1,K2
2.	To implement data mining techniques like classification, prediction	K2,K3
3.	Able to use different visualization techniques using R	K4,K5
4.	To apply different data mining algorithm s to solve real world application	K5,K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		

Subject Code: **Subject:** Practical IV: Advanced Java Lab on

successful completion of this course, the students will be able to:

SI.No	Course Outcome	Code
1.	Understand to the implement concepts of Java using HTML forms ,JSP & JAR	K1,K2
2.	Must be capable of implementing JDBC and RMI concepts	K2,K3
3.	Able to write Applets with Event handling mechanism	K4,K5
4.	To Create interactive web based applications using servlets and jsp	K5,K6
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create		