# S. S. T. COLLEGE OF ARTS AND COMMERCE

# Master of Science (Computer Science)

# Programme Outcome

<b>PO1</b>	To be fundamentally strong at core subject of Computer Science
<b>PO2</b>	To apply programming and computational skills for industrial solutions
PO3	Broad understanding of latest technological trends
PO4	To identify opportunities for establishing an enterprise for immediate Employment
PO5	Able to understand and apply fundamental research concepts
<b>PO6</b>	Able to use efficient soft skills for professional development
PO7	Engage in independent and life-long learning for continued professional development

# Course outcome

# Sem - I

### **Course: Algorithm For Optimization**

<b>CO1</b>	You will be able to effectively implement optimization techniques to
	the existing algorithm to improve its performance
<b>CO2</b>	You will be able to work in the areas of Machine Learning and Data
	Sciences Algorithms

### **Course: Software Defined Networking**

<b>CO</b> 1	To make the students capable of understanding computer network basics
CO2	To Obtain the knowledge of Software defined networks with understanding of data plane, control plane and application plane
<b>CO3</b>	To apply network virtualization for industry standard solutions
CO4	To improve skills in implementing network virtualization and Software Defined Network (SDN)

**Course:** Applied Signal And Image Processing

<b>CO1</b>	Introduce the concepts of signal processing terms and relate them
	to image processing
<b>CO2</b>	Learn about basic image processing techniques (e.g., noise removal
	and image enhancement)
CO3	Develop skills to design and implement algorithms for advanced
	image analysis
<b>CO4</b>	Apply image processing to design solutions to real-life problems

# **Course: Advanced Database Techniques**

<b>CO1</b>	To cover advanced topics of databases to become more proficient
CO2	To provide students with theoretical knowledge and practical skills
	in advanced topics in database systems, big data and modern data-
	intensive systems
<b>CO3</b>	To Expand Students, view and introduce advanced topics and
	Business Intelligence

### SEM- II

### Course: Applied Machine And Deep Learning

 CO1 Developing projects in machine learning for industrial applications
CO2 Understanding and implementing algorithms and techniques of Machine Learning useful in the field of Data Science, Image Processing, NLP, etc

#### **Course: Natural Language Processing**

<b>CO1</b>	Understanding the importance and concepts of Natural Language
	Processing (NLP)
<b>CO2</b>	Applying algorithms available for the processing of linguistic
	information and computational properties of natural languages
CO3	Knowledge on various morphological, syntactic, and semantic NLP
	tasks
<b>CO4</b>	Introducing various NLP software libraries and data sets publicly
	available
<b>CO5</b>	Designing and developing practical NLP based applications

#### **Course: Web Mining**

<b>CO1</b>	To Understand the difference between Web Mining and Data mining
<b>CO2</b>	To Understand the Basics and Needs of Web Mining
<b>CO3</b>	To Understand Web-based Data
<b>CO4</b>	To Understand Opinion Mining and Sentiment classification

#### **Course: Embedded And Iot Technology**

<b>CO1</b>	The course is designed to enable students, to understand and
	implement IoT in industry
CO2	Design and executive projects in IoT with Automatic Identification
	and Data Capture

## SEM - III

# Course: Advanced Computing (Web Technologies)

<b>CO1</b>	To cover the technical aspects of cryptocurrencies, blockchain
	technologies, and distributed consensus
<b>CO2</b>	To familiarize potential applications for Bitcoin-like cryptocurrencies
CO3	To Basics of smart contracts, decentralized apps, and decentralized
	anonymous organizations (DAOs)
C04	To know Solidity programming

### **Course:** Security (Cryptography and Cryptoanalysis)

<b>CO1</b>	To develop the foundation for the study of cryptography and its use
	in security
<b>CO2</b>	To understand the application of Number Theory and Algebra for
	the design of cryptographic algorithms
CO3	To understand the role of cryptography in communication over an
	insecure channel
CO4	To analyze and compare symmetric-key encryption and public-key
	encryption schemes based on different security models

## **Course:** Computer Networking (Wireless Networking)

<b>CO1</b>	To understand basic concepts of wireless networking
CO2	To understand 4G, 5G Technologies and their working
<b>CO3</b>	To implement Wireless architecture practically
CO4	To gain knowledge about sensors and their working

### **Course: Data Science (Data Visualization)**

<b>CO1</b>	Familiarity with working with data analysis tools
<b>CO2</b>	Ability to perform data wrangling for practical purposes
<b>CO3</b>	Ability to solve real-world data analysis problems with thorough, detailed examples
<b>CO4</b>	Ability to use Tableau to handle data from various sources and perform analysis of data

# Sem-IV

# **Course: Robotics (Online Mode)**

<b>CO1</b>	Leverage the features of the Raspberry Pi OS
<b>CO2</b>	Discover how to configure a Raspberry Pi to build an AI-enabled
	robot
CO3	Interface motors and sensors with a Raspberry Pi
<b>CO4</b>	Code robot to develop engaging and intelligent robot behaviour
C05	Explore AI behaviour such as speech recognition and visual processing Advanced

# **Course: Deep Learning (Online Mode)**

<b>CO1</b>	Understand the context and use of neural networks and deep
	learning
CO2	Understand the tools and libraries for deep learning
<b>CO3</b>	Have a working knowledge of neural networks and deep learning
CO4	Explore the parameters for neural networks
CO5	Identify emerging applications of deep learning