

# SAINTGITS COLLEGE OF APPLIED SCIENCES

VALUE ADDED COURSES 2021-22

# MACHINE LEARNING USING MATLAB



# ABOUT THE COURSE

This program focuses on providing the learners with a thorough knowledge and a hands-on experience on different Machine Learning techniques using MATLAB.



# **OBJECTIVES**

The objective of this course is:

- To impart theoretical and practical knowledge in the specialized area of Machine Learning.
- This course is designed to expose students to the frontiers of ML-intensive computing and information systems while providing a sufficiently strong foundation to encourage further research.

THE COURSE IS TO
EQUIP THE
STUDENTS WITH
LATEST
TECHNOLOGY
TRENDS IN MACHINE
LEARNING

This course helps students get a hands-on look at the techniques used for machine learning using MATLAB.

### **EXPECTED OUTCOMES**

- Fundamental of MATLAB and Machine Learning
- · Classification and Clustering techniques
- Application of Machine Learning

## DURATION

30 Hrs.



Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala

# **FEATURES**

Machine learning is a type of artificial intelligence that allows software pplications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data is input to predict new output values.



### **RELEVANCE**

This course is designed to equip the students with the latest machine learning centures and give a practical exposure to these techniques using MATLAB.

### **ADVANTAGES**

- Machines help man to reduce his job.
- Machines reduce the time taken to do a job.
- Machines can do the job of more persons in less time.

### CONTENTS

#### MODULE 1

Getting started with MATLAB Machine Learning Importing and organizing data in MATLAB From data to knowledge discovery Finding relationships between variables

#### MODULE 2

Pattern recognition through classification algorithms Identifying groups of data using clustering methods

#### MODULE 3

Simulation of human thinking Improving the performance of the machine learning model Machine learning in practice



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# **SAINTGITS**

**COLLEGE OF APPLIED SCIENCES** 



# Machine Learning using MATLAB

Course objective: The learner will get a thorough knowledge and a hands-on experience on different Machine Learning techniques using MATLAB.

Module 1- Getting Started with MATLAB Machine Learning, Importing and Organizing Data in MATLAB, From Data to Knowledge Discovery, Finding Relationships between Variables.

Module 2- Pattern Recognition through Classification Algorithms, Identifying Groups of Data Using Clustering Methods

Module 3- Simulation of Human Thinking, Improving the Performance of the Machine Learning Model, Machine Learning in Practice

#### Reference Books: -

1. MATLAB for Machine Learning by Giuseppe Ciaburro

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#### CAMPUS

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**EXCEL** 

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