GOVERNMENT COLLEGE
KASARAGOD

VIDYANAGAR, KASARAGOD, KERALA, 671123

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NAAC 3RD CYCLE ACCREDITATION

ADD ON COURSE

MACHINE LEARNING

ADD ON COURSE - MACHINE LEARNING

SYLLABUS

MODULE-1

Introduction to Machine Learning: Concept of learning, different types of learning; supervised learning, unsupervised learning, reinforcement learning. Setting up machine learning platform; basics of python, training, validation and testing, over-fitting and under-fitting   (10 Hrs)

MODULE II

Supervised Learning: Introduction, learning a class from examples, SVM, learning multiple classes, model selection and generalization, linear regression and feature selection, Bayesian and Decision Tree learning.
(8 Hrs)

Module III

Unsupervised Learning: Introduction, clustering; mixture densities, k-means clustering, expectation maximization algorithm,spectral and hierarchical clustering, Dimensionality reduction; principal component analysis   (5Hrs)

MODULE IV

Introduction to Artificial Neural Network: Understanding brain, perceptron, Multi-Layer perceptron, general architecture of artificial neural network, feed forward and back-propagation, linear and nonlinear activation functions for binary and multi class classification.   (7Hrs)

MODULE V

Introduction to Deep Learning: Fundamentals of deep learning, Existing Deep neural networks, Regularization for Deep Learning, Optimization for Training Deep Models, Introduction to Convolutional Networks, Classification and segmentation using CNN, Sequence Modelling using Recurrent Nets, overview of LSTM, Generative adversarial network.   (14 Hrs)

Date................

Name and Signature of the Principal
Dr.Ananthapadmanabha.A.L

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KASARAGOD

EVALUATION STRATEGY

TOTAL MARKS: 100

COMPONENT	WEIGHTAGE
THEORY EXAM	40%
PRACTICAL	50%
ASSIGNMENT	10%

SUMMARY REPORT

The course titled <u>MACHINE LEARNING</u> introduced for students from various streams in the college who are interested to learn python programming. 23 students who are interested in the programming from other stream joined the course. Course started on 05.12.2021. Along with theory classes practical classes are also provided to students .The evaluation of the course was mainly based on their practical knowledge. On 10th March 2022 we have successfully completed the course.

Name and Signature of the Principal
Dr.Ananthapadmanabha.A.L

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KASARAGOD

ENROLMENT LIST:

ENROLLMENT LIST

Sl.NO	REGISTER NUMBER	STUDENT NAME	SIGNATURE
1	GK20CCSR01	C K YUMNA	
2	GK20CCSR02	HALEEMATH SALIMA FARISA	
3	GK20CCSR03	ABDUL RAHIMAN SHUHAIB S K	
4	GK20CCSR04	ANURAJ A	
5	GK20CCSR05	ARJUN K	
6	GK20CCSR06	KARTHIK KRISHNAN	
7	GK20CCSR07	MOHAMMAD NOUFAL	
8	GK20CCSR08	NIRMAL A V	
9	GK20CCSR09	SHREYAS.C	
10	GK20CCSR10	VIJITH T S	
11	GK20CCSR11	DHANALAKSHMI K	
12	GK20CCSR12	FATHIMA MAHJABEEN K	
13	GK20CCSR13	FATHIMATH SHAHNA K	
14	GK20CCSR14	NITHYA C	
15	GK20CCSR15	SAJNA SALEEM	
16	GK20CCSR16	SREELAKSHMI K	
17	GK20CCSR17	ABHIJITH	
18	GK20CCSR18	AVIN KUMAR	
19	GK20CCSR19	ANANYA S	
20	GK20CCSR20	SHREEJITHA S A	
21	GK20CCSR21	ACHAL B SUKUMARAN	
22	GK20CCSR22	MOHAMED RAZEEN	
23	GK20CCSR24	MAYA	

Name and Signature of the Principal
Dr.Ananthapadmanabha.A.L

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KASARAGOD

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Date..................
KASARAGOD

ATTENDANCE SHEET:

Name and Signature of the Principal
Dr.Ananthapadmanabha.A.L

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MODEL CERTIFICATE:

GOVERNMENT COLLEGE, KASARAGOD

DEPARTMENT OF COMPUTER SCIENCE

NAME

Has successfully completed the add on course

MACHINE LEARNING ON 10th March 2022

CORDINATOR

DATE

PRINCIPAL

Name and Signature of the Principal
Dr.Ananthapadmanabha.A.L
PRINCIPAL
GOVERNMENT COLLEGE
KASARAGOD

GOVERNMENT COLLEGE
Date............
KASARAGOD