राष्ट्रीयइलेक्ट्रॉनिकीएवंसूचनाप्रौद्योगिकीसंस्थान,कालीकट
National Institute of Electronics & Information Technology, Calicut

ISO 9001-2015 Certified

Ministry of Electronics and Information Technology

Government of India

On-line Course Prospectus

Foundation Course in Machine Learning using Python
NSQF Aligned (Level 4)

20th May 2024
(1 Month / 90 Hrs)

Course Description

Machine learning has become an important part of many applications we use every day. The future of machine learning is exceptionally exciting. At present, almost every common domain is powered by machine learning applications.

The course is Level 4, National Skill Qualification Framework (NSQF) aligned.

This course is an easy way to learn the basics of Machine Learning and solve many basic problems in Machine Learning.

Click Here to Register

Who can attend?

2nd Year Polytechnic Diploma in Computer Science / IT / Electronics / Electrical / Instrumentation / or Final year BCA / B.Sc (Electronics / CS / IT) or Pursuing MCA / MSc (CS / IT) / PGDCA or Pursuing B.E / B.Tech in any domain or NIELIT O Level(IT).

Target Audience

Specially designed for research scholars, students and professionals.

Course Content

Basics of Machine Learning, Methods - Python Eco System - Methods for Machine Learning - Data Loading for ML Projects

Understanding Data with Statistics - Understanding Data with Visualization - Preparing Data - Data Feature Selection

Machine Learning Algorithms - Machine Learning with Pipelines - Improving Performance of ML Models - Mini Project

S No	Date	Topic
1	Day 1	Basics of Machine Learning , Python Eco System
2	Day 2	Methods for Machine Learning
3	Day 3	Data Loading for ML Projects – 1
4	Day 4	Data Loading for ML Projects - 2 (1 hour) ; Understanding Data with Statistics - 1(3 hours)
5	Day 5	Understanding Data with Statistics - 2(3 hours) Project – Understanding Requirements(1 hour)
6	Day 6	Understanding Data with Statistics - 3(2 hours) Understanding Data with Visualization - 1(2 hours)
7	Day 7	Understanding Data with Visualization - 2 (4 hours)
8	Day 8	Understanding Data with Visualization - 3 (4 hours)
9	Day 9	Preparing Data – 1 (4 hours)
10	Day 10	Preparing Data - 2 (4 hours)
11	Day 11	Data Feature Selection - 1(4 hours)
12	Day 12	Data Feature Selection - 2(4 hours)
13	Day 13	Data Feature Selection - 3(2 hours) Machine Learning Algorithms - 1 (2 hours)

14	Day 14	Machine Learning Algorithms – 2
15	Day 15	Machine Learning Algorithms – 3
16	Day 16	Machine Learning Algorithms – 4
17	Day 17	Machine Learning Algorithms - 5
18	Day 18	Machine Learning with Pipelines – 1
19	Day 19	Machine Learning with Pipelines – 2 (3 hours) Project – Topic discussion(1 hour)
20	Day 20	Improving Performance of ML Models - 1
21	Day 21	Improving Performance of ML Models - 2
22	Day 22	Project - Design and Coding
23	Day 23	Project – Implementation

Course Timings

10:30 AM to 12:30 Noon Theory Sessions.

2:00 PM to 4:00 PM Practical Sessions.

Prerequisite

Knowledge of Programming Language.

Fee and important dates

Course Fee	Rs. 5,000/-
NSQF Exam Registration Fee	Rs. 118/-
NSQF Theory Exam Fee	Rs. 590/-
NSQF Practical Exam Fee	Rs. 354/-
Total Fee	Rs. 6062/- (including GST)
Last Date for registration & payment	20th May 2024
Sharing of Link / passwords & other details	20th May 2024

For more details on course and examinations please refer Qualification file

Link to Course QUALIFICATION FILE

Minimum Requirements

- Attendees must have a Computer with a good internet connection.

NIELIT NSQF Examination

To get NIELIT NSQF certification, participants should pass the examinations. **Participants should attend the online theory and practical examinations conducted by NIELIT HQ New Delhi, from either NIELIT Calicut or from a nearest NIELIT accredited/facilitation Centre**.

Certificate

Successful candidates will be issued certificate by NIELIT Headquarter, New Delhi through certificate.nielit.gov.in

Candidates who do not attend / fail the online NSQF examination as per the norms, only digitally signed course completion certificate shall be issued (subject to fulfilling all the mandatory requirements mentioned under 'Terms and Conditions' below) by NIELIT Calicut to their registered e-mail ids.

Faculty

- **Mrs. Reshma CB, Senior Technical Officer**

Course Coordinator

Reshma CB
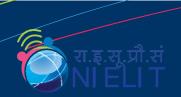Senior Technical Officer
Mob:9495639330
Email: reshma[at]calicut[dot]nielit[dot]in
20+ years of Experience

Terms and Conditions

1. After the commencement of course, candidates have to register in NIELIT portal at student.nielit.gov.in for course registration and later for exam registration, as per the guidelines issued by the course Coordinator.

2. In case any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated

3. In case the online course is cancelled /postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.

4. No course/exam fee shall be refunded to candidates not attending/failing the examination. Only completion certificate shall be issued to such candidates subject to fulfilling all mandatory requirements mentioned below.

5. 60% attendance and feedback submission are mandatory for awarding 'successfully completed certificate' and is also subject to the candidate passing the exit test with minimum 50% marks.

6. Candidates failing in the any of the NSQF examination component (theory/practical) can reappear for the failed component alone by paying the requisite fee.

NIELIT

Click Here to Register

For more details about our institution and facilities visit us

Website: https://nielit.gov.in/calicut/index.php