

COURSE PROSPECTUS

Name of the Group: IT

Name of the Course: Certificate course in Machine Learning

Course Code: AI 100

Starting Date: 16-10-2018

Duration: 80 Hrs

Course Coordinator: : Krishna Nand Chaturvedi, Scientist 'D'
Email ID: knchaturvedi@nielit.gov.in
Phone: 044-24421445

Last date of Registration: 08-10-2018

Preamble:

This course is to introduce about the fundamentals of pattern classification, neural network and their applications. Pattern classification and neural network model deals about the fundamentals of learning and classification methods, used for the various artificial intelligence and other applications.

Objective of the Course:

The objective of this course is to introduce the fundamentals of machine learning. This course is designed to provide the knowledge of neural network and classification.

Outcome of the Course:

- The students will able to apply the concept of statistics and probability techniques for pattern classification.
- The students will be able to implement and simulate the neural network for classification skills using Scilab in the field of machine learning which also used for research work.
- The students will be able to apply neural network and SVM and various feature extraction and classification methods for the artificial intelligence and other applications

Course Structure:

| Sl. No. | Topics | Duration |
|---------|---------------------------------|----------|
| 1 | Pattern Classification | 20 |
| 2 | Scilab Programming | 20 |
| 3 | Artificial Neural Network (ANN) | 6 |

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| 4 | Support Vector Machine | 6 |
| 5 | Decision Trees and Random Forests | 6 |
| 6 | Genetic Algorithm (GA) | 6 |
| 7 | Dimensionality Reduction and Feature Selection | 4 |
| 8 | Neural Network Functions Approximation | 4 |
| 9 | Neural Network Classifications | 4 |
| 10 | Regression | 4 |

Other Details:

Course Fees:

For General Candidates: *Course fee is Rs. 5000/- (Five Thousands only) (Including GST)*

For SC/ST Candidates:

Tuition Fees are waived for eligible SC/ST students under the reservation policy (SC: 15%, ST: 7.5% of total seats). However they are required to remit an amount of **Rs.1000** /- as advance caution/security deposit. This amount will be considered as caution/security deposit and will be refunded after completion of the course. If the student fails to complete the course successfully this amount along with any other caution/security deposits will be forfeited. Any other SC/ST candidates admitted over and above the reservation policy have to pay complete fee.

Registration Fee: (Non-refundable)

SC/ST: **No registration fee**

Others: **Rs 500** /-.

However the above registration fee shall be refunded on few special cases as given below:

1. If course postponed and new date is not convenient for the student.
2. If course cancelled.

Course Fee Instalment Structure: *Not applicable for this course*

Eligibility:

1. BE/B.Tech or MCA or BCA
OR
2. BE/B.Tech (Undergoing) or MCA(Undergoing) or BCA

Number of Seats: 25

How to apply:



National Institute of Electronics and Information Technology, Chennai

Candidates are advised to download the Registration from our website www.nielit.gov.in/chennai. After filling the form with all documents and fees, it can be submitted to NIELIT Chennai office in person or through post before starting of the course. Payment towards non-refundable Registration and Course fee can be paid through any one of the following modes:

- ✓ DD drawn from a nationalized bank (preferably SBI) in favour of “NIELIT Chennai” payable at Chennai.
- ✓ Online transaction: *Account No: 31185720641 Branch: Kottur (Chennai), IFS Code: SBIN0001669.*
- ✓ Pay through Nationalized Bank Debit Card (Service charges applicable)

Note: The Institute will not be responsible for any mistakes done by either the bank concerned or by the depositor while remitting the amount into our account.

Last date of Registration: 08-10-2018

Selection of candidates: First come first served

Admission Procedure:

All interested candidates are required to fill the Registration form with the fees (Registration and Course fees) before 09-10-2018 with all the necessary following documents.

- Original and self-attested Copies of Proof of Age, Qualifications, etc.
- One passport size photograph and one stamp size photograph for identity card.
- Self-attested copy of Govt. issued photo ID card (AADHAR is mandatory for SC/ST Candidates).
- Self-attested copy of community certificate (if availing SC/ST fee concession)

Note: Working days are from Monday to Friday. Admission timings are from 09.00 am to 05.00 pm.

Discontinuing the course: No fees under any circumstances shall be refunded in case of a student discontinuing the course. No certificate shall be issued if discontinued.

Course Timings: 4 Hrs/8 Hrs per day

Location: NIELIT Chennai is located at Gandhi Mandapam Raod, Kotturpuram, Chennai (Landmark: Opp. To Anna Centenary Library)

Address: National Institute of Electronics and Information Technology Chennai Centre,
ISTE Complex, No. 25, Gandhi Mandapam Road, Chennai – 600025
E-mail: training.chennai@nielit.gov.in / Phone: 044-24421445

Course enquiries: Students can enquire about the various courses either on telephone or by personal contact between 9.15 A.M. to 5.15 P.M. (Lunch time 1.00 pm to 1.30 pm) Monday to Friday.