

### About Jaipur

Jaipur is a lively and vibrant city in the state of Rajasthan and is situated in Northern India at a distance of around 265 km from Delhi. Also, Jaipur is a world heritage city which offers a multitude of interesting places and tourist attractions. There are several magnificent historical monuments such as the Hawa Mahal, Amber fort, Jaigarh fort, Nahargarh fort, Jal Mahal, City palace, Jantar Mantar etc. The city is popularly known as the city of fun, food and festivals. It is also known as the "Pink City" which is a heady mix of tradition and modernity. The city is very well connected with most parts of the country via air, rail and road. The weather of Jaipur in the month of July is warm, and the temperature in the day time ranges between 35 to 40 °C.

### About MNIT Jaipur

MNIT bagged 35<sup>th</sup> rank in NIRF 2020 Ranking of top engineering institutes in India. The institute was established in 1963, formerly known as Malaviya Regional Engineering College, Jaipur. Subsequently on June 26, 2002, it was rechristened as National Institute of Technology; later on 15 August 2007, it was accorded the status of an institute of National Importance through an act of Parliament. The Institute is fully funded by Ministry of Education, Government of India.

### About the Mechanical Engineering department

Mechanical Engineering department of MNIT offers academic programmes at three levels leading to Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), and Doctor of Philosophy (Ph.D.) degrees. An extremely dynamic faculty and experienced support staff gives the department a breadth of research focus and wide range of technical expertise.

### About the STC

Lately data Science and Artificial Intelligence (AI) has emerged as lucrative and promising career choice. Machine learning is the science of getting computers to act without being explicitly programmed. It is truly an interdisciplinary field catering to various disciplines of Science, Engineering and Humanities. Today machine learning is so pervasive that people use it multiple times every day without realizing it. Over past decade, machine learning has given us vastly improved self-driving cars, speech recognition, web search, and understanding of human genome. With the rising capability of AI along with ever-growing computational power, the potential of machine learning is finding greater scope in commercial/ defence applications as well as research and development of each nation. The demand for candidates possessing data analytics and machine learning skills is constantly on the rise. In fact India is the second-highest recruiter of data science/ analytic professionals. The goal of this course is to introduce the virtues and capabilities of machine learning to beginners. The STC sessions will be conducted by experts from industry, IITs, NITs, and CFTIs.

### Organizing Committee

#### Chief Patron

**Prof. (Dr) Udaykumar R. Yaragatti**

Director, Malaviya National Institute of Technology Jaipur

#### Co-Patron

**Prof. (Dr) M L Mittal**

Head, Mechanical Engineering department, MNIT Jaipur

#### Convener

**Dr. Ram Dayal**

Assistant Professor, MED, ramdayal.mech@mnit.ac.in

#### Coordinator(s)

**Dr. Manish Kumar,**

Assistant Professor, MED, manish.mech@mnit.ac.in

**Dr. Amit Arora,**

Assistant Professor, MED, amit.mech@mnit.ac.in

## Malaviya National Institute of Technology Jaipur, Rajasthan - 302017



One week Short term course (online)

(sponsored by TE QIP-III)

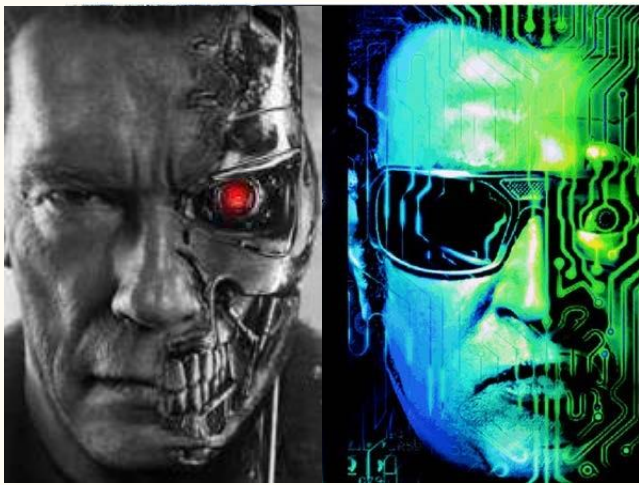
## Machine Learning for Beginners

(13 Jan, 2021 – 17 Jan, 2021)



www.supplai.nl

Organized by  
Mechanical Engineering department  
MNIT Jaipur



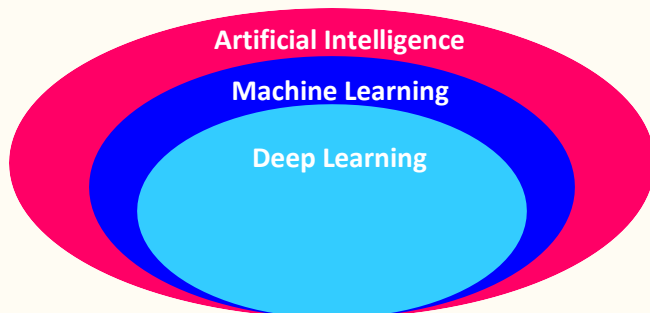
**Terminator**

**Chitti**

**Thrust of the STC**

This STC introduces you to the exciting and high-demand field of Machine Learning. Through a series of practical case studies, you will gain applied experience in major areas of Machine Learning viz. prediction, classification, clustering, and information retrieval. Also, you will learn to analyze large and complex datasets, create systems that adapt and improve over time, and develop intelligent applications capable of forecasting that helps in subsequent decision making. This course comprises of five major skills, with hands-on sessions, as mentioned below.

- Python programming essentials
- Data manipulation and visualization using Python
- Predictive Modeling framework
- Machine Learning methods
- Deep Learning : Case studies



**Eligibility/ targeted audience**

Short term course may be attended by the following:

**Students** - UG, PG, PhD (All streams of Engineering, Science and Humanities)

**Faculty** - All streams of Engineering, Science & Humanities

**Other professionals** – Engineers, Marketing & Planning Analyst, and Scientists from Industry & R&D organisations

**Participation Fee**

All registered candidates will get participation certificate. The participation fee including GST is mentioned below.

**Category 1: Participants from MNIT Jaipur**

**General/ OBC** : INR 300 (student), INR 750 (faculty)

**Women/ SC/ ST** : INR 200 (student), INR 500 (faculty)

**Category 2: Participants from other Academic Institutes**

**General/ OBC**: INR 500 (student), INR 1000 (faculty)

**Women/ SC/ ST** : INR 350 (student), INR 750 (faculty)

**Category 3: Participants from Industry and R&D units**

**All participants** : INR 2000

**Payment mode:** NEFT/IMPS

**Payee:** Registrar, MNIT, Jaipur (TEQIP-Phase III)

**Account No.** 36875887782

**Bank Branch:** State Bank of India, MNIT Campus Jaipur

**IFSC Code:** SBIN0015921

**How to apply**

Use either of the following modes to apply.

**Mode 1:** Online application using the link given below.

<https://forms.gle/Di7iBgAP7PCw3kit5>. For successful registration, you need the snapshot of payment receipt.

**Mode 2:** E-mail following to [stcmechmnit@gmail.com](mailto:stcmechmnit@gmail.com)

(i) Scanned copy of filled registration form provided in this brochure (ii) Snapshot of payment receipt

**Accommodation & Registration support**

Not Applicable.

**Important dates**

Last date of registration : November 4, 2020

**Contact(s) for registration & accommodation support**

**Mr. Swapnil Chitnis**, +91-90965-72327

**Email:** stcmechmnit@gmail.com

**Malaviya National Institute of Technology**

**Jaipur, Rajasthan – 302017**



**One week Short term course (online)**

(sponsored by TEQIP-III)

**Machine Learning for Beginners**

(13 January 2021 – 17 January 2021)

**REGISTRATION FORM**

Name: .....

Designation: .....

Department : .....

Organization: .....

.....

.....

Email: .....

Mobile: .....

**Gender** (tick)

MALE:  FEMALE:  TRANSGENDER:

**Fee Waiver** (tick)

SC:  ST:  Woman:

**Registration Details:**

Transaction/ Reference No. ....

Date of transaction: .....

Registration Amount: .....

Date: .....

**Signature of Candidate**

## One Week Online Short Term Course

*On*

### Machine Learning for Beginners

Department of Mechanical Engineering  
Malaviya National Institute of Technology Jaipur, Jaipur

#### Tentative Schedule

<b>Date</b>	<b>Session-I (10:30 -12:00 Hrs)</b>	<b>Session-II (12:30-2:00)</b>	<b>Session-III (3:00-4:30)</b>
Day-1	<b>Machine Learning: State-of-the-art</b>	<b>Python: Fundamentals - I</b>	<b>Python: Fundamentals - II</b>
Day-2	<b>Data Frame Manipulation</b>	<b>Data Preparation for Machine Learning (ML)</b>	<b>Data Preparation for ML – Hands-on</b>
Day-3	<b>Predictive Modeling: Framework - I</b>	<b>Predictive Modeling: Framework - II</b>	<b>Machine Learning Methods - I</b>
Day-4	<b>Machine Learning Methods - II</b>	<b>Machine Learning Methods - III</b>	<b>Machine Learning Methods - Hands-on</b>
Day-5	<b>Applied Machine Learning – Case study I</b>	<b>Applied Machine Learning – Case study II</b>	<b>Technical Q&amp;A and Review</b>

Above sessions will be conducted by following experts from industry and academia:

Dr. B. Ravindra (IIT Jodhpur)  
Dr. Surya Prakash Singh (IIT Delhi)  
Dr. Rajneesh Pathak (Genpact India)  
Mr. Ramgopal Prajapat (IBM India)  
Dr. Ram Dayal (MNIT)  
Dr. Manish Kumar (MNIT)  
Dr. Amit Arora (MNIT)