

# MODEL FINISHING SCHOOL

( Established by Government of Kerala )

Science and Technology Museum Complex  
PMG Junction, Vikas Bhavan P.O  
Trivandrum – 33 Ph#. 0471-2307733  
[www.modelfinishingschool.org](http://www.modelfinishingschool.org)

## Internship Programme for MSc Students

### Background

An oft voiced and addressed concern with regard to education and employment is that candidates with good academic credentials are not able to get prestigious employment opportunities. Experts in this line of thought opine that the students, though educated are seldom employable, as they lack skills in areas which are most sought after by the industry.

To overcome this and to ensure that the youth are able to secure employment in desired levels, the Government of Kerala has taken the first step by setting up the Model Finishing School in the capital city of Thiruvananthapuram. The Model Finishing School is a joint initiative of IT Department, Government of Kerala and Institute of Human Resources Development (IHRD), with the support of Infosys. IHRD is the co-ordinating agency and is overseeing the day-to-day functioning of the Model Finishing School.

<b>Duration</b>	:	1 Month
<b>Timing</b>	:	10 AM – 1 PM
<b>Fee</b>	:	Rs. 2500/-
<b>Registration Fee</b>	:	Rs.50/-

### Course : Python, AI and English Communication

#### **Module 1 : Introduction and fundamentals of python**

- Understanding python
- Variables and strings
- Operators and operands
- Conditional statements and loops
- Data structure
- Input and output in python

## **Module 2 : Functions and Functional Programming**

- User defined functions
- Parameters
- Function Documentation
- Mapping Functions in a Dictionary
- Lambda
- Modules
- Standard Modules

## **Module 3 : Object Oriented Python**

- Classes in Python
- Principles of Object Orientation
- Creating Classes
- Inheritance
- Polymorphism
- Type Identification
- Custom Exception Classes
- Iterators, Generators and Decorators

## **Module 4 : Introduction to Data Science**

- Basics of Data Science
- Python Ecosystem for Data Science
- Getting started with Anaconda and Jupyter
- Pandas
- Matplotlib
- Numpy

## **Module 5 : Exploratory Data Analysis**

- Data collection
- Missing value analysis
- Data wrangling
- Data visualization

## **Module 6 : Introduction to ML**

- Basics of ML
- AI vs. ML vs. DL
- Classification algorithms
- Regression algorithms
- Model training and evaluation

- Clustering Algorithms
- Model saving and deployment
- Overfitting

### **Module 7 : Introduction to Deep Learning**

- Basics of deep learning
- Tensorflow, Keras and pytorch
- Introduction to NN
- Shallow and Deep NN
- Activation function, loss function and optimization
- Front propagation and back propagation
- Designing and training neural network
- Model evaluation and fine tuning

### **Module 8 : Introduction to image processing**

- OpenCV
- Basics of image processing
- Face recognition

### **Module 9 : Deep learning for images and sequences**

- Pooling and Convolution
- Feature extraction
- CNN architectures
- Applying DL for sequential input/output

### **Module 10 : English Communication & Soft Skills, Career Guidance (India & Abroad)**

#### **How to Apply**

Interested candidates may directly approach Model Finishing School with filled up application form and registration fee (Cash). At the time of admission, candidates have to produce the following:

1. Copy of ID Card of the institution studying
2. Cash towards course fee.