## ROOT IT LEARNING CENTRE, TRICHY

## www.therootlearning.com

## Data Science and Machine Learning Fundamentals

- 1. Python Basics
- 2. Python Data Structures
- 3. Advanced Python
  - a. NumPy
  - b. Pandas
  - c. Matplotlib
  - d. Seaborn
- 4. Data Collection and Handling
- 5. Feature Extraction and Pre-processing
- 6. Linear algebra
- 7. Statistics
- 8. Probability
- 9. Machine Learning
- 10. Supervised Learning
  - a. Classification Models
  - b. Regression Models
- 11. Introduction to Artificial Neural Networks
- 12. Unsupervised Learning
- 13. Model Selection and Evaluation
- 14. Model Deployment
- 15. Deep Learning
  - a. Introduction to deep learning frameworks (TensorFlow, Keras, PyTorch)

Participation in Kaggle competitions or collaborative projects