Schedule of ATAL
BASIC OFFLINE FDP

FDP Application Number : 1743744664

Title of the FDP: AI & ML-Driven Robotics: Perception, Planning, and Autonomous Control System

FDP Start Date : 28-July-2025 **FDP End Date:** 02-August-2025

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
9:00 − 9:30 **Inauguration**					
9:30 − 12:00 **Session 1** 1. **Name of the Expert :** Dr. Kavicharan Mummaneni 2. **Designation :** *Assistant Professor.* 3. **Organization:** *NIT-Silchar.* 4. **Experience in Years:** 18. 5. **Topic to be taught:** *Foundations of Robotics and Intelligent Systems*	**9:30 − 12:00** **Session 3** 1. **Name of the Expert :** *Dr. Nagamanikandan Govindan.* 2. **Designation :** *Assistant Professor.* 3. **Organization:** *IIIT-Hyderabad.* 4. **Experience in Years:** *16.* 5. **Topic to be taught:** *Perception Systems in Robotics.*	**9:30 − 12:00** **Session 5** 1. **Name of the Expert :** *Pranav Kora.* 2. **Designation :** *Robotics Engineer.* 3. **Organization:** *Anvi Robotics.* 4. **Experience in Years:** *11.* 5. **Topic to be taught:** *Path Planning and Navigation.*	**9:30 − 12:00** **Session 7** 1. **Name of the Expert :** *Pranav Kora.* 2. **Designation :** *Robotics Engineer.* 3. **Organization:** *Anvi Robotics.* 4. **Experience in Years:** *11.* 5. **Topic to be taught:** *Robot Operating System (ROS) and Simulation Tools.*	**9:00 − 1:00** **Industrial visit** 1. **Name of the Organization:** *T-Works, Hyderabad* 2. **Complete address with pincode :** *T-Works Foundation Corporate Office Plot 1/D, 1/E, 1/F, Survey No. 83/1, Rai durgam, Ranga Reddy District, Hyderabad 500081, India.* 3. **Industry Type:** *Hardware Prototyping Center* 4. **Area of specification :** *Robotics & Automation*	**9:30 − 12:00** **Session 10** 1. **Name of the Expert :** *Dr. G. Amarnath.* 2. **Designation :** *Professor.* 3. **Organization:** *MLRITM-Hyderabad.* 4. **Experience in Years:** *16.* 5. **Topic to be taught:** *Project-Based Learning and Innovation in AI-ML Robotics.*
12:00 − 1:00 **Article Discussion** **1.Title of the Research Paper :** *Artificial intelligence, machine learning and deep learning in advanced robotics, a review* **2. Name of the journal:** *Cognitive Robotics* **3. Year of Publication:** *2023*	**12:00 − 1:00** **Article Discussion** **1.Title of the Research Paper :** *Self-Supervised Monocular Depth Estimation With Self-Perceptual Anomaly Handling* **2. Name of the journal:** *IEEE Transactions on Neural Networks and Learning Systems* **3. Year of Publication:** *2023*	**12:00 − 1:00** **Article Discussion** **1.Title of the Research Paper :** *Adaptive Prescribed-Time Neural Control of Nonlinear Systems via Dynamic Surface Technique* **2. Name of the journal:** *IEEE TRANSACTIONS ON ARTIFICIAL INTELLIGENCE* **3. Year of Publication:** *2024*	**12:00 − 1:00** **Article Discussion** **1.Title of the Research Paper :** *Observer-Based Consensus Control for MASs With Prescribed Constraints via Reinforcement Learning Algorithm* **2. Name of the journal:** *IEEE Transactions on Neural Networks and Learning Systems* **3. Year of Publication:** *2024*		**12:00 − 1:00** **Article Summary**
1:00 − 2:00 **Lunch**	**1:00 − 2:00** **Lunch**	**1:00 − 2:00** **Lunch**	**1:00 − 2:00** **Lunch**	**1:00 − 2:00** **Lunch**	**1:00 − 2:00** **Lunch**
2:00 − 4:30 **Session 2** 1. **Name of the Expert :** Dr. G. Amarnath 2. **Designation :** *Professor.* 3. **Organization:** *MLRITM-Hyderabad.* 4. **Experience in Years:** *16.* 5. **Topic to be taught:** *Introduction to AI and ML Concepts for Robotics*	**2:00 − 4:30** **Session 4** 1. **Name of the Expert :** *Kisshaan PSV.* 2. **Designation :** *Robotics Process Engineer.* 3. **Organization:** *Anvi Robotics.* 4. **Experience in Years:** *21.* 5. **Topic to be taught:** *Machine Learning for Robotic Perception*	**2:00 − 4:30** **Session 6** 1. **Name of the Expert :** *Pranav Kora.* 2. **Designation :** *Robotics Engineer.* 3. **Organization:** *Anvi Robotics.* 4. **Experience in Years:** *11.* 5. **Topic to be taught:** *Autonomous Control Systems*	**2:00 − 4:30** **Session 8** 1. **Name of the Expert :** *Pranav Kora.* 2. **Designation :** *Robotics Engineer.* 3. **Organization:** *Anvi Robotics.* 4. **Experience in Years:** *11.* 5. **Topic to be taught:** *Deep Learning for Robotics*	**2:00 − 4:30** **Session 9** 1. **Name of the Expert :** *L. Manish Reddy.* 2. **Designation :** *Automation Test Engineer.* 3. **Organization:** *H-bots Robotics.* 4. **Experience in Years:** *12.* 5. **Topic to be taught:** *Human-Robot Interaction and Collaborative Robotics*	**2:00 − 4:00** **MCQ & Reflection Journal**
4:30 − 5:30 **Hands on training /Labs**	**4:30 − 5:30** **Hands on training /Labs**	**4:30 − 5:30** **Hands on training /Labs**	**4:30 − 5:30** **Hands on training /Labs**	**4:30 − 5:30** **Hands on training /Labs**	**4:00 − 5:00** **Valedictory Session**