



## NTHRYS WORKSHOPS

# Advanced Techniques In Mechatronics

### 8:45 AM - 10:15 AM: Session 1: Advanced Control Systems

Introduction to advanced control techniques in mechatronics.  
Hands-on session on PID controllers, fuzzy logic, and neural networks.  
Practical demonstration of advanced control systems in mechatronics.

### 10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

### 10:30 AM - 12:00 PM: Session 2: Robotics and Automation

Exploring robotics and automation in mechatronics.  
Workshop on designing and programming robotic systems.  
Case studies on the applications of robotics in industrial automation.

### 12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

### 1:00 PM - 2:30 PM: Session 3: Embedded Systems Design

Hands-on session on designing embedded systems for mechatronics.

Exploring techniques for developing custom embedded solutions.  
Practical applications of embedded systems in mechatronics.

### **2:30 PM - 2:45 PM: Short Break**

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Machine Vision and AI**

Workshop on integrating machine vision and AI in mechatronics.  
Practical techniques for using image processing and machine learning.  
Case studies on the role of machine vision and AI in enhancing mechatronic systems.

### **4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break**

Last networking opportunity with snacks.

### **4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption**

Group discussions on implementing new techniques learned today.  
Dialogue on overcoming challenges in adopting new technologies in similar sectors.  
Feedback session and closing remarks.

**Certificate Issue**

### **5:30 PM: Workshop Concludes**