

## NTHRYS WORKSHOPS

# Introduction To Mechatronics

### 8:45 AM - 10:15 AM: Session 1: Basics of Mechatronics

Overview of mechatronics principles and applications.  
Hands-on session on integrating mechanical, electrical, and computer systems.  
Introduction to the importance of mechatronics in modern engineering.

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

Networking and refreshments.

### 10:30 AM - 12:00 PM: Session 2: Sensors and Actuators

Interactive session on sensors and actuators in mechatronics.  
Workshop on using various types of sensors and actuators.  
Practical demonstration of sensor integration in mechatronic systems.

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

Catered lunch and networking opportunity.

### 1:00 PM - 2:30 PM: Session 3: Microcontrollers and Programming

Exploring techniques for programming microcontrollers in mechatronics.

Hands-on training on using microcontrollers like Arduino and Raspberry Pi.  
Case studies on the application of microcontrollers in mechatronics projects.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: System Integration and Testing**

Workshop on integrating and testing mechatronic systems.  
Practical techniques for system integration and troubleshooting.  
Case studies on the role of system integration in successful mechatronics projects.

### **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**