



## Embedded Systems Workshops

# Embedded Systems Workshops

NTHRYS BIOTECH LABS provides a diverse array of workshops in the realm of Embedded Systems. Explore our comprehensive offerings below

[Embedded Systems Workshops Application Process](#)

[Back to All Workshops](#)

## Embedded Systems Awaits: Navigate Through Our Workshop Offerings!

1. [Workshop in Introduction to Embedded SystemsPDF](#)
2. [Workshop in Advanced Techniques in Embedded SystemsPDF](#)
3. [Workshop in Embedded Systems in Industrial ApplicationsPDF](#)
4. [Workshop in Innovations in Embedded SystemsPDF](#)
5. [Workshop in Ethical and Regulatory Perspectives in Embedded SystemsPDF](#)

### 1. Workshop in Introduction to Embedded Systems

+

**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: Basics of Embedded Systems**

Overview of embedded systems and their applications.

Hands-on session on understanding microcontrollers.

Introduction to embedded system design and architecture.

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

Networking and refreshments.

**10:30 AM - 12:00 PM: Session 2: Programming Embedded Systems**

Interactive session on programming microcontrollers using C/C++.

Workshop on writing and debugging embedded software.

Practical demonstration of simple embedded applications.

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

Catered lunch and networking opportunity.

**1:00 PM - 2:30 PM: Session 3: Embedded Hardware Design**

Exploring the principles of embedded hardware design.

Hands-on training on designing and testing embedded circuits.

Case studies on hardware-software integration in embedded systems.

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

Time for a stretch and informal discussions.

**2:45 PM - 4:15 PM: Session 4: Real-Time Operating Systems (RTOS)**

Workshop on the basics of real-time operating systems.

Practical use of RTOS in embedded applications.

Case studies on RTOS implementation in various 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**

## 2. Workshop in Advanced Techniques in Embedded Systems

+

**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: Advanced Embedded**

## **Programming**

Introduction to advanced programming techniques for embedded systems.  
Hands-on session on using advanced microcontrollers and processors.  
Practical demonstration of complex embedded applications.

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

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Embedded Systems Security**

Exploring the principles of security in embedded systems.  
Workshop on implementing security measures in embedded software.  
Case studies on addressing security challenges in embedded systems.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Embedded Systems for IoT**

Interactive session on designing embedded systems for the Internet of Things (IoT).  
Hands-on training on integrating sensors and actuators.  
Practical use of communication protocols in IoT applications.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Low-Power Design Techniques**

Workshop on designing low-power embedded systems.  
Practical techniques for optimizing power consumption.  
Case studies on successful low-power embedded 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**

### **3. Workshop in Embedded Systems in Industrial Applications**

+

**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

#### **8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

#### **8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

#### **8:45 AM - 10:15 AM: Session 1: Embedded Systems in Automation**

Overview of embedded systems in industrial automation.

Hands-on session on designing control systems.

Practical use of embedded systems in automation projects.

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

Networking and refreshments.

#### **10:30 AM - 12:00 PM: Session 2: Embedded Systems in Robotics**

Exploring the role of embedded systems in robotics.

Workshop on integrating sensors and actuators in robotic systems.  
Case studies on advanced robotic applications.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Embedded Systems in Automotive**

Hands-on session on designing embedded systems for automotive applications.  
Exploring the use of embedded systems in vehicle control and diagnostics.  
Case studies on innovations in automotive embedded systems.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Embedded Systems in Consumer Electronics**

Workshop on the application of embedded systems in consumer electronics.  
Practical techniques for designing smart devices.  
Case studies on successful consumer electronics 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**

## **4. Workshop in Innovations in Embedded Systems**

+

**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM

**8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

**8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

**8:45 AM - 10:15 AM: Session 1: Artificial Intelligence in Embedded Systems**

Introduction to AI and machine learning in embedded systems.

Hands-on session on implementing AI algorithms.

Case studies on AI-driven embedded applications.

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

Networking and refreshments.

**10:30 AM - 12:00 PM: Session 2: Embedded Systems for Wearable Technology**

Exploring the design of embedded systems for wearables.

Hands-on training on developing wearable devices.

Practical use of sensors and communication protocols in wearables.

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

Catered lunch and networking opportunity.

**1:00 PM - 2:30 PM: Session 3: FPGA in Embedded Systems**

Hands-on session on using FPGAs in embedded system design.

Exploring the benefits of reconfigurable hardware.

Case studies on advanced FPGA-based embedded projects.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Future Trends in Embedded Systems**

Discussion on emerging trends and technologies in embedded systems.

Workshop on integrating new technologies in embedded design.

Case studies on the future impact of embedded systems innovations.

### **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**

## **5. Workshop in Ethical and Regulatory Perspectives in Embedded Systems**

+

**Date:** Pre Selected Date

**Fee:** Rs 6000/-

**Duration:** One Day

**Mode:** Offline and Virtual

**Location for Offline:** NBL Cherlapalli IDA Branch

**Facilitator(s):** NTHRYS TEAM



### **8:00 AM - 8:30 AM: Registration and Welcome Coffee**

Participants arrive, register, and network over coffee.

### **8:30 AM - 8:45 AM: Opening Remarks**

Welcome by the host.

Brief overview of today's focus.

### **8:45 AM - 10:15 AM: Session 1: Ethical Considerations in Embedded Systems**

Overview of ethical issues in embedded system design.

Case studies on ethical dilemmas in embedded applications.

Workshop on addressing ethical considerations in embedded research.

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

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Regulatory Frameworks for Embedded Systems**

Exploring regulatory guidelines and requirements for embedded systems.

Case studies on navigating regulatory challenges.

Workshop on understanding international regulatory frameworks.

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

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Safety and Reliability in Embedded Systems**

Hands-on session on designing safe and reliable embedded systems.

Exploring techniques for ensuring system integrity.

Case studies on addressing safety and reliability issues in embedded systems.

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

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Public Perception and**

## **Communication**

Workshop on improving public understanding of embedded systems.  
Techniques for effective science communication.  
Case studies on public engagement and education initiatives.

### **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**

Note: NTHRYS Management reserves the right to modify the workshop module at any time without prior notice. Registered or enrolled candidates will receive the module that is current on the day of enrollment.

## **NTHRYS Workshops Department**

**M: +91-7993084748**

**Email: workshops ( a t ) nthrys [ d0t ] com**

## **Embedded Systems Workshops Application Process**

1. Select a workshop from the list.
2. Contact via whatsapp on the number present above to request fee details and dates suitable for joining. Alternatively, you can send an email to workshops ( a t ) nthrys [ d 0 t ] com.
3. Our Workshop department will contact you promptly to provide further assistance.