

## **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

# Journey Through Genetics: Select Your Embedded Systems Session!

- 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.

### NTHRYS OPC PVT LTD Embedded Systems Workshops

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

### NTHRYS OPC PVT LTD Embedded Systems Workshops

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 (at) 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.