



**INSTITUTE OF ADVANCED  
STUDIES AND RESEARCH**

**AN INITIATIVE OF JIS GROUP , KOLKATA**

**3 Days Short Courses at JISIASR**  
**Under The Centre For Interdisciplinary Science**

**Target Students** : Mainly Industrial but useful for Academics also.  
**Eligibility Qualification:** Bachelor in Engineering  
**Faculty** : From Institute and Industry

**1) Course-1: Design Thinking and Innovation- 3Days**

**Objective:** To educate the candidate about the design process and design method and system design with interdisciplinary technology from user and industry perspective

**Module 1:** Empathy: Study, Interact and Understand User **1 day**

Understanding of User Requirement –Stated and Unstated

User Constraints and Risk factors

**Module 2 :** Design Thinking and Product Conceive- **1 day**

**Module-3 :** System Design and Design Engineering **1 day**

**2) Course-3: Embedded Electronic System design – 3 Days**

**Objective:** To educate the candidate about the Embedded Electronic System design process, design method and system design with interdisciplinary technology , HW-SW integration focusing the user and industry perspective

**Module 1:** Embedded Electronic System **1 day**

Design Thinking and Empathy

**Module-2:** System Design and System Specification **1 day**

SW design life cycle

**Module-3:** Open Architecture HW design , **1 day**

Interdisciplinary design

HW-SW integration analysis