



Summer INTERSHIP Opportunities

Syllabus For Training

Course content (Drone & related technologies) (1week)

- * Types of Drones, drone rules and regulations
- * Identify & select different drone's mechanical parts, Assembly of Drones
- * Test different sensors, their characteristics
- * GPS navigation and telemetry module, different RF blocks and antennas.
- * 3D Printing and AM

VLSI, Product Design and 3D Printing (2weeks)

- * VLSI Design flow
- * Overview of Verilog HDL
- * Hardware modelling using Verilog HDL
- * Overview of FPGAs
- * FPGA Synthesis and Programming
- * Fundamentals of PCB, Autodesk EAGLE /FUSION 360 for Through hole and SMD packages.
- * Schematic editor, BOM Generation and ERC
- * PCB layout editor, Gerber files, CNC Milling & Drilling, SMT pick & place, 3D PCB files
- * PCB Through hole Plating, screen-printing technology
- * Mechanical machining operations

Course Content (Embedded System & IoT) (1week)

- * Fundamental of IoT and Challenges in IoT
- * Introduction to Microprocessors and Microcontrollers & Overview of ARM Cortex-M architecture and CMSIS standard
- * Sensors & Actuators required for various IoT applications
- * Wireless Technologies
- * Edge Computing and Protocols



Link for Google form:

https://docs.google.com/forms/d/e/1FAIpQLScHmDrTix72ipwOsn1nLIQazBdKm6MrRcGlSxW2DEt_8KSZhQ/viewform

Objectives

The main aim of this Training is to create manpower who can design and develop innovative & low cost electronic product to solve the problems of industries and societies with the help of emerging technologies.

Eligibility

B. Tech passed out (3rd and final year can also apply) and M. Tech final year

Certificate

Internship Certificate will be provided to the participants, based on minimum 75% attendance and on performance in mini project conducted at the end of the course

Duration

Duration: 6 Weeks, ● Last Two weeks (Mini project)

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Area of Excellence:

- Embedded System and VLSI Technology
- 3D Printing and Additive Manufacturing
- Internet of Things (IoT)
- Social and Mobile Analytics
- Robotic Process and Automation (RPA)



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