



CONTINUING EDUCATION CELL (2024-25)

The Continuing Education Cell is dedicated to fostering a culture of lifelong learning among students. Our mission is to equip learners with the skills, knowledge, and competencies needed to excel in a rapidly evolving world.

We offer a variety of sessions, workshops, and training programs tailored to enhance technical, professional, and soft skills. These initiatives are designed to bridge the gap between academic learning and industry requirements, empowering students to stay ahead in their chosen fields.

Office Bearers

#	Name of the Faculty	Designation and Department
1.	Asha Raj	AP, CSE
2	Nivea Kesav	AP, CSE
3	Anjali Muraleedharan	AP, AI& DS
4	Geethu Chacko	AP, EEE

What We Offer:

- **Skill Enhancement Workshops:** Interactive sessions focused on technical and professional development.
- **Industry Expert Talks:** Insights from professionals to prepare students for real-world challenges.
- **Certification Programs:** Opportunities to earn certifications in trending technologies and areas of expertise.
- **Career Development Guidance:** Resume building, interview preparation, and career counseling.

By participating in our programs, students gain access to cutting-edge tools and techniques that elevate their academic and professional journeys.

Recent Sessions and Workshops:

- **Interactive Session with Dr. John Jose (IIT Guwahati)** – This session provided valuable insights into advanced computing concepts and innovations, IT industry practices, and the significance of competitive exams like GATE.



- **STTP ON FLUTTER & DART APPLICATION DEVELOPMENT** – This course aimed to equip students with essential skills in mobile application development, focusing on both theoretical knowledge and practical application using Flutter and Dart. By providing hands-on experience in building real-world mobile applications, the program enhanced the employability of the students, preparing them for competitive job markets. It also promoted collaboration among students through group projects and peer reviews, building a community of learners who supported each other's growth and development.



STTP ON FLUTTER AND DART
APPLICATION DEVELOPMENT

August 1st to September 30, 2024

Organized by,
Continuing Education Cell

Introduction:
This course equips students with essential mobile app development skills using Flutter and Dart, blending theoretical knowledge with practical application. Through hands-on experience in building real-world mobile apps, students enhance their employability for competitive job markets. Group projects and peer reviews foster collaboration, creating a supportive learning community.

Purpose of the Training Program:

- To introduce students to mobile application development using Flutter;
- To provide hands-on experience in building cross-platform mobile applications.
- To enhance students' programming skills and prepare them for industry requirements.

Target Audience:

S5 Students of the college with the following prerequisite knowledge on

- Object Oriented Programming.
- Java Programming.

Schedule:

- Course commences from August.
- Weekly 3 hours (Timing 4.30pm to 5.30pm)
- A total of 24 hours.

Participants Criteria:

- Maximum students count is 30.
- If registration exceeds the maximum count, a test on java programming will be conducted for the admission.



RESOURCE PERSON ▶



Mr. BASIL BABY

Assistant Professor,
Department of Computer
Science & Engineering

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Register details:



Registration fee: Rs.750.
*Last date to register: August 1st, 2024
*Shortlisted students shall be informed
through email.
*Students can pay the registration fee
after confirmation.

Week 1: Introduction to Flutter and Dart

- Overview of Flutter.
- Setting up the development environment.
- Basics of Dart programming.

Week 2: Flutter Widgets and Layouts

- Understanding widgets.
- Building layouts using Flutter.

Week 3: State Management and Navigation

- Navigation and routing.
- Passing data between screens.
- Understanding stateful, and stateless widgets.

Week 4: Networking and Data Storage

- Making network requests.
- Storing data locally.

Week 5: Flutter with Firebase

- Introduction to firebase.
- Setting firebase with flutter apps.
- Developing flutter CRUD app with firebase as back end.

Week 6: State Management in Flutter

- Introduction to BLOC.
- Flutter architecture.
- Developing apps based on Flutter architecture and BLOC.

Week 7: UI/UX

- Introduction to UI/UX using Figma.
- Initiation of Real Time Project based on Flutter and Firebase.

Week 8: Project

- Continuation of the project.

COURSE CONTENT



- **ROS2 WORKSHOP** – The hands-on workshop on Robot Operating System 2 (ROS2) provided participants with an immersive experience to master the development of autonomous robots from scratch. Combining expert-led sessions with practical activities, the workshop covered core ROS2 concepts, robotic navigation, manipulation, and sensor integration. Participants worked on real-world projects, enhancing their technical expertise and problem-solving skills while fostering collaboration through group tasks and peer reviews. The workshop successfully equipped attendees with a strong foundation in robotics, preparing them for advanced challenges in the field and boosting their employability in the competitive robotics domain.

Muthoot Institute of Technology & Science

ROS2 WORKSHOP

INTRODUCTION TO ROS2

Commencing from August 6th
Organized by,
Continuing Education Cell
Powered by,
IEEE RAS SBC MITS

Introduction:
Join our hands-on workshop on Robot Operating System 2 (ROS2) and master building autonomous robots from scratch. Learn to develop innovative robotic applications in a dynamic environment. This workshop is designed to significantly enhance and refine your robotics skills through expert-led sessions and hands-on activities.

Topics to be Covered

- Introduction to ROS2 and Basic Concepts.
- Writing ROS2 Nodes.
- Interfacing Sensors and Actuators with ROS2.
- Advanced Topics in ROS2.
- Building and Deploying a Robot.

Target Audience
SS & S7 Students of the college.
• Prerequisite: Basic computer knowledge.
• Requirement: Laptop with Ubuntu 22.04 (Dual Boot Preferred, Fusion 360 installed).

Schedule

- Course starts from August 6th
- Course duration: 3 weeks
3 days every week concluding with Saturday of the last week
(Wednesday - 4:30 PM to 5:30 PM - Saturday - 9:00 AM to 4:00 PM)

Participants Criteria

- Maximum students count is 30.
- If registration exceeds the maximum count, a test will be conducted for the admission.

Resource Persons

Mr. T. Anandhakrishnan
Project Associate, CIDRIE
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Mr. Sandeep B Kadam
Project Engineer, CIDRIE
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Week 1
Introduction to ROS

- Overview of Robotics
- Introduction to ROS
- ROS2 Architecture
- Installation of ROS2
- Hands-On Installation

ROS2 Basics and Command Line Tools

- Basic ROS2 Commands
- Creating and Managing Workspaces

Week 2
Writing ROS2 Nodes

- Programming Languages
- Node Lifecycle Management
- Hands-On: Writing Simple Publisher and Subscriber Nodes

Introduction to TurtleSimBot

- Hands-On: Running and launching nodes

Week 3
Sensor Integration

- Understanding Actions
- Introduction to Micro-ROS
- Introduction to Sensors
- Interfacing Sensors with ROS2
- Hands-On

REGISTRATION DETAILS

Registration fee: Rs.750/-
(exclusive discount for IEEE RAS student members)

- **Last date to register August 2nd 2024**
- Shortlisted students shall be informed through email.
- Students can pay the registration fee after confirmation.

COURSE CONTENT

Click here!

By organizing such enriching sessions, the Continuing Education Cell aims to bridge the gap between theoretical knowledge and practical application, empowering students to excel in their careers.