



COMED KARES
INNOVATION HUB

INNOVATION & DESIGN THINKING
COURSE OUTCOMES

Mangalore

MAY 2023



IDT Course

In this course students will learn how to design and prototype their ideas. Through a series of lectures and exercises students will learn and practise different prototyping techniques. This prototyping course emphasises on rapid prototyping, using prototyping device and system user interfaces, design considerations and perspective for devices. This course has topics that include design methods, modelling and simulation, design, and customization. This course on a whole, enables student transition from ideas to prototyping.

| | |
|------------------------|--------|
| Overall program Rating | 4.89/5 |
| Attendance | 100% |
| Student Enrolled | 8 |

Highlights of Batch @Mangalore

This program saw the participation of 8 students from different institutes. The students partook in the program to come up with prototypes addressing various problem statements for their design challenge.

3 Projects built for the final line following design challenges

50% increase in knowledge levels and performance of students

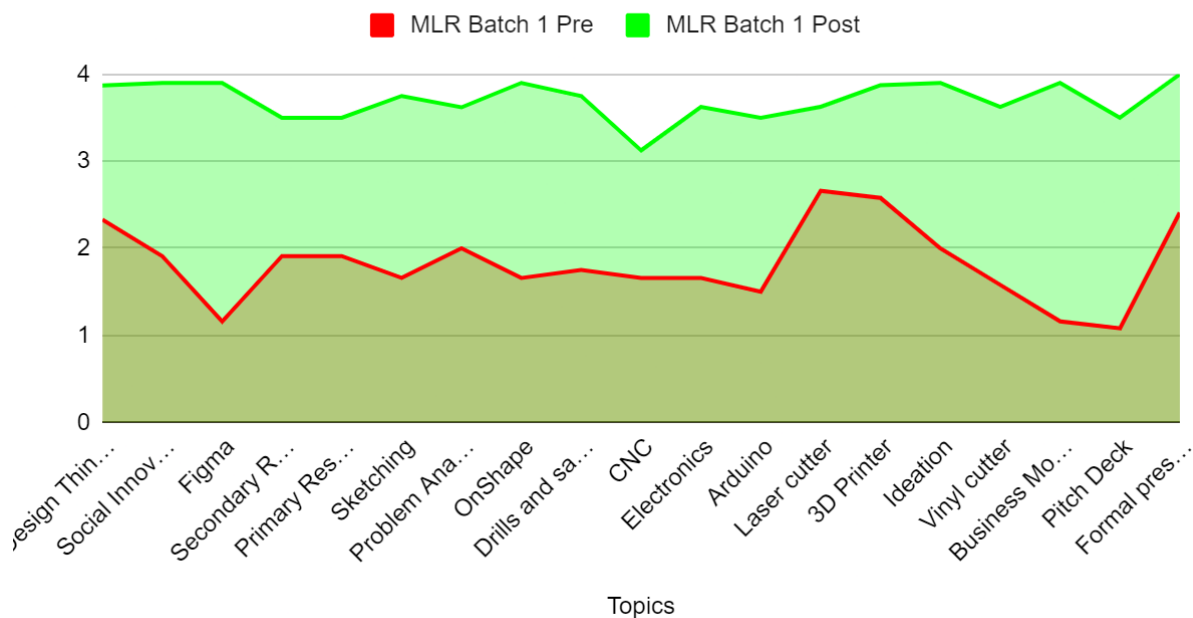




Post Program Findings of our Courses

IDT Course Assessment Report of Mangalore

Pre and Post Knowledge (IDT Mangalore)



The IDT batch from Mangalore, have resulted in a **significant increase in knowledge levels (1.88 points avg across all topics) self-reported by students.** Based on the course outcomes a total of 19 topic related questions were posed to the students before and after the program to see the change in their self efficacy levels. The highest score of 4 indicates complete practical expertise in the topic, and **a score of 3 means achievement of program relevant objectives**, which has been true the centre.

**Refer the table for the tags and their relevant topics*



What our students had to say

1. *"The time spent really felt productive and we got to learn a lot of things and it helped us in improving our imagination and thinking ability."*
2. *"Made me put myself in their shoes,I learnt how to approach a solution for the problem in a sequential manner."*

Final Project

Vehicle locator with load weighing detection

| PROBLEM STATEMENT | TEAM MEMBERS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| An affordable alternative solution that can help students learn in the absence of electricity. | <ul style="list-style-type: none">• Kendric C Soans• Nihal B Gatty• Nishika B Shetty• Sakshi Shetty |
| IDEA Introducing the "Universal Bike Dynamo Kit" - a versatile and user-friendly attachment designed to transform any type of bicycle into a renewable energy powerhouse. This innovative kit utilises a bicycle dynamo to generate power, which is then efficiently stored in a li-ion cell. The generated power can be harnessed to charge electronic devices and power lights, making it an essential accessory for cyclists, especially in rural areas with limited access to electricity. The key feature of this kit lies in its adaptability, as it allows users to modify the power output based on their specific needs. Whether you're looking to charge your smartphone during a long ride or illuminate your way through dark trails, the Universal Bike Dynamo Kit has got you covered. | |
| RESULT By encouraging eco-friendly transportation and providing a sustainable energy solution, this idea not only enhances the cycling experience but also contributes to promoting greener practices in areas with limited access to traditional power | |



sources. Let's explore the potential partnerships and opportunities to bring this game-changing kit to cyclists around the world.

PROTOTYPE IMAGE

