

**Report on Innovative Teaching Learning method adopted for ISE evaluation of Project
Demonstration on given Microcontroller development board by Prof. Priya Deshpande
Sem IV, ETRX Subject: Microcontroller (ET206), Academic Year: 2022-23**

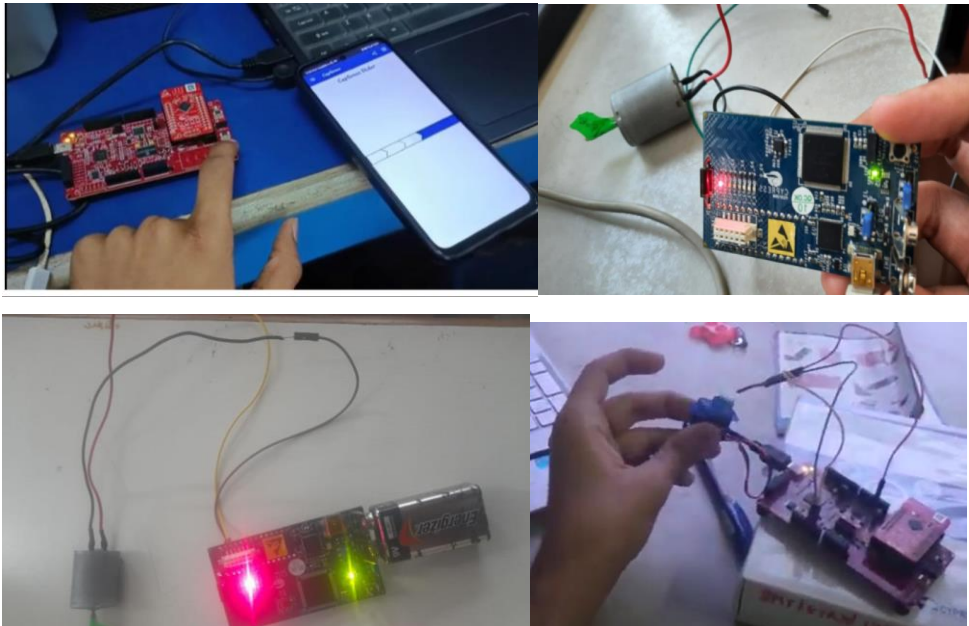
As a part of Internal Assessment of Microcontroller Lab students were given various development boards and assessment is done on the basis of level of understanding and level of experiments done on that development boards.

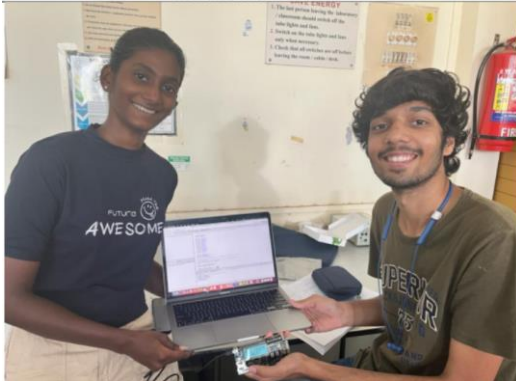
Group of 2 students consist of one slow learner and fast learner (decision taken on basis of first 6 experiment evaluation marks) were made for this ISE.

Following boards were given to students

- 1) PSOC 5
- 2) PSOC 4
- 3) PSOC 3
- 4) MSP ultra low power board
- 5) MSP 432
- 6) Silicon Lab's Giant Gecko EFM32
- 7) FRDM board

Some of screenshots of Projects:





Following Rubrics were used for evaluation

Student has explored the given board properly	Not at all <i>0 points</i>	Moderately <i>1 points</i>	Very well <i>2 points</i>
Student has run multiple problem statements on the board	Not at all <i>0 points</i>	Moderately <i>1 points</i>	Very well <i>2 points</i>
Student is able to design its own experiment	Not at all <i>0 points</i>	Moderately <i>1 points</i>	Very well <i>2 points</i>
Student has demonstrated the board to his/ her class mates	Not at all <i>0 points</i>	Moderately <i>1 points</i>	Very well <i>2 points</i>
Student has submitted the report with proper conclusion and design in moodle	Not at all <i>0 points</i>	Moderately <i>1 points</i>	Very well <i>2 points</i>

Impact Analysis:

The response was very good from the students. In a class of 75 students, 47 students got marks above average 8.6

Following Students were allotted the development boards