



## **ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi &

Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

**Accredited by NAAC with A+ & NBA accreditation for ECE & CSE**

### **MEMS LAB**

### **PRODUCT DEVELOPMENT WORKSHOP REPORT**

**JUNE-2023**

**MEMS LAB REPORT**

## Report on Product development life cycle

### Introduction:

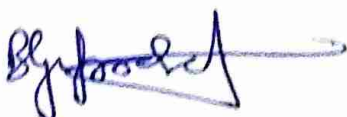
A seven-day workshop on product development life cycle using KiCAD software was conducted by the Department of Electronics and Communication Engineering at our college from June 8th, 2023 to June 15th, 2023. The workshop was aimed at providing hands-on experience to the participants on creating electronic product designs using KiCAD. The workshop covered various stages of the product development life cycle, including ideation, design, prototyping, testing, and manufacturing.

### Day 1: Introduction to KiCAD Software

On the first day of the workshop, the participants were introduced to the KiCAD software. They were taught about the various features and tools available in the software that are used in the product development process. The trainers also demonstrated the proper way of installing and configuring the software on their laptops.

### Day 2: Schematic Design

The second day of the workshop was dedicated to schematic design. The participants were taught about the importance of schematic design in the product development process. They were introduced to the various elements and symbols used in the schematic design and were given hands-on experience in creating schematic designs using KiCAD.



Siddash

H. O. D.

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### Day 3: PCB Design

On the third day, the participants were introduced to PCB design using KiCAD. They were taught about the various types of PCBs, the components used in PCB design, and the design rules required for creating high-quality PCBs. The participants were given hands-on experience in creating PCB layouts using KiCAD.

### Day 4: Component Placement and Routing

On day four of the workshop, the participants were taught about the importance of component placement and routing in the product development process. They were introduced to the various techniques used for component placement and routing and were given hands-on experience in arranging and routing components on PCB layouts.

### Day 5: Gerber File Generation

The fifth day of the workshop was dedicated to the generation of Gerber files. The participants were taught about the importance of Gerber files in the manufacturing process and were given hands-on experience in the generation of Gerber files using KiCAD.

### Day 6: Design Review and Prototyping

On day six, the participants were taught about the design review and prototyping stages in the product development life cycle. They were introduced to the various testing techniques used in the design review stage and were given hands-on experience in prototyping electronic designs using KiCAD.

## Day 7: Manufacturing and Testing

On the final day of the workshop, the participants were taught about the manufacturing and testing stages of the product development life cycle. They were introduced to the various manufacturing techniques used in the production of electronic products and were given hands-on experience in the testing of electronic designs using KiCAD.

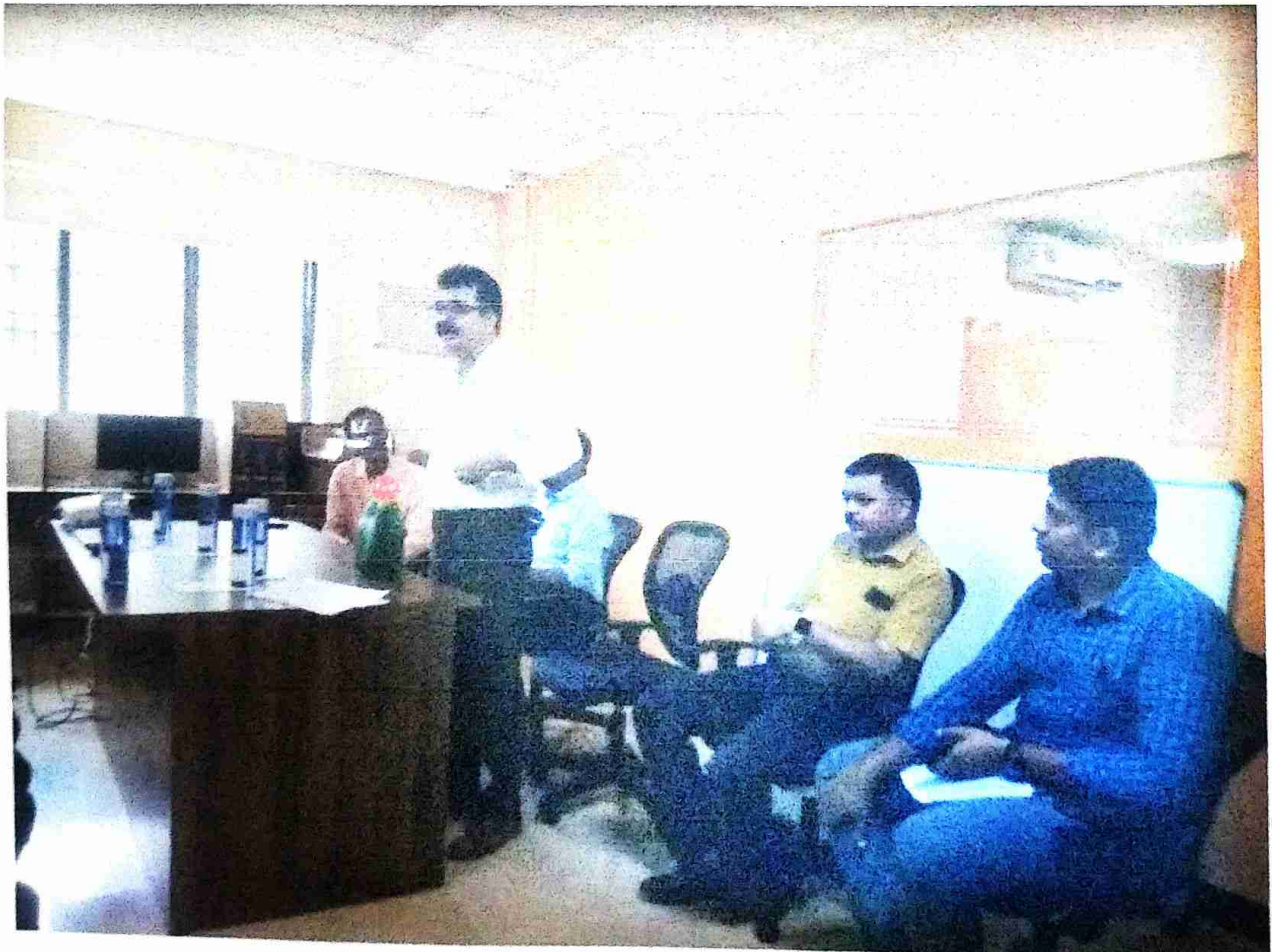
### Conclusion:

The seven-day workshop on product development life cycle using KiCAD software was a huge success. The participants were able to gain hands-on experience in various stages of the product development process and were able to create their own electronic designs using the software. The workshop was a great learning experience for all the participants and helped them in enhancing their skills in electronic product development.

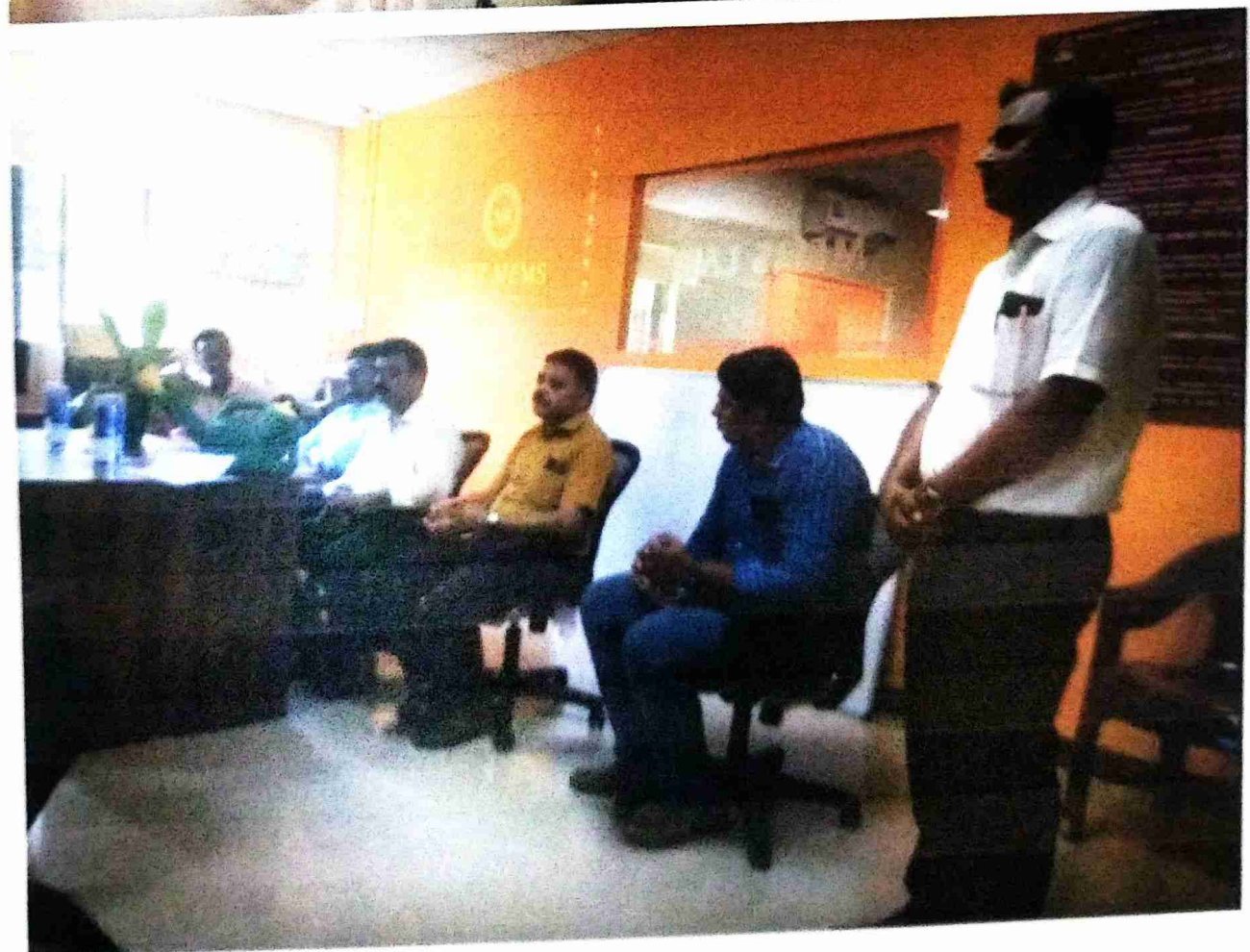
### Glimpses of the Event:













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Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### Approval Letter

Date: 01.06.2023

To

Principal,

Alva's Institute of Engineering and Technology

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka.

Respected Sir,

Subject: Conducting Certificate Programme on "Product Development Workshop".

Regarding the aforementioned subject, I would like to kindly draw your attention to the fact that the department intends to hold a four-day certificate program on "Product Development Workshop" from June 08 to June 14, 2023. Mr. Santhosh, Director, EM - Tantra Pvt Ltd, serves as the program's resource person. Students in their fourth and sixth semesters can participate in this training program.

Consider our request and take the appropriate action to facilitate further action.

Thanking You Sir

Coordinator

Dr. Guruprasad B

HoD

Dr. Siddesh

Principal

Dr. Peter Fernandes

**PRINCIPAL**  
Alva's Institute of Engg. & Technology,  
MIJAR. MOODBIDRI - 574 225, D.K





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### Invitation Letter

Date: 05.06.2023

To

Mr. Santhosh,

Director,

EM-Tantra Pvt Ltd, Mangaluru.

Dear Sir,

We are delighted to ask you to serve as a resource person for a certification course on "Product Development Workshop" that is scheduled to take place at our leading institution from June 08 to June 14, 2023. Students from the Department of Electronics and Communication Engineering's fourth and sixth semesters will participate in this training program.

Kindly accept our invitation letter and do the needful.

Thanking You

Coordinator

Dr. Guruprasad B

HoD

Dr. Siddesh

**H. O. D.**

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### Circular

Date: 06.06.2023

It is here by informed to all the students of 4<sup>th</sup> and 6<sup>th</sup> Semester that our department is organizing 7 days certificate programme on "Product Development Workshop" from June 08 to June 14, 2023. In this regard all the students are informed to attend the same and go through the basics of electronic circuits. Certificate will be provided upon completion of course with minimum 85% attendance at the end of the course.

Coordinator

Dr. Guruprasad B

HoD

Dr. Siddesh

**H. O. D.**

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### Feedback Form

Resource person: Mr. Santhosh

1. The resource Person is well prepared and Knowledgeably  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
2. The resource person was presented in a clear and well organized manner.  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
3. The resource person answered to questions in an informative, appropriate and satisfactory manner.  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
4. The resource person covered all the topics as per the schedule  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
5. The content coverage will be useful for the future knowledge  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
6. The activities and assignments are relevant to the course content and learning objectives  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
7. The resource person has encouraged participants interaction  

Strongly Disagree	Disagree	Agree	Strongly Agree
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8. The resource person kept me engaged and interacted  

Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
9. Overall the sessions were informative and valuable  

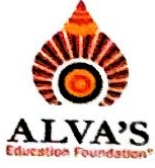
Strongly Disagree	Disagree	Agree	Strongly Agree
-------------------	----------	-------	----------------
10. The Certification objective were met  

Strongly Disagree	Disagree	Agree	Strongly Agree
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If any remarks or suggestions you would like to make

Very Interested. He should be Give some  
Assignments Reg- this programme.





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### Appreciation Letter

14<sup>th</sup> June, 2023

Mr. Santhosh,  
Director,  
EM-Tantra Pvt Ltd, Mangaluru.  
Sub: Letter of Appreciation

Dear Sir,

We would like to express our heartfelt appreciation for organizing the certificate course on "Product Development Workshop" from June 08 to June 14, 2023. On behalf of Management, the Principal, and the Department of Electronics & Communication Engineering. The certification program was enlightening, informed, and stimulating. It was a truly great learning opportunity that exposed students to convert their technical ideas into a product level. All of them appreciated and profited from your comments on this subject.

The Department and the College are grateful for your time, commitment to running the workshop, and efforts to enhance the participants' wellbeing. We sincerely appreciate your consideration of our plea and your prompt action. We are eager to collaborate with you on future projects.

Thanking you,  
Yours sincerely,

HoD  
(Dr. Siddesh)

*Siddesh*

**H. O. D.**

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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### Product Development Workshop - Students List

Dates: 08.06.2023 to 15.06.2023

Venue: MEMS Lab

S.No	Name of the Student	Signature
1	Manjunath Sajjan	Mam
2	Shridevi	Bui
3	Thejashwi P Acharya	Thejashwi
4	Lakshmi P B	PB lats
5	Abhishek P Taluskar	Abhishek
6	G. Chidan Kumar Gowda	G. Kumar
7	Kishan	Kishan
8	Shravan V.	Shravan
9	Praveen Vishwakarma	Praveen
10	Aaravinda	Aaravinda
11	Ranjitha R.	Ranjitha R.
12	Lebina Lal	Lebina
13	Vinyashree Jain	Vinyashree
14	Santhrupti CS	Santhrupti
15	Shruthi	Shruthi
16	Shwetha	Shwetha
17	Disha	Disha H
18	Chetana M	Chetana M
19	Yena Sadashiv Talwar	Yena



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20	Jyoti B.P.	Jyoti B.P.
21	Varshini K.L.	Varshini K.L.
22	Bhavana M.	Bhavana M.
23	Aishwarya Panchagavi	Aishwarya Panchagavi
24	Harshithe P.K.	Harshithe P.K.
25	Kshama T.C.	Kshama T.C.
26	Projakta	Projakta
27	Spoorthi	Spoorthi
28	Akshay K. somar	Akshay K. somar
29	Mohammed Sharfuddhin	Mohammed Sharfuddhin
30	Nijay Bharu	Nijay Bharu
31	Saumya . N.	Saumya . N.
32	Preethi.G.M	Preethi.G.M
33	Rakesh Sangshetty	Rakesh Sangshetty
34	Chaitreshree . M. G	Chaitreshree . M. G
35	Rakshitha. S	Rakshitha. S
36	Ramya . K	Ramya . K
37	Pavan K	Pavan K
38	Ponitham	Ponitham
39	Akshay	Akshay
40	Sanjay G. K	Sanjay G. K

Faculty Incharge

Siddesh  
 HoD/ECE

H. O. D.  
 Dept. Of Electronics & Communication  
 Alva's Institute of Engg. & Technology  
 Mijar, MOODBIDRI - 574 225



AIET MEMS

# Certificate OF COMPLETION

IS PRESENTED TO :

**Santrupthi C S**

For Completing All Neccessary Tasks and assignments  
in the PRODUCT DEVELOPMENT WORKSHOP Conducted by  
AIET MEMS LABORATORY in association  
with  
EmTantra technologies Pvt Ltd

**Mr.Santhosh**

DIRECTOR  
EM-TANTRA PVT LTD

**Dr. Guruprasad B**

MEMS CO-ORDINATOR  
DEPT OF ECE

**Dr. Siddhesh G K**

HOD  
DEPT OF ECE

**Dr. Peter Fernandes**

PRINCIPAL  
AIET