



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
(Accredited by NBA-AICTE, New Delhi, ISO 9001:2000 Certified Institution &
Accredited by NAAC with "A" Grade)

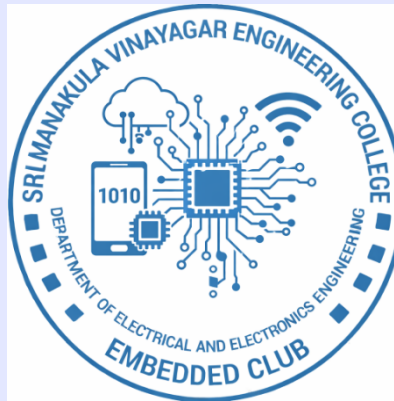
Madagadipet, Puducherry - 605 107



DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING

EMBEDDED CLUB

(Academic Year: 2023 to 2024)



Submitted by
Mr.G.Rajavel
Assistant Professor
Faculty Coordinator



Preface

The Embedded Club of the Department of Electrical and Electronics Engineering at Sri Manakula Vinayagar Engineering College functions as a vibrant technical forum established to cultivate innovation, design thinking, and application-oriented competence among students. The club provides a structured academic platform where theoretical foundations are strengthened through systematic technical engagement, collaborative learning, and experiential exposure. Guided by faculty coordinators and actively managed by student office bearers, the club promotes an integrated approach to understanding modern electronic systems from a holistic perspective, emphasizing conceptual clarity, logical reasoning, and structured problem-solving methodologies. It regularly organizes technical discussions, knowledge-sharing sessions, design-oriented activities, interactive workshops, simulation-based explorations, and innovation-driven mini projects to enhance practical insight and analytical capability. The club also encourages interdisciplinary collaboration, teamwork, leadership development, and professional ethics, enabling students to adapt to rapidly evolving technological environments. By fostering creativity, critical thinking, and real-time application perspectives, the Embedded Club plays a significant role in equipping students with industry-relevant competencies, strengthening their technical confidence, and preparing them to become future-ready engineers capable of addressing complex engineering challenges with precision, responsibility, and innovation.

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About the Department



ABOUT THE INSTITUTION

Sri Manakula Vinayaga Educational Trust was founded to provide quality and affordable education to the weaker sections of society. The trust established Sri Manakula Vinayagar Engineering College (SMVEC) in 1999. SMVEC is an autonomous institution affiliated to Pondicherry University. It offers 13 undergraduate, 8 postgraduate and 11 Research programme in engineering. SMVEC has been accredited by NAAC with “A” grade and NBA. The institution is also accredited by TATA consultancy services. The college has a good placement record with students getting job offers from top companies in India and abroad. SMVEC students have won many awards and accolades for their academic achievements.

Vision

- To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society

Mission

M1: Quality Education : To provide comprehensive academic system that amalgamates the cutting edge technologies with best practices.

M2: Research and Innovation : To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

M3: Employability and Entrepreneurship : To inculcate the employability and entrepreneurial skills through value and skill based training.

M4: Ethical Values : To instill deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.



DEPARTMENT VISION AND MISSION

Vision

To promote proficiency in the field of Electrical and Electronics Engineering by creating a stimulating environment for research, innovation and entrepreneurship

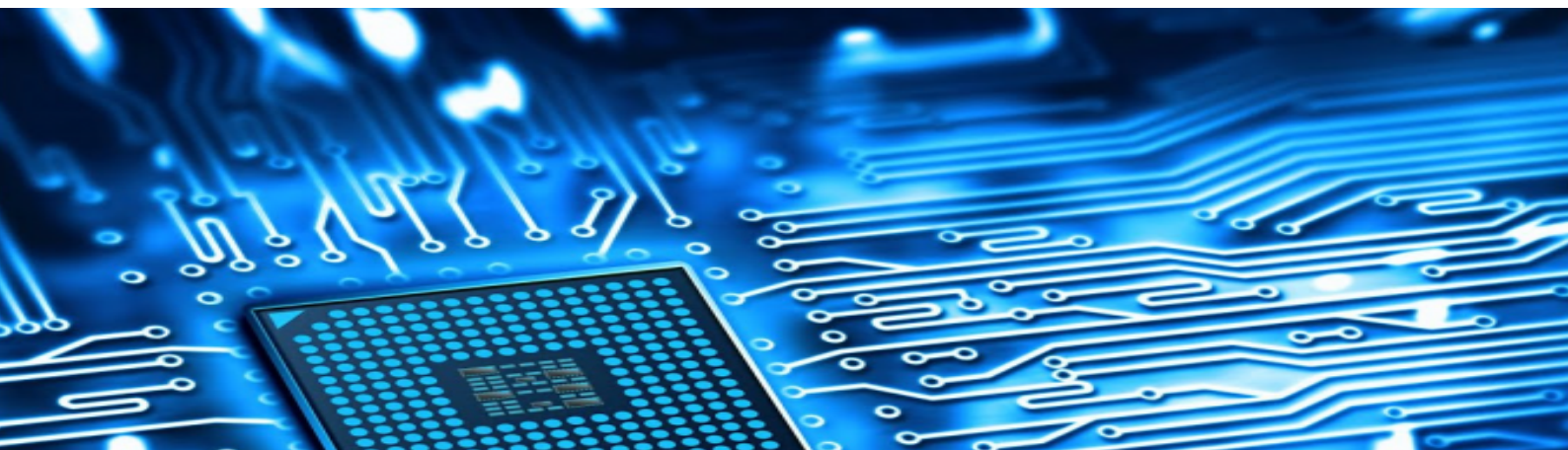
Mission

M1: Quality Education: To impart high quality technical education with problem solving capabilities by innovative pedagogy in emerging technologies.

M2: Industrial and Societal Needs: To cater the dynamic needs of the industry and society by strengthening industry-institute interaction.

M3: Research and Innovation: To nurture the spirit of research attitude by carrying out innovative technologies pragmatically.

M4: Placement and Entrepreneurship: To inculcate the professionalism in career by advancing synergetic skills to compete in the corporate world.



“Transforming energy into ideas, and ideas into impact.”

ABOUT THE EMBEDDED CLUB

Embedded systems are referred to as control systems tailored for specific applications. Embedded systems are used in many different fields such as automotive, robotics, IoT, AI, ML, biomedical equipment, and instrumentation etc. Looking at its diversity of applications and potential for production of highly innovative products, embedded system can be considered as the primary technology of the present and future.

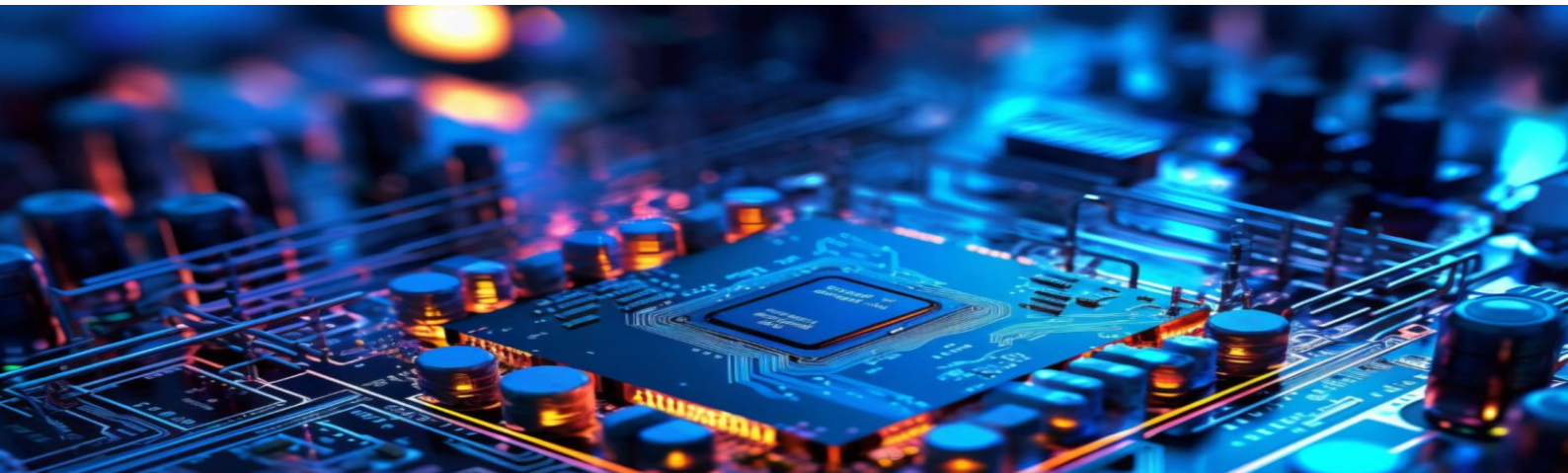
The function of the club is to deal from basics of electronics. This club aims to uncover those key topics that are not part of the curriculum. The club helps the students by integrating their skills in the various fields of engineering and technology to cope up with the highly competitive environment

Objectives Of Embedded Club

- To make the students aware of the upcoming embedded system technologies.
- To understand hardware and software design requirements of embedded system.
- To analyze the embedded system specifications and develop software program.
- To create a platform for sharing innovative ideas and to develop mini projects.
- To make students to design real time applications.

Functions

- Organising Lecture session on embedded systems.
- Conducting frequent weekend contest.
- Weekly Hands-on training sessions.
- Designing of interfacing circuits.
- Conducting Hackathon for the benefit of students.



"Where circuits connect and innovation flows."

Office Bearers and portfolios

S.No	Name	Position
1.	Mr.G.Rajavel Assistant professor/EEE	Faculty Coordinators
2.	Mr. R. Vignesh Assistant professor/EEE	
3.	Mr. C. Adrein Periyanyagam Assistant Professor / EEE	
4.	Mr. P. Mohan Raj	President
5.	Mr. K. Jothikrishnan	Vice president
6.	Mr.Srisanthosh B	Secretary
7.	Mr. E.K Abdullah	Joint Secretary
8.	Mr. Tom Tijo Edattukaran	
9.	Ms. M. Savitha	Executive Members
10.	Mr. Mohanlal	
11.	Ms. M.Swetha	Technical Members
12.	Mr. Jeeva sudhan	
13.	Ms. Susangati Samantaray	



Mr.G.Rajavel
Assistant professor/EEE



Mr. P. Mohan Raj
President



Mr. K. Jothikrishnan
Vice president



Mr.Srisanthosh B
Secretary



Mr. E.K Abdullah
Joint Secretary



Mr. Mohanlal
Executive
Member

List of student members

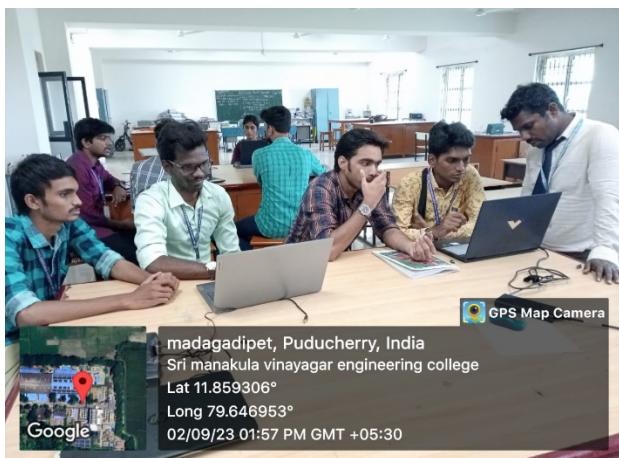
S.NO	NAME OF THE STUDENT	YEAR
1	Swetha M	IV
2	A. Sakthi	IV
3	Arunprasath.S	IV
4	Akash Sv	IV
5	Poobathi	IV
6	V. Arthi	IV
7	Mohan Raj P	IV
8	Badhma Priya M	IV
9	Kalpanadevi	IV
10	Devapriya D	IV
11	Kriahna Kumar. R	IV
12	Anusha.C	IV
13	Savitha.M	IV
14	Nithishkumar.K	IV
15	Srisanthosh B	IV
16	Mohamed Thofique	IV
17	Kabilan S	IV
18	Kirankumar S	IV
19	Abdullah E K	IV
20	Surendhar V	IV
21	Keerthiga M	IV
22	Danush Balaji S	IV
23	Vighneshwar.V	IV
24	Sivabalan G	IV
25	Rozalan J	IV
26	Vijaya Boopathy.S	IV
27	Srinevan V	IV
28	Sasidharan R	IV
29	M.Latchiavasan	IV
30	Karthikeyan.P	IV
31	Kirubakaran P	IV
32	Priyadharshini	III
33	Tom Tijo Edattukaran	III
34	Sanjai.S	III
35	Jothikrishnan K	III
36	Mohan Lal	III
37	Srinivasan S	III
38	S. Logesh	III
39	Pranav	III
40	Abdul Hafreed	III
41	Vigneshwaran. V	III
42	Susangati Samantaray	III
43	J.Sabarigireesane	III
44	R.Yogesh	III

45	Nirmal D	III
46	Raghul R	III
47	I. Gladson Joshua Paulraj	III
48	Rahul T	III
49	S. Gunapriya	III
50	Jeevasudhan G	III
51	Periasamy .R	III
52	Maheyndiran.S	III
53	Prasanaa.K	II
54	Rajesh.M	II
55	Reeshma R	II
56	Dharani	II
57	Vidhyasri	II
58	Mohamad Fazil.J	II
59	Sharmilaa.R	II
60	Dhanush	II
61	M.Mathan	II
62	S.Madhan	II
63	Selvam	II
64	Afrena.A	II

CLUB ACTIVITIES DETAILS-1

Name of the Students Club	: Embedded Club
Name of the Staff Coordinators	: 1. Mr.K.Thangaraj AP/EEE 2. Mr.C.Adrien Perianyagam AP/EEE 3. Mr.R.Vignesh AP/EEE
Activities	: Hands-on Training on “Simulation of ESP32, STM32 and ARM7”
Academic Year	: 2023 – 2024
Date/Day	: 16.09.2023 / Saturday
Time and Duration	: 5 th and 6 th Hour (1.15 PM to 2.55 PM)
No of Participants	: 17 (III/A)

The Hands-on Training on the simulation of ESP32, STM32, and ARM7 microcontrollers



aimed to provide participants with practical experience in simulating and programming specific applications. The training commenced with an overview of microcontrollers, their applications, and the significance of simulating them for development and testing purposes. Practical exercises including writing and debugging code for applications like LED control, switch control, and LCD interfacing, were conducted. This session provided participants with opportunities to clarify doubts and gain deeper insights into the world of embedded systems.

Attendance Sheet

Date:16.09.2023

Class: III-A

Sl.No	Student Name	Present/Absent
1.	ABDUL HAFREED H	Present
2.	ARCHANA R	Present
3.	DEVANATHAN A	Present
4.	DHIVYASHREE M	Present
5.	DINESH R S	Present
6.	ELAMPARUTHI K	Present
7.	GANDHAM NAGENDRA KARTHIK	Present
8.	GAYATHRY G	Present
9.	GLADSON JOSHUA PAULRAJ I	Present
10.	GUNAPRIYA S	Present
11.	GURUDEVAN L	Present
12.	HEMANATHAN D	Present
13.	JAYAKUMAR D	Present
14.	JEEVASUDHAN G	Present
15.	JOTHIKRISHNAN.K	Present
16.	KALAIYARASSI M	Present
17.	KARTHIKEYAN P	Present

CLUB ACTIVITIES DETAILS - 2

Name of the Students Club	:	Embedded Club
Name of the Staff Coordinators	:	Mr.K.Thangaraj AP/EEE Mr.C.Adrien Perianyagam AP/EEE Mr.R.Vignesh AP/EEE
Activities	:	Hands-on Training on “Selection of Microcontroller and developing environment”
Academic Year	:	2023 – 2024
Date/Day	:	2.09.2023 / Saturday
Time and Duration	:	5 th and 6 th Hour (1.15 PM to 2.55 PM)
No of Participants	:	17 (III/A)

Hands-on Training on “Selection of Microcontroller and developing environment”

Microcontrollers are crucial components in embedded systems, powering a wide range of devices from simple household appliances to complex industrial automation systems.

The selection of an appropriate microcontroller development environment decides the efficiency, functionality, and cost-effectiveness of the final product. Students were trained, how to choose specific microcontrollers for a particular applications and IDE tools. Teams were formed to develop prototype systems using ARM7 based LPC2148 microcontroller, ESP NodeMCU - (ESP8266/ESP32) and

Date: 02.09.2023

Class: III A

Sl.No	Name	Present/Absent
1.	KARTHIKRAJA S.D	Present
2.	KASTHURI C	Present
3.	KAVEEYA K	Present
4.	KAVIARASAN M	Present
5.	KAVIYA S	Present
6.	KEERTHIRAJ. V	Present
7.	LOGESH.S	Present
8.	LOKESH N	Present
9.	LOKESHWARI D	Present
10.	MAHEYNDIRAN.S	Present
11.	MOHAN LAL S	Present
12.	MURUGAN.S	Present
13.	NIRMAL D	Present
14.	NIVEDHA G	Present
15.	PRANAV B	Present
16.	PRIYADHARSHINI A	Present
17.	RAGHUL R	Present

