



# SASURIE COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai

Near NH544, Coimbatore Bypass, Near Vijayamangalam Tollgate, Tirupur 638056

## NAAC DOCUMENTS

### QUALITY INDICATOR FRAME WORK

#### CRITERION - 3

### RESEARCH, INNOVATION & EXTENSIONS

SUBMITTED BY

# IQAC

INTERNAL QUALITY ASSURANCE CELL

### SASURIE COLLEGE OF ENGINEERING



DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING

Ref: SCE / ECE / Students / RM / 2021 – 2022 / EVEN

09.05.2022

CIRCULAR

In order to address the recent research issues in the field of multi-disciplinary Engineering areas and to overcome such research issues, Department of Electronics and Communication Engineering in association with IQAC of our Institution, is planning to conduct one day seminar for the students of II, III and IV year of Civil, ECE, EEE & Mech on the title “MEMS and NEMS Research Techniques” on 13.05.2022. At the end of the programme, participation certificates will be issued to the participants.

<b>Resource Person Details</b>	Mr. Bose Vasantha, Trainer, Sunrise Electronics, Coimbatore-641001.	DM. Kishorkumar, Manager, Sunrise Electronics, Coimbatore-641001.
<b>Venue</b>	<b>Seminar Hall-ECE</b>	

  
HoD/ECE

  
PRINCIPAL

Copy to:

1. Chairman & Secretary for information
2. Principal office
3. IQAC Co-Ordinator
4. Class In charges - II, III & IV-Year Civil, ECE, EEE & Mech
5. II, III & IV-Year Civil, ECE, EEE & Mech Students
6. Civil, ECE, EEE & Mech Notice Board
7. Department File

  
**Dr. M. VIJAYAKUMAR** ME., Ph.D.,  
PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 055, Tirupur (Dt).



# **SASURIE COLLEGE OF ENGINEERING**

**Vijayamangalam, Tiruppur**

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai - 600025)

## **DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

*in association with IQAC*

*Cordially invites*

One day Research Methodology Programme (RM)

On

“MEMS and NEMS Research Techniques”

Date : 13.05.2022

Venue: Seminar Hall ECE

### **Resource Persons**

*Ms. Bose Vasantha,  
Trainer,  
Sunrise Electronics,  
Coimbatore-641001.*

*Mr. D.M. Kishorkumar,  
Manager,  
Sunrise Electronics,  
Coimbatore-641001.*

*in the esteemed presence of*

*Dr. E. Nandhakumar  
Principal*

*Shri A.M. Kandaswami  
Chairman*

*Ms. K. Savitha Moganraj  
Secretary*



*Dr. M. VIJAYAKUMAR ME., Ph.D.,  
PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 056, Tiruppur (Dt).*

DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING

**Students Participation List – Research Methodology Programme**

**“MEMS and NEMS Research Techniques”**

On 13.05.2022

Academic Year : 2021 -2022 / EVEN

S.No.	Reg No.	Name of the Student	Year / Branch
1.	732419106001	FEMEY S	III/ECE
2.	732419106003	MOWNEESH N	III/ECE
3.	732419106004	SARANYA DEVI V	III/ECE
4.	732419106005	UMESH KUMAR S	III/ECE
5.	732419106006	YOGESH S	III/ECF
6.	732419106301	KAVIYA PRIYA G	III/ECE
7.	732419106302	VIVEK S M	III/ECE
8.	732418106004	SABITHA A	IV/ECE
9.	732418106005	SUJITHRA P	IV/ECE
10.	732419105001	AJITH KUMAR S	III/EEE
11.	732419105002	DINESH M	III/EEE
12.	732419105004	NAVEENKUMAR A	III/EEE
13.	732419105005	PRAVEEN KUMAR M	III/EEE
14.	732419103001	PRAKASH V	III/CIVIL
15.	732419103002	VIPIN H	III/CIVIL
16.	732420114301	HARI GANESH B	II/MECH
17.	732420114302	PREMKUMAR Y	II/MECH
18.	732420114301	HARI GANESH B	II/MECH
19.	732420114302	PREMKUMAR Y	II/MECH
20.	732419114001	AMULRAJ P	III/MECH
21.	732419114002	ARUNKUMAR B	III/MECH
22.	732419114003	KAVIKRISHNAN P	III/MECH
23.	732419114004	KISHORE B	III/MECH
24.	732419114006	PAVENDHAR S	III/MECH
25.	732419114007	PRIYADHARSHAN G	III/MECH
26.	732419114008	SELVENTHIRAN S	III/MECH
27.	732419114010	THIRUNAVUKKARASU S	III/MECH

*V. Suresh*  
Event Coordinator

*[Signature]*  
HoD/ECE



*[Signature]*  
**Dr.M.VIJAYAKUMAR ME., Ph.D.,**  
 PRINCIPAL  
**SASURIE COLLEGE OF ENGINEERING,**  
 Vijayamangalam - 638 056, Tirupur (Dt).

DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING

**Students Attendance List – Research Methodology Programme**

**“MEMS and NEMS Research Techniques”**

On 13.05.2022

Academic Year: 2021 -2022 / EVEN

S.No.	Reg No.	Name of the Student	Year / Branch	13.05.2022		Signature
				FN	AN	
1.	732419106001	FEMEY S	III/ECE	/	/	S. Jurey
2.	732419106003	MOWNEESH N	III/ECE	/	/	N. Venu
3.	732419106004	SARANYA DEVI V	III/ECE	/	/	V. Jurey
4.	732419106005	UMESH KUMAR S	III/ECE	/	/	S. Chitra
5.	732419106006	YOGESH S	III/ECE	/	/	S. Yogesh
6.	732419106301	KAVIYA PRIYA G	III/ECE	/	/	K. Priya
7.	732419106302	VIVEK S M	III/ECE	/	/	S. H. Vivek
8.	732418106004	SABITHA A	IV/ECE	/	/	S. Sabitha
9.	732418106005	SUJITHRA P	IV/ECE	/	/	P. Sujithra
10.	732419105001	AJITH KUMAR S	III/EEE	/	/	A. Jithan
11.	732419105002	DINESH M	III/EEE	/	/	M. Dinesh
12.	732419105004	NAVEENKUMAR A	III/EEE	/	/	A. Naveen
13.	732419105005	PRAVEEN KUMAR M	III/EEE	/	/	M. Praveen
14.	732419103001	PRAKASH V	III/CIVIL	/	/	V. Prakash
15.	732419103002	VIPIN H	III/CIVIL	/	/	H. Vipin
16.	732420114301	HARI GANESH B	II/MECH	/	/	B. Ganesh
17.	732420114302	PREMKUMAR Y	II/MECH	/	/	Y. Premkumar
18.	732420114301	HARI GANESH B	II/MECH	/	/	B. Ganesh
19.	732420114302	PREMKUMAR Y	II/MECH	/	/	Y. Premkumar
20.	732419114001	AMULRAJ P	II/MECH	/	/	P. Amulraj
21.	732419114002	ARUNKUMAR B	III/MECH	/	/	B. Arunkumar
22.	732419114003	KAVIKRISHNAN P	III/MECH	/	/	P. Kavikiran
23.	732419114004	KISHORE B	III/MECH	/	/	B. Kishore
24.	732419114006	PAVENDHAR S	III/MECH	/	/	S. Pavendhar
25.	732419114007	PRIYADHARSHANG	II/MECH	/	/	G. Priyadharshang
26.	732419114008	SELVENTHIRAN S	III/MECH	/	/	S. Selventhiran
27.	732419114010	THIRUNAVUKKARASU S	III/MECH	/	/	S. Thirunavukkarasu

Event Coordinator  
V. Jurey

HOD/ECE  
J. Jurey



DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING

Students Attendance List – Research Methodology Programme

“MEMS and NEMS Research Techniques”

On 13.05.2022

Academic Year : 2021 -2022 / EVEN

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1.	732419106001	FEMEY S	III/ECE	S. Jey.
2.	732419106003	MOWNEESH N	III/ECE	N. Harsh.
3.	732419106004	SARANYA DEVI V	III/ECE	V. Saranya
4.	732419106005	UMESH KUMAR S	III/ECE	S. Umesh.
5.	732419106006	YOGESH S	III/ECE	S. Yogesh.
6.	732419106301	KAVIYA PRIYA G	III/ECE	K. Priya
7.	732419106302	VIVEK S M	III/ECE	V. Vivek.
8.	732418106004	SABITHA A	IV/ECE	S. Sabitha
9.	732418106005	SUJITHRA P	IV/ECE	P. Sujithra
10.	732419105001	AJITH KUMAR S	III/EEE	A. S. Ajith
11.	732419105002	DINESH M	III/EEE	M. Dinesh
12.	732419105004	NAVEENKUMAR A	III/EEE	A. Naveen
13.	732419105005	PRAVEEN KUMAR M	III/EEE	M. Praveen
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15.	732419103002	VIPIN H	III/CIVIL	H. Vipin
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17.	732420114302	PREMKUMAR Y	II/MECH	Y. Prem
18.	732420114301	HARI GANESH B	II/MECH	B. Ganesh
19.	732420114302	PREMKUMAR Y	II/MECH	Y. Prem
20.	732419114001	AMULRAJ P	III/MECH	P. Amulraj
21.	732419114002	ARUNKUMAR B	III/MECH	B. Arun
22.	732419114003	KAVIKRISHNAN P	III/MECH	P. Kavikrishnan
23.	732419114004	KISHORE B	III/MECH	B. Kishore
24.	732419114006	PAVENDHAR S	III/MECH	S. Pavendhar
25.	732419114007	PRIYADHARSHAN G	III/MECH	G. Priyadharshan
26.	732419114008	SELVENTHIRAN S	III/MECH	S. Selventhiran
27.	732419114010	THIRUNAVUKKARASU S	III/MECH	S. Thirunavukkarasu

Evening Coordinator  
V. Suresh

Head ECE



DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
 ENGINEERING

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**“MEMS and NEMS Research Techniques”**

On 13.05.2022

Academic Year : 2021 -2022 / EVEN

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3.	732419106004	SARANYA DEVI V	III/ECE	V. Saranya
4.	732419106005	UMESH KUMAR S	III/ECE	S. Umesh
5.	732419106006	YOGESH S	III/ECE	S. Yogesh
6.	732419106301	KAVIYA PRIYA G	III/ECE	K. Priya
7.	732419106302	VIVEK S M	III/ECE	V. Vivek
8.	732418106004	SABITHA A	IV/ECE	S. Sabitha
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11.	732419105002	DINESH M	III/EEE	M. Dinesh
12.	732419105004	NAVEENKUMAR A	III/EEE	A. Naveen
13.	732419105005	PRAVEEN KUMAR M	III/EEE	M. Praveen
14.	732419103001	PRAKASH V	III/CIVIL	V. Prakash
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18.	732420114301	HARI GANESH B	II/MECH	B. Hari
19.	732420114302	PREMKUMAR Y	II/MECH	Y. Prem
20.	732419114001	AMULRAJ P	III/MECH	P. Amulraj
21.	732419114002	ARUNKUMAR B	III/MECH	B. Arun
22.	732419114003	KAVIKRISHNAN P	III/MECH	P. Kavikrishnan
23.	732419114004	KISHORE B	III/MECH	B. Kishore
24.	732419114006	PAVENDHAR S	III/MECH	S. Pavendhar
25.	732419114007	PRIYADHARSHAN G	III/MECH	G. Priyadharshan
26.	732419114008	SELVENTHIRAN S	III/MECH	S. Selventhiran
27.	732419114010	THIRUNAVUKKARASU S	III/MECH	S. Thirunavukkarasu

Event Coordinator  


HOD/ECE  


### Report on Research Methodology Programme

Title:	MEMS and NEMS Research Techniques		
Resource Person:	Mr. Bose Vasantha, Trainer, Sunrise Electronics, Coimbatore-641001.	DM. Kishorkumar, Manager, Sunrise Electronics, Coimbatore-641001.	
Date of conduct ON :	13.05.2022	To: -	Duration: 1 Day
Organized by :	ELECTRONICS AND COMMUNICATION ENGINEERING in association with IQAC of our Institution		
Academic Year:	2021 – 2022	Semester:	EVEN
Participant Year:	II, III, IV Year -Civil, ECE, EEE & Mech	No. of Students Participated:	27
Venue:	Seminar Hall-ECE		

### Outcome of Research Methodology Programme


At the end of the Research Methodology Programme, Students can be able to

- Develop a comprehensive understanding of the principles and concepts of Microelectromechanical Systems (MEMS) and Nanoelectromechanical Systems (NEMS).
- Gain knowledge of advanced research methods and techniques specific to MEMS and NEMS research.
- Apply research methods to investigate various research issues and challenges in MEMS and NEMS technology.
- Gain proficiency in simulating and modeling MEMS and NEMS devices using software tools such as COMSOL Multiphysics.
- Enhance their ability to communicate research findings effectively through written reports, presentations, and academic papers, adhering to academic standards and conventions in the field of MEMS and NEMS research.

### Glimpse of Research Methodology Programme Photos



  
 Event Co-ordinator

  
 HoD/ ECE

  
 Principal





# SASURIE COLLEGE OF ENGINEERING


(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)  
Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr .VIPIN H, III / CIVIL  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
Academic year 2021-2022.

**IQAC Co-ordinator**



  
**Dr.M.VIJAYAKUMAR** ME., Ph.D.,  
PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 053, Tirupur (Dt).

  
**Principal**



# SASURIE COLLEGE OF ENGINEERING

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Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr. PRAKASH V, III / CIVIL  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
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**IQAC Co-ordinator**



  
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**Principal**



# SASURIE COLLEGE OF ENGINEERING


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Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr. UMESH KUMAR S, III / ECE  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
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and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
Academic year 2021-2022.

**IQAC Co-ordinator**



  
**Dr. M. VIJAYAKUMAR** M.E., Ph.D.,  
PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 633 056, Tiruppur (Dt).

**Principal**



# SASURIE COLLEGE OF ENGINEERING

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Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr . AIITHKUMAR.S, III / EEE  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
Academic year 2021-2022.

**IQAC Co-ordinator**



  
**Dr.M.VIJAYAKUMAR ME., Ph.D.,**  
PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 056, Tirupur (Dt).

  
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Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Ms. SUIITHRA P, IV / ECE  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
Academic year 2021-2022.

**IQAC Co-ordinator**



**Dr.M.VIJAYAKUMAR** ME., Ph.D.,  
PRINCIPAL

SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 639 052, Tirupur (Dt).

**Principal**



# SASURIE COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)  
Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr . PREMKUMAR Y, II / MECH  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
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**IQAC Co-ordinator**



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PRINCIPAL  
SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 056, Tirupur (Dt).

  
**Principal**



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Vijayamangalam, Tiruppur

## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr. AMULRAJ P. III / MECH  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
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**IQAC Co-ordinator**



  
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SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 056, Tirupur (Dt).

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## CERTIFICATE OF PARTICIPATION

This Certificate has been awarded to Mr. SELVENTHIRAN S. III / MECH  
has participated in the Research Methodology Program on "MEMS and  
NEMS Research Techniques" conducted by the Department of Electronics  
and Communication Engineering in association with "Sunrise Electronics"  
and IQAC of Sasurie College of Engineering on 13.05.2022 during the  
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SASURIE COLLEGE OF ENGINEERING,  
Vijayamangalam - 638 056, Tirupur (Dt).

  
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