



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Dr.G.S.Satheeshkumar, Prof/BME
Name of the subject with code : 19BM501-Bio Control System
Year/Semester/Class : III/V/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Modeling of electrical systems, translational and rotational mechanical systems	Puzzle solving
2.	II	Determination of time domain specification of second order system	Flipped classroom
3.	III	Construction of root Locus and study of stability	Mind mapping
4.	IV	Use of Nichol's chart to compute frequency and bandwidth	Group discussion
5.	V	Illustration with real time applications	Peer Group Learning

Signature of the Course Coordinator

HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : **19BM501- BIO CONTROL SYSTEM**
2. Class / Year / Branch : **III Year / V Semester / BME**
3. Name of course coordinator : **Dr.G.S.Satheeshkumar, ASP/BME**
4. Date & Hour : **16.08.2024 & 5 th**
5. Topic of the class : **Modeling of electrical systems, translational and rotational mechanical systems**
6. Title of Innovative teaching learning process : **Innovative teaching –Puzzle solving**
: **To foster engaged and experiential learning by using puzzle-solving activities that challenge students to identify, relate, and model components of electrical, translational, and rotational mechanical systems, thereby enhancing their analytical thinking, system mapping skills, and understanding of interdisciplinary analogies in system modeling.**
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Puzzle-solving introduces an element of play into learning, making abstract concepts like system modeling more interactive and less intimidating for students. By solving puzzles that match electrical components to their mechanical analogs, students can visualize and reinforce analogies (e.g., inductor $\leftrightarrow$ mass, damper $\leftrightarrow$ resistor), aiding in interdisciplinary understanding.

Challenges: Not all students may be comfortable with puzzles, especially those who are more linear or theory-driven, potentially leading to uneven engagement. Some students may focus on solving the puzzle rather than understanding the underlying principles, leading to shallow learning if not debriefed properly.



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024–25 Odd Semester

1. Name of the Subject with Code : **19BM501- BIO CONTROL SYSTEM**
2. Class / Year / Branch : III Year / V Semester / BME
3. Name of course coordinator : Dr.G.S.Satheeshkumar, ASP/BME
4. Date & Hour : 10.09.2024 & 5 th
5. Topic of the class : Determination of time domain specifications of second order systems
6. Title of Innovative teaching learning process : Innovative teaching –Flipped Classroom
: To enable students to independently explore the concepts of time domain specifications (such as rise time, peak time, maximum overshoot, settling time, and steady-state error) of second-order systems through pre-class learning materials, and apply this understanding in class through problem-solving, discussion of real-world system responses, and comparative analysis of system behaviors.
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

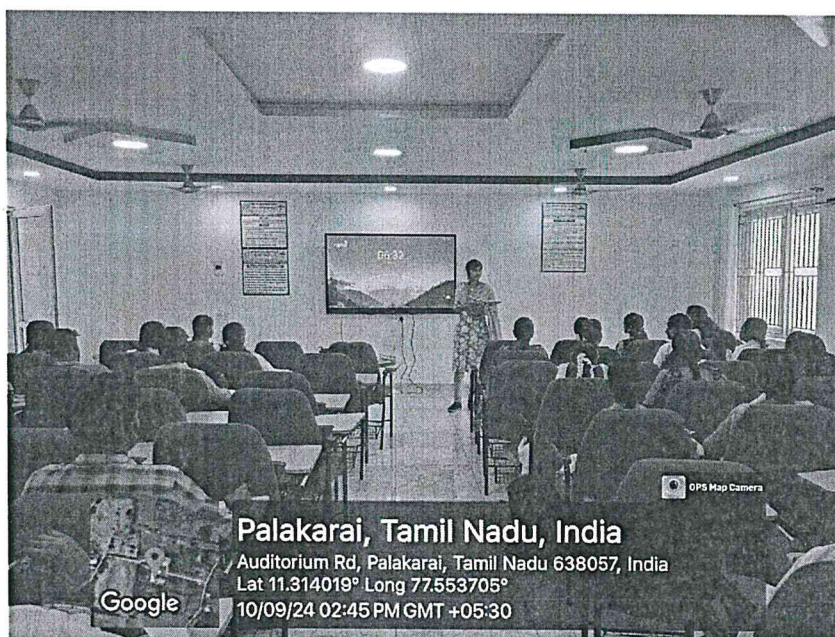
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: This led to more productive and meaningful classroom discussions, where students could focus on solving problems, interpreting response curves, and relating theoretical parameters to real-world systems (e.g., suspension systems, servo motors).

Challenges: Some students did not engage with pre-class materials, leading to uneven participation and understanding. Limited access to stable internet or devices for watching video content affected a few students. Initial classes required more time for explaining the flipped model itself and motivating students to follow it.



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : **19BM501- BIO CONTROL SYSTEM**
2. Class / Year / Branch : **III Year / V Semester / BME**
3. Name of course coordinator : **Dr.G.S.Satheeshkumar, ASP/BME**
4. Date & Hour : **30.09.2024 & 1st**
5. Topic of the class : **Construction of root Locus and study of stability**
6. Title of Innovative teaching learning process : **Innovative teaching – Mind Mapping**
: **To enable students to visually organize and interconnect key concepts of root locus construction and system stability by using mind mapping, thereby enhancing conceptual clarity, analytical thinking, and the ability to relate pole-zero locations to system behavior in both time and frequency domains.**
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

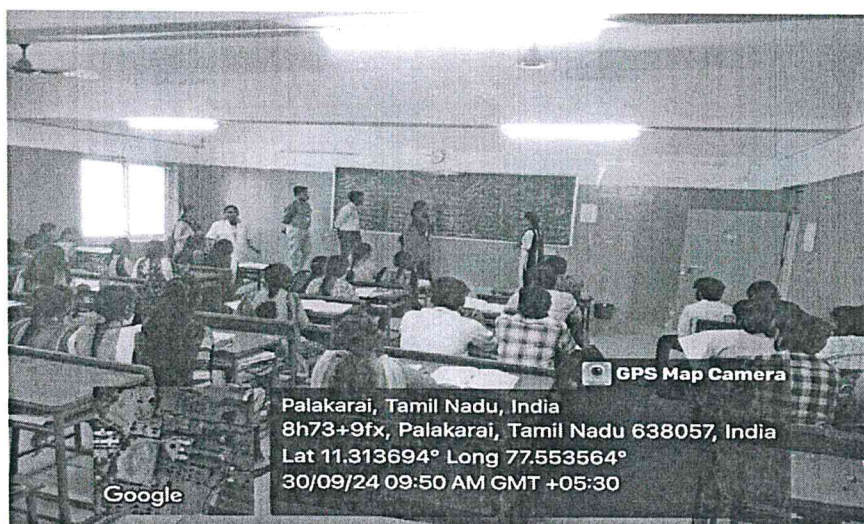
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Mind mapping allows students to visually connect the steps and rules of root locus construction, which is particularly helpful for non-linear and abstract concepts. It promotes active learning rather than passive memorization. The structured, visual layout of mind maps makes it easier for students to retain formulas, procedures, and relationships between gain, poles, and system response.

Challenges: Some students may struggle with organizing complex topics visually, limiting the effectiveness of the method without proper scaffolding. Evaluating student understanding through mind maps can be subjective unless clear rubrics are defined.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : **19BM501- BIO CONTROL SYSTEM**
2. Class / Year / Branch : **III Year / V Semester / BME**
3. Name of course coordinator : **Dr.G.S.Satheeshkumar, ASP/BME**
4. Date & Hour : **25.10.2024 & 5th**
5. Topic of the class : **Use of Nichol's chart to compute frequency and bandwidth.**
6. Title of Innovative teaching learning process : **Innovative teaching – Group Discussion**
: **To engage students in collaborative discussions that enhance their understanding of Nichols Chart principles, allowing them to analyze open-loop frequency response and compute gain crossover frequency, phase margin, and bandwidth, thereby fostering critical thinking, peer learning, and deeper insights into system stability in the frequency domain.**
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

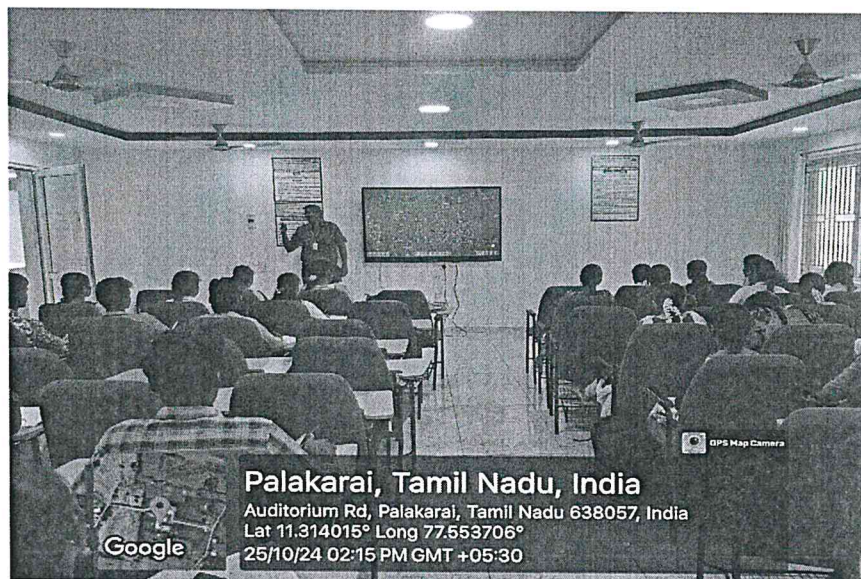
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Group discussions allow students to share different viewpoints and clarify doubts among themselves, which promotes a deeper understanding of frequency-domain concepts. Students learn to articulate technical ideas, justify their reasoning, and listen actively to others—an essential skill for engineering professionals.

Challenges: Some students may dominate the discussion, while quieter or less confident individuals may hesitate to participate, reducing group diversity in viewpoints.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : **19BM501- BIO CONTROL SYSTEM**
2. Class / Year / Branch : **III Year / V Semester / BME**
3. Name of course coordinator : **Dr.G.S.Satheeshkumar, ASP/BME**
4. Date & Hour : **19.11.2024 & 5th**
5. Topic of the class : **Illustration with real time applications**
6. Title of Innovative teaching learning process : **Innovative teaching – Peer Group Learning**

: **To enable students to collaboratively explore, illustrate, and present real-time applications of physiological control systems (e.g., temperature regulation, blood glucose control, respiratory rate control) by working in peer groups, thus fostering deeper comprehension, teamwork, critical thinking, and the ability to connect physiological theory with clinical and biomedical engineering applications.**
7. Objective

ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

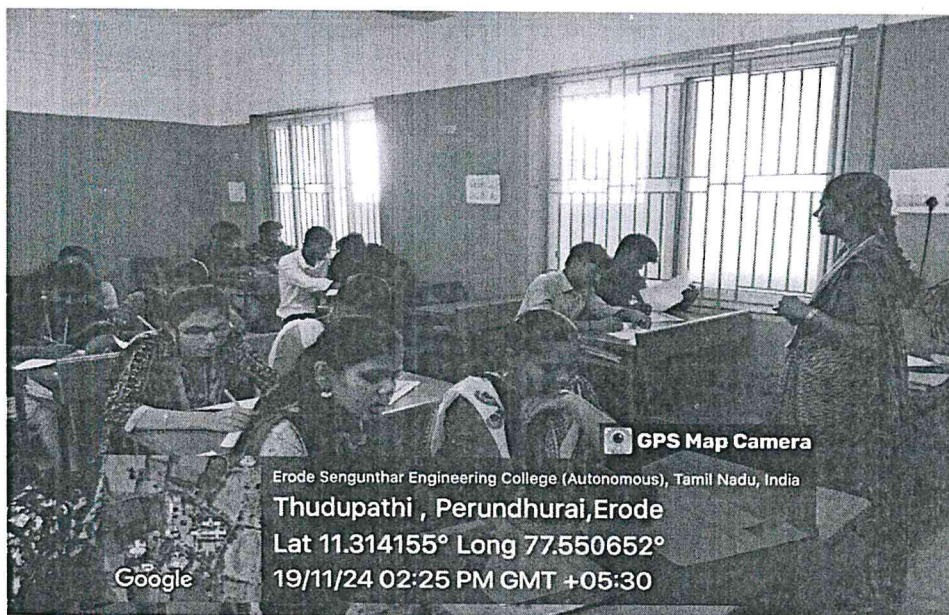
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Peer group learning encourages students to teach and learn from one another, enhancing their understanding of complex physiological control mechanisms through simplified peer explanations. Students develop teamwork, leadership, and presentation abilities, essential for healthcare professionals and biomedical engineers.

Challenges: It may be hard to assess individual learning outcomes unless supported by follow-up quizzes, reflections, or individual presentations. Coordinating group schedules and keeping all members equally engaged and on task can be challenging, especially for larger groups.



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.K.K.Leka, AP/BME
Name of the subject with code : 19BM502 Biomechanics
Year/Semester/Class : III/V/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Mechanics of bone structure	Group discussion
2.	II	Types of Prosthetic Valves	Flipped Class room
3.	III	Mechanics Properties of Bone	Peer teaching
4.	IV	Pulse wave velocities in arteries	Quiz
5.	V	Gait analysis	Role play

Signature of the Course Coordinator

HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI- 638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BM502 Biomechanics
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 13.08.2024 & 6th Hour
5. Topic of the class : Mechanics of bone structure
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective : To understand its composition, mechanical properties, and response to various forces. This includes analyzing bone's microstructure, strength, stiffness, and adaptability to stress (Wolff's Law). Understanding these principles helps in applications such as orthopedic implants, injury prevention, rehabilitation, and bioengineering.

8. Student name list

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
GROUP-II		
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
GROUP-III		
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
GROUP-IV		
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
GROUP-V		
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
GROUP-VI		
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

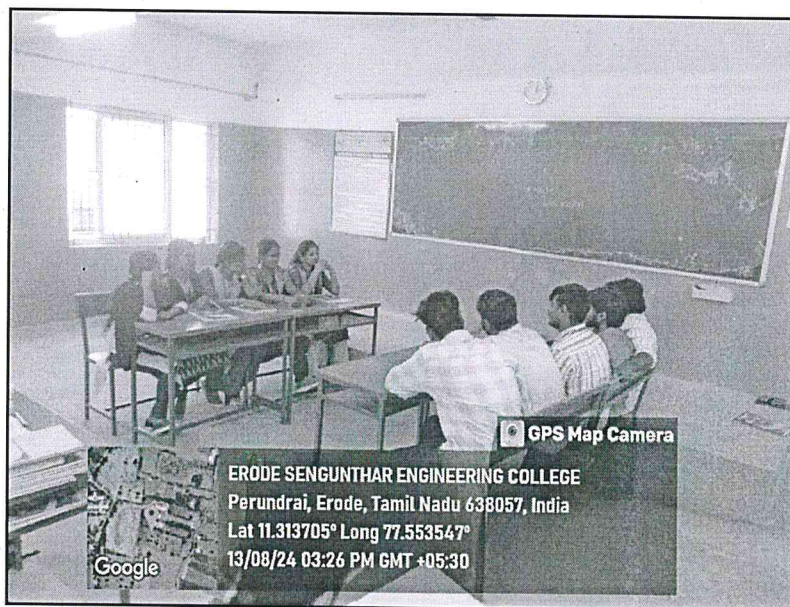
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Group Discussion



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai & National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BM502 Biomechanics
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 03.09.2024 & 6th Hour
5. Topic of the class : Types of Prosthetic Valves
6. Title of Innovative teaching learning process : Innovative teaching – Flipped Classroom
7. Objective : To understand their design, function, and application in replacing diseased heart valves.
This includes analyzing the differences between mechanical and biological valves, their materials, hemodynamic performance, durability, and biocompatibility.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S

43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

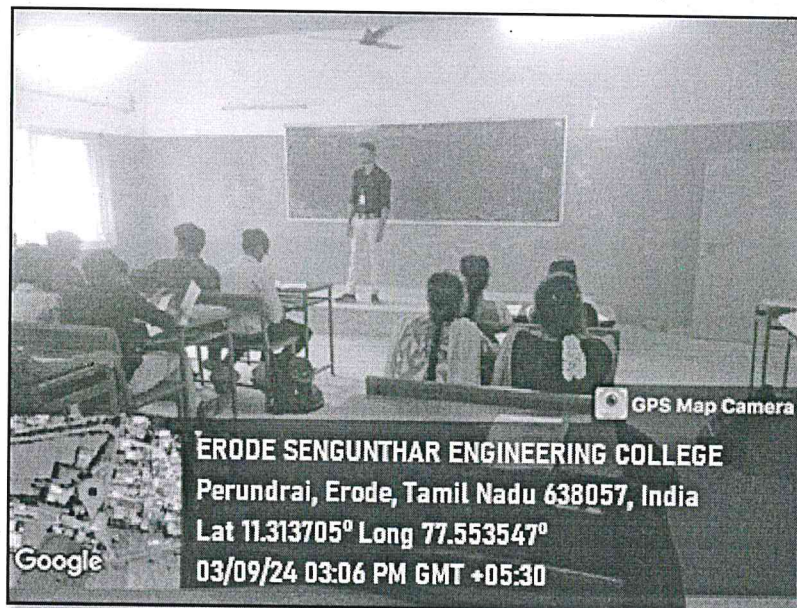
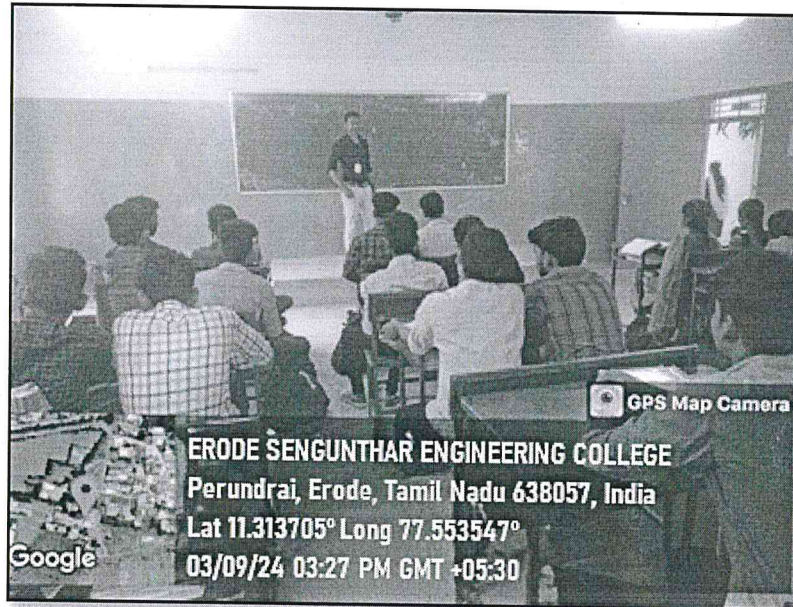
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Flipped Classroom

ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BM502 BIOMECHANICS
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 24.09.2024 & 6th Hour
5. Topic of the class : Mechanical properties of bone
6. Title of Innovative teaching learning process : Innovative teaching – Peer Teaching
7. Objective : Understand bone's mechanical properties, including material characteristics, structural adaptations, biomechanical function, age-related changes, clinical applications, experimental techniques, and strategies for bone health. This knowledge is essential for research, diagnosis, treatment, and promoting skeletal well-being.

8. Student name list

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
GROUP-II		
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
GROUP-III		
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
GROUP-IV		
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
GROUP-V		
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
GROUP-VI		
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

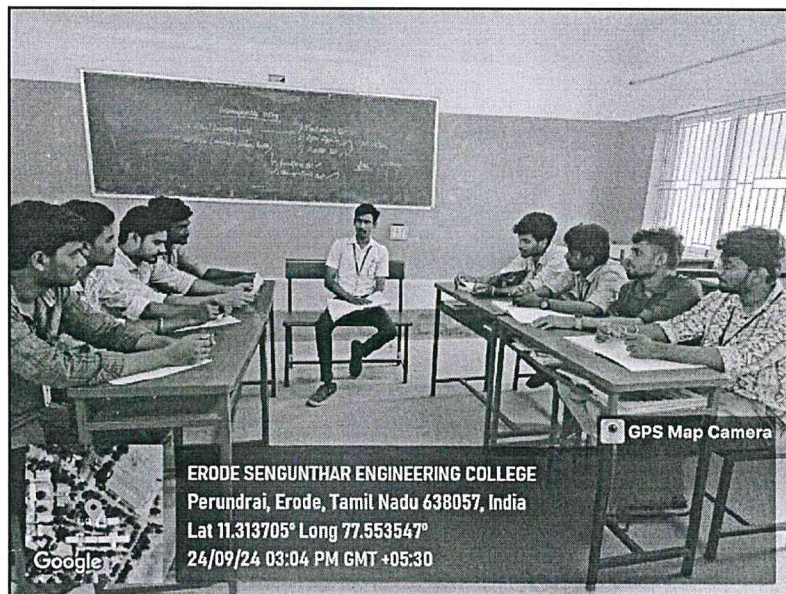
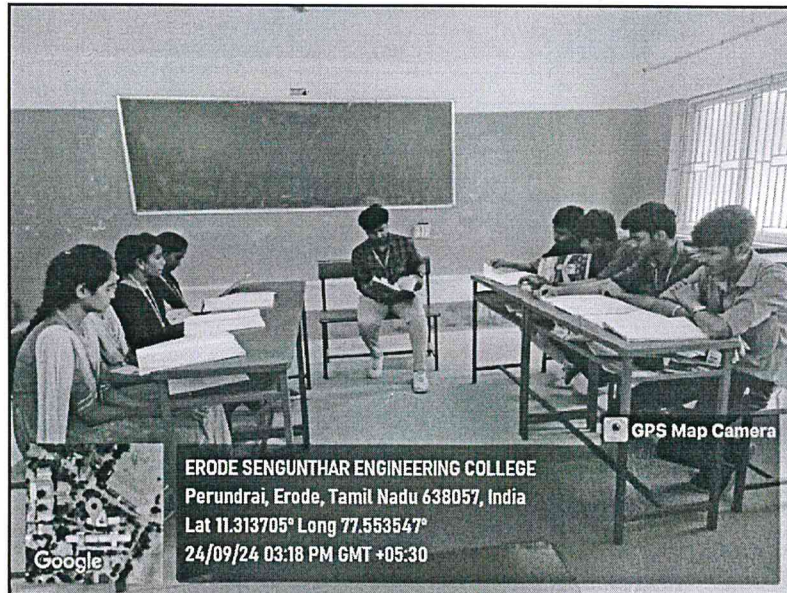
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Peer Teaching



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BM502 BIOMECHANICS
2. Class / Year / Branch : III Year / V Semester / Biomedical
Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 15.10.2024 & 6th Hour
5. Topic of the class : Pulse wave velocities in arteries
6. Title of Innovative teaching learning process : Innovative teaching – Quiz
7. Objective : Explore pulse wave velocities in arteries,
covering measurement methods,
clinical importance, arterial
compliance, age-related changes, links
to atherosclerosis and hypertension, and
potential interventions. This knowledge
is crucial for cardiovascular
diagnostics, risk assessment, and
targeted treatments.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVIM
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

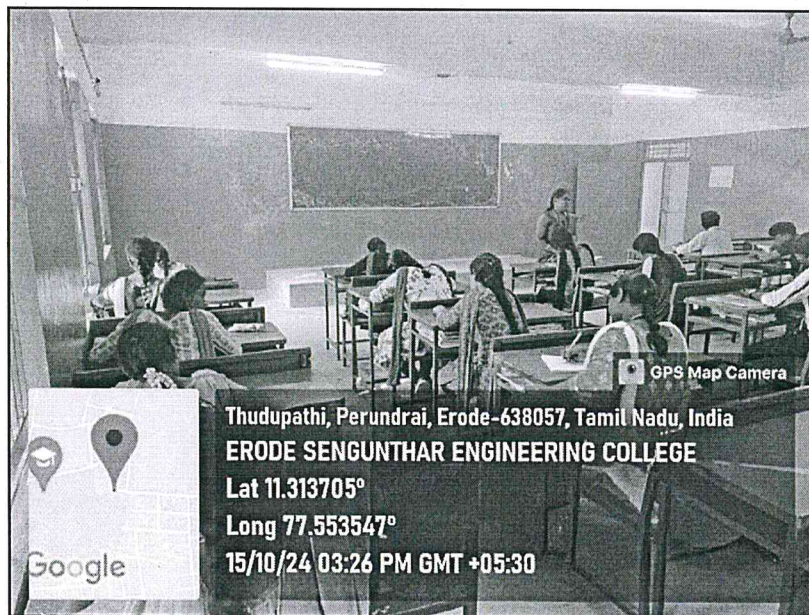
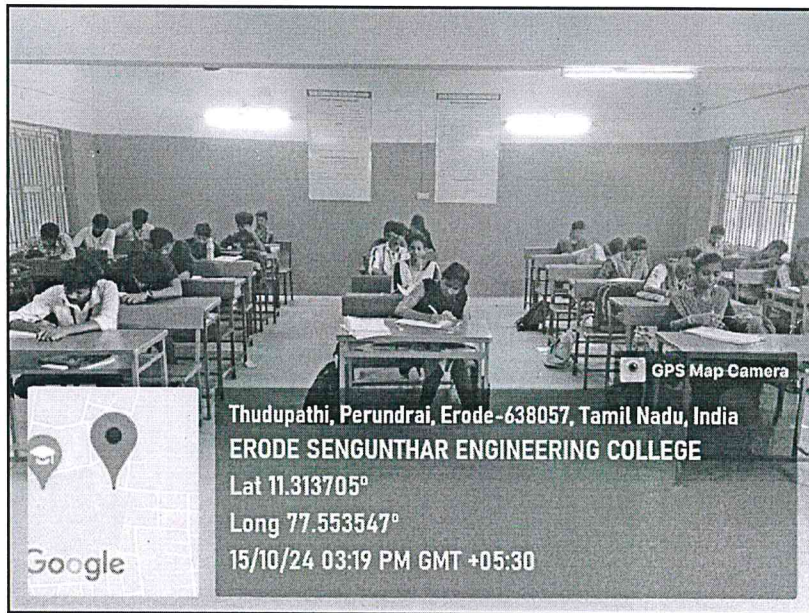
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Quiz



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)
Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI - 638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BM502 BIOMECHANICS
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 07.11.2024 & 3rd Hour
5. Topic of the class : Gait analysis (determination of Instantaneous joint reaction analysis)
6. Title of Innovative teaching learning process : Innovative teaching – Role play
7. Objective : To understand gait analysis for determining instantaneous joint reactions during the gait cycle. This includes exploring measurement techniques, gait phases, joint kinematics, joint kinetics, clinical applications, sports performance, research applications, and data interpretation.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Role Play



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

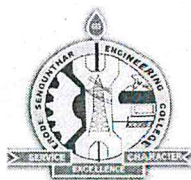
INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.M.Mohanavalli, AP/BME
Name of the subject with code : 19BM504- Biomedical Instrumentation
Year/Semester/Class : III/V/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Basic Medical Instrumentation System	Role play
2.	II	EEG 10-20 Electrode System	Practical based learning
3.	III	Instrumentation Amplifier	Peer group learning
4.	IV	Measurement of Pulse rate	Practical based learning
5.	V	Bed side Monitors	Practical based learning

Signature of the Course Coordinator


HOD/BME



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM504 Biomedical Instrumentation
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 17.08.2024 & 1st Hour
5. Topic of the class : Basic Medical Instrumentation System
6. Title of Innovative teaching learning process : Role Play
7. Objective :
To understand the principles of operation for common medical instruments
8. Students Name list

S.No	Register Number	Student Name
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DIANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V

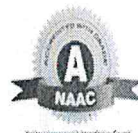
S.No	Register Number	Student Name
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S



ERODE SENGUNTHAR ENGINEERING COLLEGE

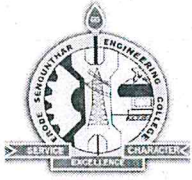
(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register Number	Student Name
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121040	SAMPOORNAM M
39.	730422121041	SANDHIYA T
40.	730422121043	SARANYA E
41.	730422121044	SEETHA S
42.	730422121045	SENTHAMARAI S
43.	730422121046	SHALINI V
44.	730422121047	SHIVANIKA S
45.	730422121048	SIBIRAJ S

S.No	Register Number	Student Name
46.	730422121049	SIVA S
47.	730422121050	SOWMIYA S
48.	730422121051	SRILEKA M
49.	730422121052	SUBALAKHSMI S
50.	730422121053	SUGANYA S
51.	730422121054	SUNDARAM R
52.	730422121055	THRISHA R
53.	730422121056	VALAVAN V
54.	730422121057	VASANTH KUMAR O S
55.	730422121058	VASUDEVAN K
56.	730422121059	VELLIMALAR M
57.	730422121060	VIJI J
58.	730422121061	VIKRAM S
59.	730422121062	VISHWAPRASATH M
60.	730422121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM504 Biomedical Instrumentation
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 05.09.2024 & 4th Hour
5. Topic of the class : EEG 10-20 Electrode System
6. Title of Innovative teaching learning process : Practical Based Learning
7. Objective :
To understand the EEG 10-20 electrode system, including its standardized electrode placement, nomenclature, and significance in clinical applications.
8. Students Name list

S.No	Register Number	Student Name
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V

S.No	Register Number	Student Name
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register Number	Student Name
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121040	SAMPOORNAM M
39.	730422121041	SANDHIYA T
40.	730422121043	SARANYA E
41.	730422121044	SEETHA S
42.	730422121045	SENTHAMARAI S
43.	730422121046	SHALINI V
44.	730422121047	SHIVANIKA S
45.	730422121048	SIBIRAJ S

S.No	Register Number	Student Name
46.	730422121049	SIVA S
47.	730422121050	SOWMIYA S
48.	730422121051	SRILEKA M
49.	730422121052	SUBALAKHSMI S
50.	730422121053	SUGANYA S
51.	730422121054	SUNDARAM R
52.	730422121055	THRISHA R
53.	730422121056	VALAVAN V
54.	730422121057	VASANTH KUMAR O S
55.	730422121058	VASUDEVAN K
56.	730422121059	VELLIMALAR M
57.	730422121060	VIJI J
58.	730422121061	VIKRAM S
59.	730422121062	VISHWAPRASATH M
60.	730422121301	VENKATESHWARAN D



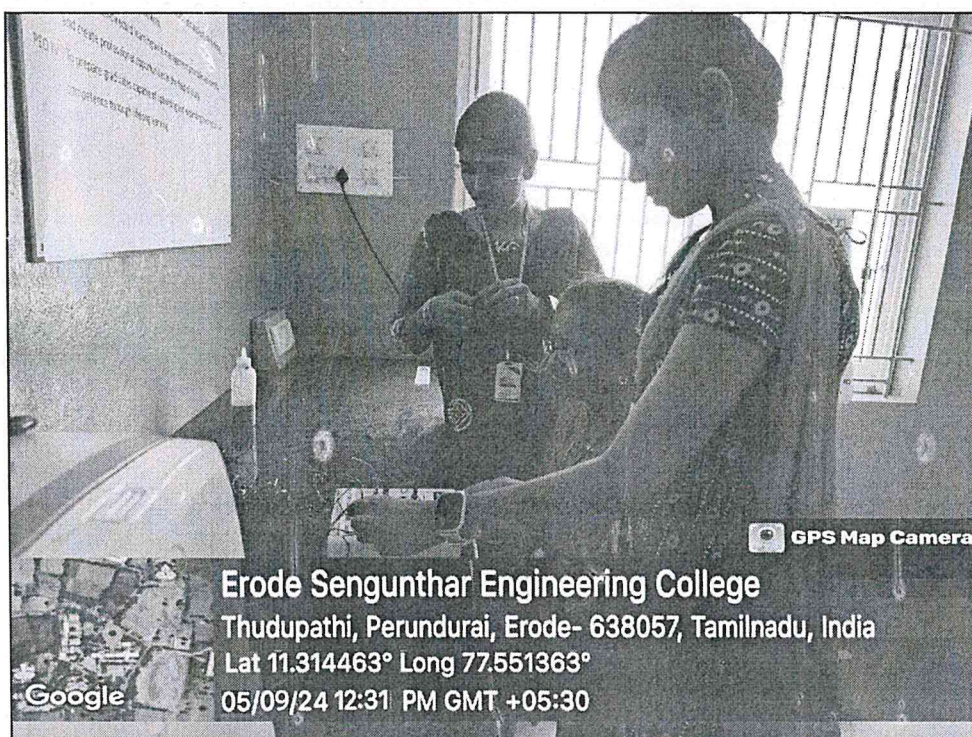
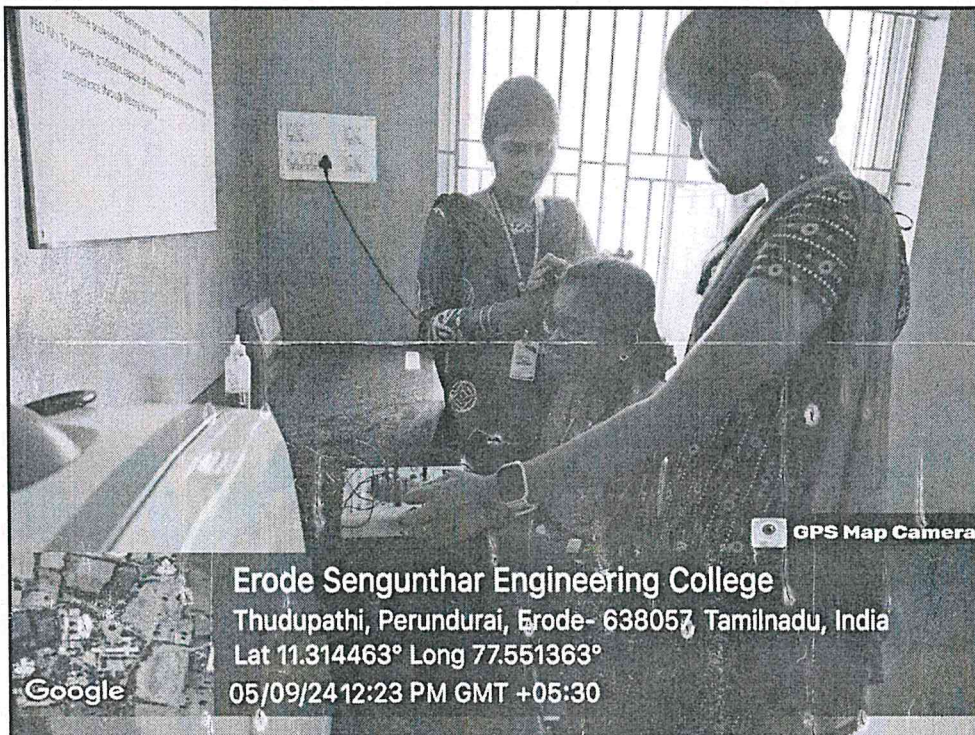
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos



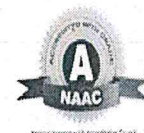


ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM504 Biomedical Instrumentation
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 26.09.2024 & 4th Hour
5. Topic of the class : Instrumentation Amplifier
6. Title of Innovative teaching learning process : Peer Group Learning
7. Objective :
To design the instrumentation amplifier for acquiring biosignals and analyze how it amplify small differential signals while rejecting common-mode noise.
8. Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D

Group II		
S.No	Register No.	Name of the Student
1.	730422121006	DARSHAN K
2.	730422121007	DHANUSHMURUGAN R
3.	730422121008	DHARMENDRA KUMAR
4.	730422121009	DHARSHINI G J
5.	730422121010	DURGANANDHINI P

Group III		
S.No	Register No.	Name of the Student
1.	730422121011	ELANGO VAN M
2.	730422121012	ESHWARAN C
3.	730422121013	HARANI S
4.	730422121014	HARINI M
5.	730422121015	HARISH V

Group IV		
S.No	Register No.	Name of the Student
1.	730422121016	JEGATHAMBAL C
2.	730422121017	KABILA S
3.	730422121018	KANISHKA A
4.	730422121019	KAVITHASRI T
5.	730422121020	KAVIYARASU P



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group V		
S.No	Register No.	Name of the Student
1.	730422121021	KEERTHANA S
2.	730422121022	KOWSHIK A
3.	730422121023	LAVANYA M
4.	730422121024	MADHUMITHA S
5.	730422121025	MOHAMED ANISH J

Group VI		
S.No	Register No.	Name of the Student
1.	730422121026	MOHANAPRIYA K
2.	730422121027	MONIKA C
3.	730422121028	MURALI DAS P
4.	730422121029	NARMATHA D
5.	730422121030	NIVETHA S

Group VII		
S.No	Register No.	Name of the Student
1.	730422121032	PRADEEPA S
2.	730422121034	PRIYADHARSHINI S
3.	730422121035	PUGAZHAMATHI P
4.	730422121036	RAMAPANDIAN M
5.	730422121037	RAMYA DEVI M

Group VIII		
S.No	Register No.	Name of the Student
1.	730422121038	RITHIKA M
2.	730422121039	SAISIVAM R
3.	730422121040	SAMPOORNAM M
4.	730422121041	SANDHIYA T
5.	730422121043	SARANYA E

Group IX		
S.No	Register No.	Name of the Student
1.	730422121044	SEETHA S
2.	730422121045	SENTHAMARAI S
3.	730422121046	SHALINI V
4.	730422121047	SHIVANIKA S
5.	730422121048	SIBIRAJ S

Group X		
S.No	Register No.	Name of the Student
1.	730422121049	SIVA S
2.	730422121050	SOWMIYA S
3.	730422121051	SRILEKA M
4.	730422121052	SUBALAKHSMI S
5.	730422121053	SUGANYA S

Group XI		
S.No	Register No.	Name of the Student
1.	730422121054	SUNDARAM R
2.	730422121055	THRISHA R
3.	730422121056	VALAVAN V
4.	730422121057	VASANTH KUMAR O S
5.	730422121058	VASUDEVAN K

Group XII		
S.No	Register No.	Name of the Student
1.	730422121059	VELLIMALAR M
2.	730422121060	VIJI J
3.	730422121061	VIKRAM S
4.	730422121062	VISHWAPRASATH M
5.	730422121301	VENKATESHWARAN D



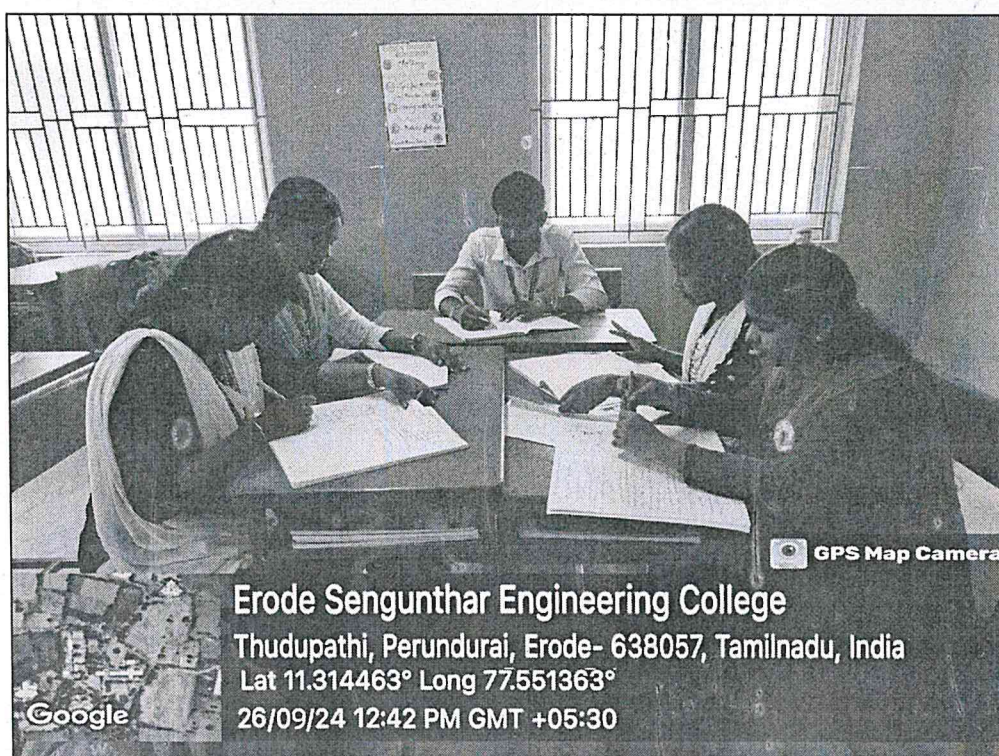
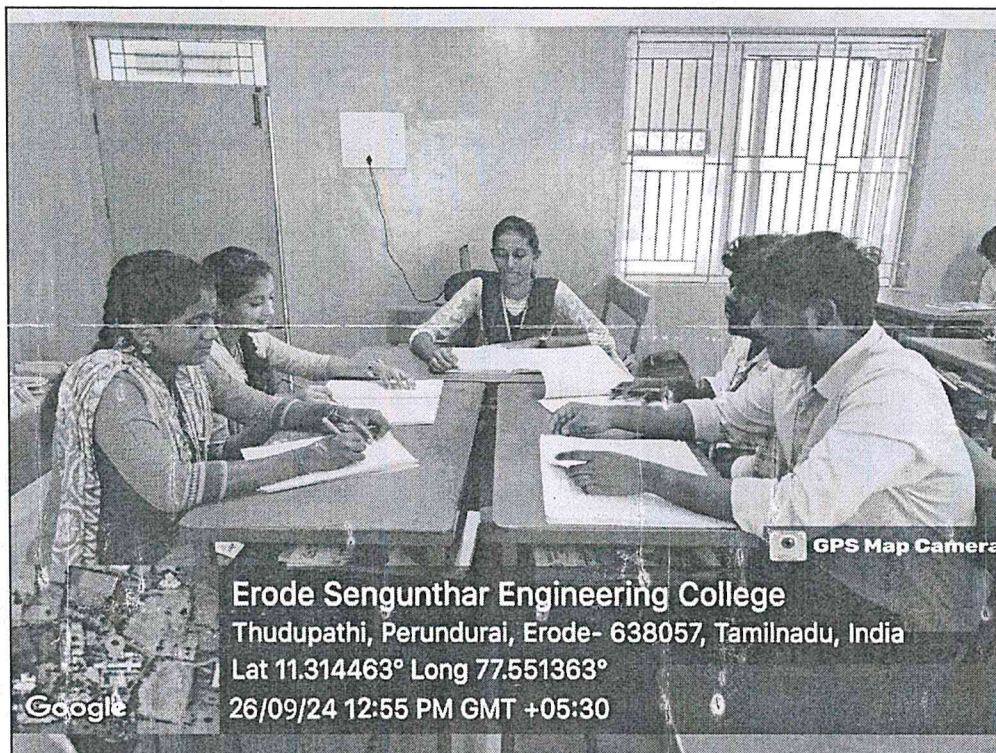
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM504 Biomedical Instrumentation
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 05.10.2024 & 1st Hour
5. Topic of the class : Measurement of Pulse rate
6. Title of Innovative teaching learning process : Practical based learning
7. Objective :
To measure the pulse rate accurately and understand its physiological significance, along with the principles underlying its detection and analysis.
8. Students Name list

S.No	Register Number	Student Name
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V

S.No	Register Number	Student Name
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S



ERODE SENGUNTHAR

ENGINEERING COLLEGE

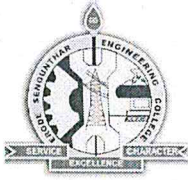
(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register Number	Student Name
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121040	SAMPOORNAM M
39.	730422121041	SANDHIYA T
40.	730422121043	SARANYA E
41.	730422121044	SEETHA S
42.	730422121045	SENTHAMARAI S
43.	730422121046	SHALINI V
44.	730422121047	SHIVANIKA S
45.	730422121048	SIBIRAJ S

S.No	Register Number	Student Name
46.	730422121049	SIVA S
47.	730422121050	SOWMIYA S
48.	730422121051	SRILEKA M
49.	730422121052	SUBALAKHSMI S
50.	730422121053	SUGANYA S
51.	730422121054	SUNDARAM R
52.	730422121055	THRISHA R
53.	730422121056	VALAVAN V
54.	730422121057	VASANTH KUMAR O S
55.	730422121058	VASUDEVAN K
56.	730422121059	VELLIMALAR M
57.	730422121060	VIJI J
58.	730422121061	VIKRAM S
59.	730422121062	VISHWAPRASATH M
60.	730422121301	VENKATESHWARAN D



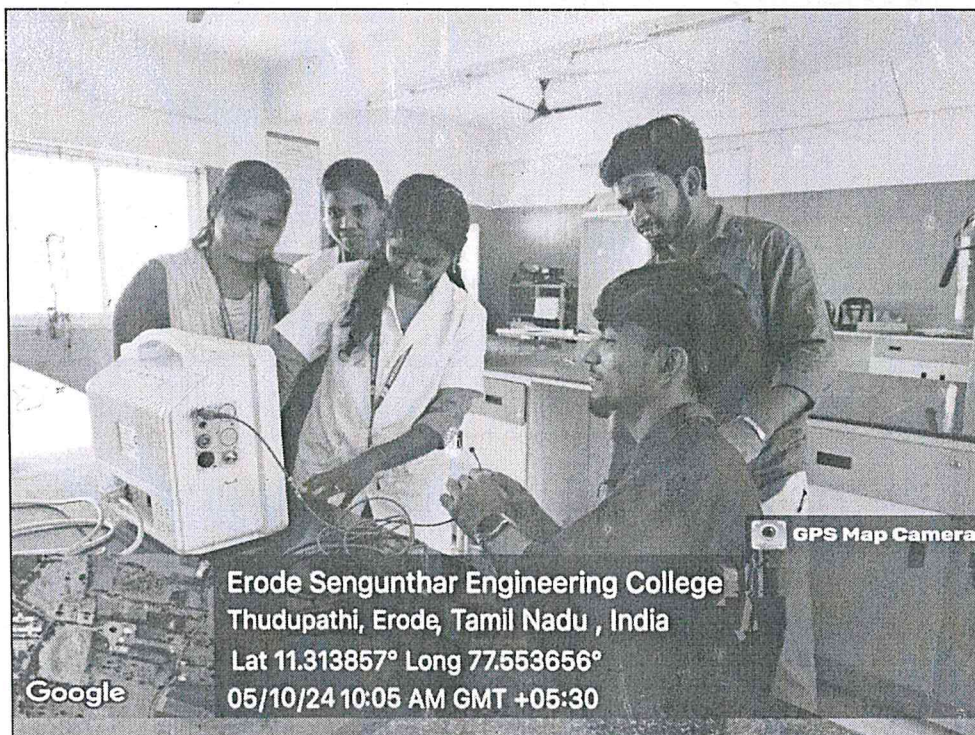
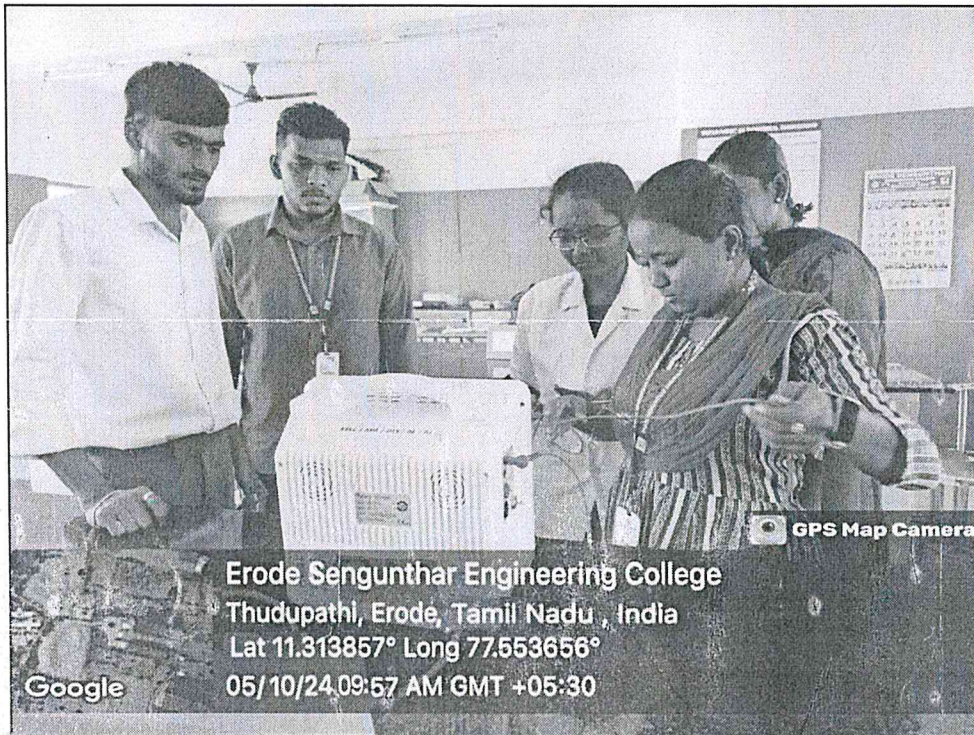
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM504 Biomedical Instrumentation
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 25.10.2024 & 7th Hour
5. Topic of the class : Bedside Monitors
6. Title of Innovative teaching learning process : Practical based learning
7. Objective :
To understand the function, components, and importance of bedside monitors in patient care
8. Students Name list

S.No	Register Number	Student Name
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V

S.No	Register Number	Student Name
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register Number	Student Name
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121040	SAMPOORNAM M
39.	730422121041	SANDHIYA T
40.	730422121043	SARANYA E
41.	730422121044	SEETHA S
42.	730422121045	SENTHAMARAI S
43.	730422121046	SHALINI V
44.	730422121047	SHIVANIKA S
45.	730422121048	SIBIRAJ S

S.No	Register Number	Student Name
46.	730422121049	SIVA S
47.	730422121050	SOWMIYA S
48.	730422121051	SRILEKA M
49.	730422121052	SUBALAKHSMI S
50.	730422121053	SUGANYA S
51.	730422121054	SUNDARAM R
52.	730422121055	THRISHA R
53.	730422121056	VALAVAN V
54.	730422121057	VASANTH KUMAR O S
55.	730422121058	VASUDEVAN K
56.	730422121059	VELLIMALAR M
57.	730422121060	VIJI J
58.	730422121061	VIKRAM S
59.	730422121062	VISHWAPRASATH M
60.	730422121301	VENKATESHWARAN D



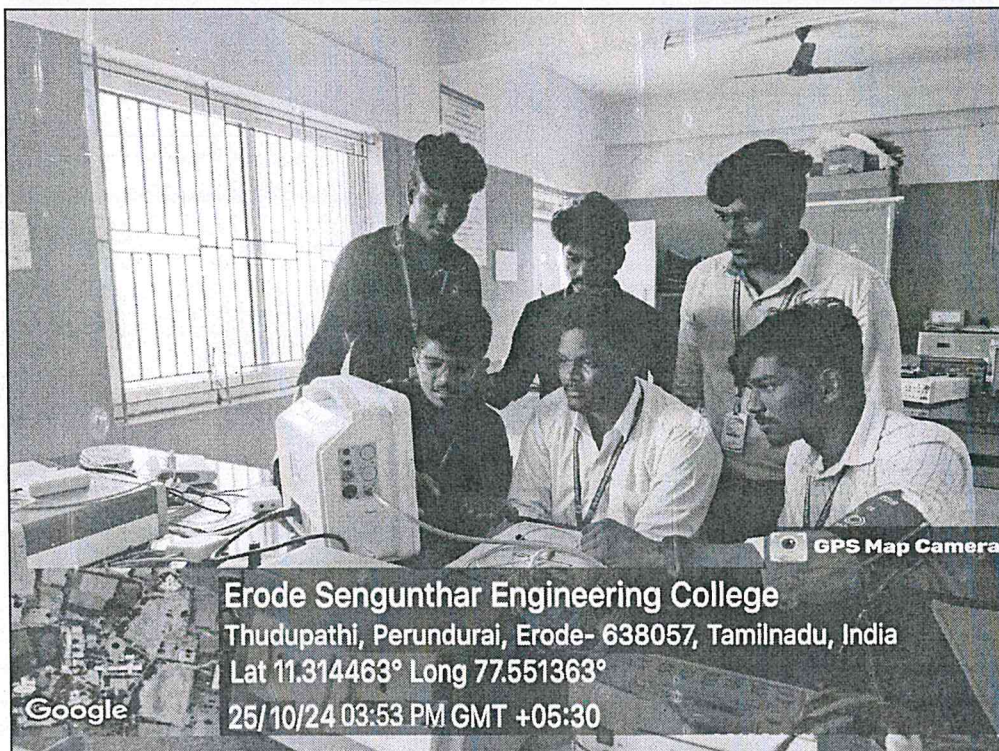
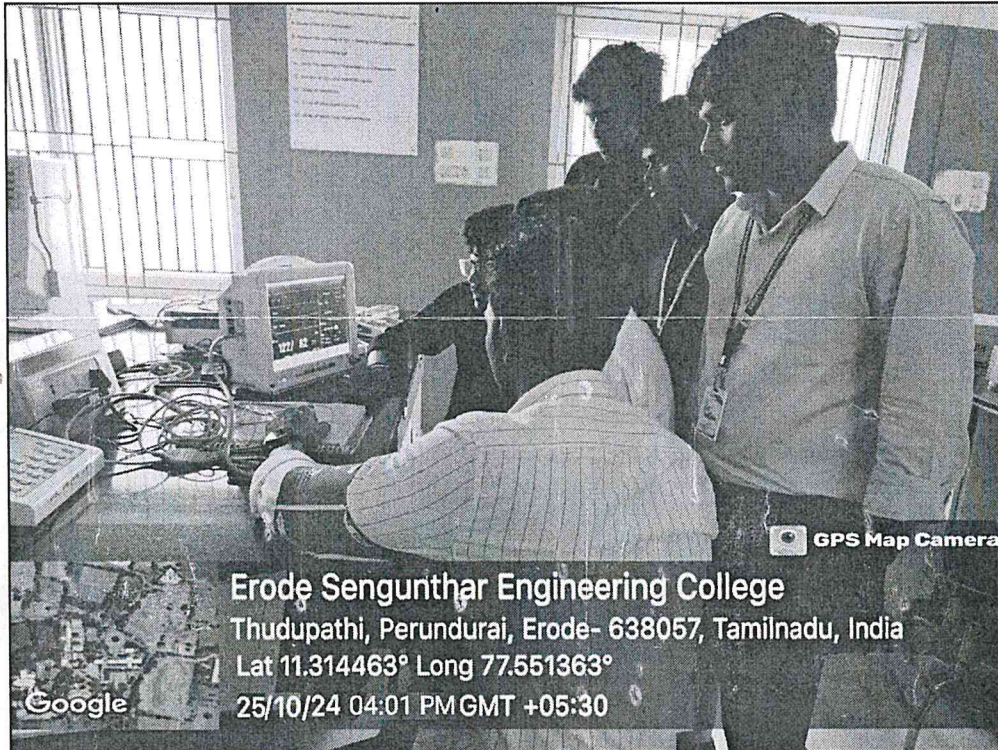
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A'

Grade

PERUNDURAI -638 057, TAMILNADU, INDIA



INNOVATIVE TEACHING

Name of the course coordinator

: Dr.B.SARITHA

Name of the subject with code

: 19BM602-PATTERN RECONITION & NEURAL
NETWORKS

Year / Semester / Class

: III/VI/BME

S.No.	UNIT	Topic	Methodology Adopted
1.	I	Supervised Learning	Participative Learning(Recollecting Things)
2.	II	Unsupervised Learning & Clustering	Participative Learning(Crossword Puzzle)
3.	V	Competitive Network	Collaborative Learning(Peer group)

Signature of the course coordinator

HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM602 PATTERN RECOGNITION AND NEURAL NETWORKS
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.B.SARITHA, ASP/BME
4. Date & Hour : 05.02.2025 & 5th Hour
5. Topic of the class : Supervised Learning
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
(Recollecting Things)
7. Objective : 1. Students **retrieve** key concepts efficiently.
2. Strengthen memory through **active engagement** rather than passive reading.

8. Student name list

S. No.	Roll Number	Student Name
1	ES22BM01	ABISHEKH C
2	ES22BM02	AKSHARA K
3	ES22BM03	ANANTHI C
4	ES22BM04	BALAJI J
5	ES22BM05	BHUVANESHWARI D
6	ES22BM06	DARSHAN K
7	ES22BM07	DHANUSHMURUGAN R
8	ES22BM09	DHARSHINI G J

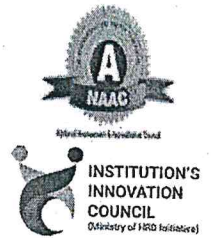
9	ES22BM10	DURGANANDHINI P
10	ES22BM11	ELANGO VAN M
11	ES22BM12	ESHWARAN C
12	ES22BM13	HARANI S
13	ES22BM14	HARINI M
14	ES22BM15	HARISH V
15	ES22BM16	JEGATHAMBAL C
16	ES22BM17	KABILA S
17	ES22BM18	KANISHKA A
18	ES22BM19	KAVITHASRI T
19	ES22BM20	KAVIYARASU P
20	ES22BM21	KEERTHANA S
21	ES22BM22	KOWSHIK A
22	ES22BM23	LAVANYA M
23	ES22BM24	MADHUMITHA S
24	ES22BM25	MOHAMED ANISH J
25	ES22BM26	MOHANAPRIYA K
26	ES22BM27	MONIKA C
27	ES22BM28	MURALI DAS P
28	ES22BM29	NARMATHA D
29	ES22BM30	NIVETHA S
30	ES22BM32	PRADEEPA S
31	ES22BM34	PRIYADHARSHINI S
32	ES22BM35	PUGAZHAMATHI P
33	ES22BM36	RAMAPANDIAN M
34	ES22BM37	RAMYA DEVI M
35	ES22BM38	RITHIKA M
36	ES22BM39	SAISIVAM R
37	ES22BM41	SANDHIYA T
38	ES22BM43	SARANYA E
39	ES22BM44	SEETHA S
40	ES22BM46	SHALINI V
41	ES22BM47	SHIVANIKA S
42	ES22BM48	SIBIRAJ S
43	ES22BM49	SIVA S
44	ES22BM50	SOWMIYA S
45	ES22BM51	SRILEKA M
46	ES22BM52	SUBALAKHSMI S
47	ES22BM53	SUGANYA S
48	ES22BM54	SUNDARAM R
49	ES22BM55	THRISHA R
50	ES22BM56	VALAVAN V
51	ES22BM57	VASANTH KUMAR O S
52	ES22BM58	VASUDEVAN K
53	ES22BM59	VELLIMALAR M
54	ES22BM60	VIJI J
55	ES22BM61	VIKRAM S
56	ES22BM62	VISHWAPRASATH M
57	ES22LBM01	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

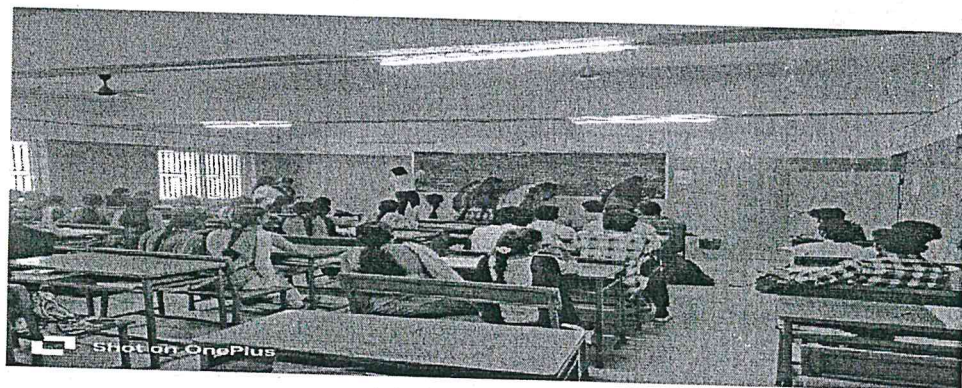
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique: Recollecting concepts through **Activity-Based Learning (ABL)** proves to be an effective strategy, as it engages multiple cognitive functions, including memory, comprehension, and critical thinking.

Challenges: Implementing these methods in class rooms initially student hesitate to come forward. Few strategic modifications can make it more accessible and efficient. By continuously refining these methods, students can achieve deeper mastery of concepts while making learning more enjoyable.

B. S. S.
Course Coordinator

B. S. S.
HOD



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM602 PATTERN RECOGNITION AND
NEURAL NETWORKS
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.B.SARITHA, ASP/BME
4. Date & Hour : 05.02.2025 & 5th Hour
5. Topic of the class : Unsupervised Learning & Clustering
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
Crossword puzzle
7. Objective : **Reinforce key concepts and terminology**
through active recall.

Enhance student engagement by introducing
a fun, game-based learning method.

Encourage critical thinking and
collaboration among learners.

8. Student name list

S. No.	Roll Number	Student Name
1	ES22BM01	ABISHEKH C
2	ES22BM02	AKSHARA K
3	ES22BM03	ANANTHI C
4	ES22BM04	BALAJI J
5	ES22BM05	BHUVANESHWARI D
6	ES22BM06	DARSHAN K
7	ES22BM07	DHANUSHMURUGAN R
8	ES22BM09	DHARSHINI G J
9	ES22BM10	DURGANANDHINI P
10	ES22BM11	ELANGO VAN M
11	ES22BM12	ESHWARAN C
12	ES22BM13	HARANI S
13	ES22BM14	HARINI M
14	ES22BM15	HARISH V
15	ES22BM16	JEGATHAMBAL C
16	ES22BM17	KABILA S
17	ES22BM18	KANISHKA A
18	ES22BM19	KAVITHASRI T
19	ES22BM20	KAVIYARASU P
20	ES22BM21	KEERTHANA S
21	ES22BM22	KOWSHIK A
22	ES22BM23	LAVANYA M
23	ES22BM24	MADHUMITHA S
24	ES22BM25	MOHAMED ANISH J
25	ES22BM26	MOHANAPRIYA K
26	ES22BM27	MONIKA C
27	ES22BM28	MURALI DAS P
28	ES22BM29	NARMATHA D
29	ES22BM30	NIVETHA S
30	ES22BM32	PRADEEPA S
31	ES22BM34	PRIYADHARSHINI S
32	ES22BM35	PUGAZHAMATHI P
33	ES22BM36	RAMAPANDIAN M
34	ES22BM37	RAMYA DEVI M
35	ES22BM38	RITHIKA M
36	ES22BM39	SAISIVAM R
37	ES22BM41	SANDHIYA T
38	ES22BM43	SARANYA E
39	ES22BM44	SEETHA S
40	ES22BM46	SHALINI V
41	ES22BM47	SHIVANIKA S

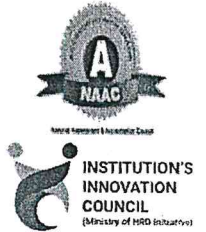
42	ES22BM48	SIBIRAJ S
43	ES22BM49	SIVA S
44	ES22BM50	SOWMIYA S
45	ES22BM51	SRILEKA M
46	ES22BM52	SUBALAKHSMI S
47	ES22BM53	SUGANYA S
48	ES22BM54	SUNDARAM R
49	ES22BM55	THRISHA R
50	ES22BM56	VALAVAN V
51	ES22BM57	VASANTH KUMAR O S
52	ES22BM58	VASUDEVAN K
53	ES22BM59	VELLIMALAR M
54	ES22BM60	VIJI J
55	ES22BM61	VIKRAM S
56	ES22BM62	VISHWAPRASATH M
57	ES22LBM01	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



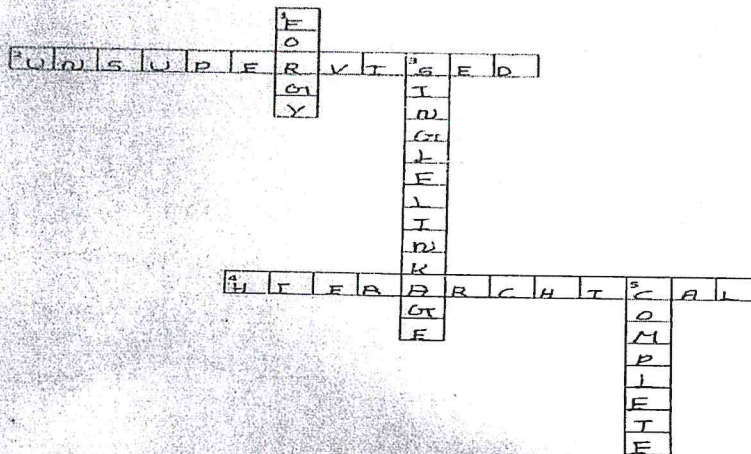
DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

Mohana Priya .K
730422121026

Untitled



Across

2. Type of learning with no labeled data
4. A method of clustering that forms a tree-like structure. KMEANS. The most commonly used partitioning clustering algorithm

Down

1. Early version of k-means that initializes centroids randomly
3. Linkage method based on the closest distance between points
5. LINKAGE. Linkage method based on the farthest distance between points

Scanned with OKEN Scanner

Reflective Critique: The crossword puzzle activity enhanced student engagement and reinforced key concepts in a fun, interactive way. It also helped assess understanding informally while promoting collaborative learning.

Challenges: Some students found it difficult to interpret the clues, affecting their participation. Time management was also a challenge, as the activity took longer than expected.

[Signature]
Course Coordinator

[Signature]
HOD

Down

2. Type of learning with no labeled data
4. A method of clustering that forms a tree-like structure KMEANS The most commonly used partitional clustering algorithm

- 1.** Early version of k-means that initializes centroids randomly
- 3.** Linkage method based on the closest distance between points
- 5.** LINKAGE Linkage method based on the farthest distance between points



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM602 PATTERN RECOGNITION AND NEURAL NETWORKS
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : Dr.B.Saritha ASP/BME
4. Date & Hour : 07.05.2025 & 6th Hour
5. Topic of the class : Competitive Network
6. Title of Innovative teaching learning process : Innovative teaching –Peer Group Learning
7. Objective : To promote collaborative learning by enabling students to actively engage in knowledge sharing, discussion, and problem-solving within peer groups. It improves Communication and confidence level

8.. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S

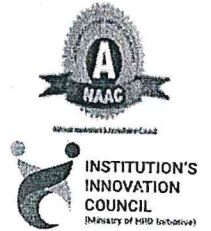
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process



Reflective Critique:

Peer group learning enhances collaboration and deepens understanding but requires careful facilitation to avoid misconceptions.

Challenges:

Unequal participation, peer conflicts, and difficulty in assessment can limit its effectiveness if not properly managed.

B. Senthil
Course Coordinator

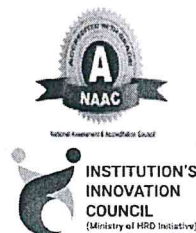
B. Senthil
HOD



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.M.Mohanavalli, AP/BME
Name of the subject with code : 19BM701- Radiological Equipment
Year/Semester/Class : IV/VII/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Digital Subtraction Angiography	Technology based Learning
2.	II	Iterative method	Tutorial
3.	III	Block diagram approach of MRI system	Role play
4.	IV	Radio Isotopes – alpha, beta and gamma radiations	Group Discussion
5.	V	Linear Accelerator	Technology based Learning

Signature of the Course Coordinator

HOD/BME



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM701 Radiological Equipments
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 20.07.2024 & 3rd Hour
5. Topic of the class : Digital Subtraction Angiography
6. Title of Innovative teaching learning process : Technology based Learning
7. Objective :

To explore the role of Digital Subtraction Angiography in visualizing blood vessels, enhancing diagnostic accuracy of vascular diseases, and improving interventional procedures by minimizing image artifacts and enhancing contrast resolution.

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH R
27.	730421121030	PRIYADHARSHINI M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121033	ROBIKA M
31.	730421121034	ROJA VARSHINI M
32.	730421121035	SAKTHIVEL P
33.	730421121037	SARUMATHI K
34.	730421121038	SIVA SANGARI S
35.	730421121039	SORNA DEVI .M
36.	730421121040	VASANTH KUMAR S
37.	730421121041	VIGNESH M
38.	730421121042	YASWANTHIKA B P
39.	730421121043	SHANKAR M
40.	730421121044	MANISH PATEL
41.	730421121045	ABINESH M
42.	730421121046	KEERTHIVASAN R
43.	730421121301	GUNAVATHI N



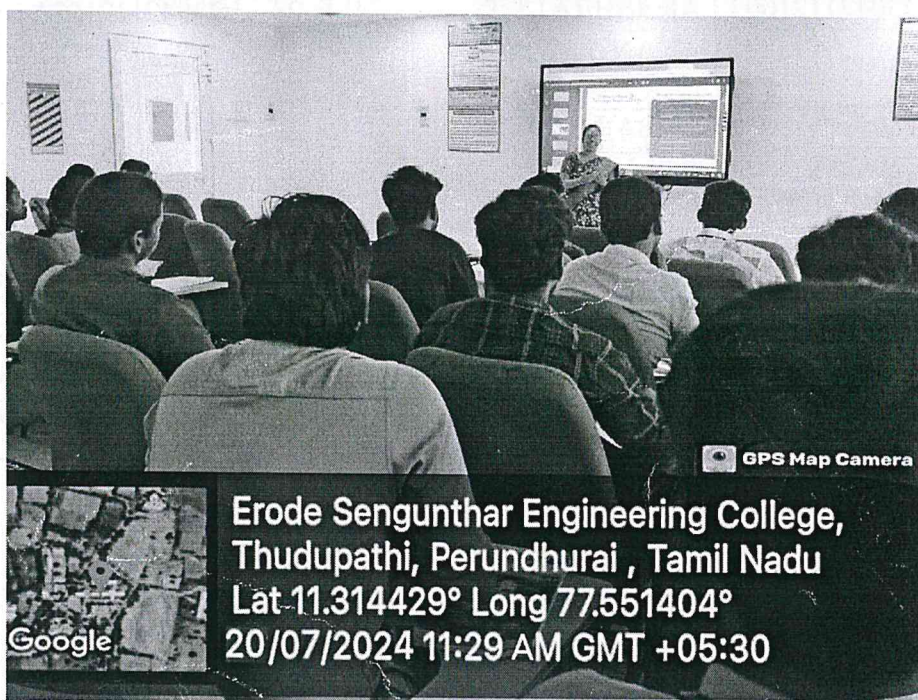
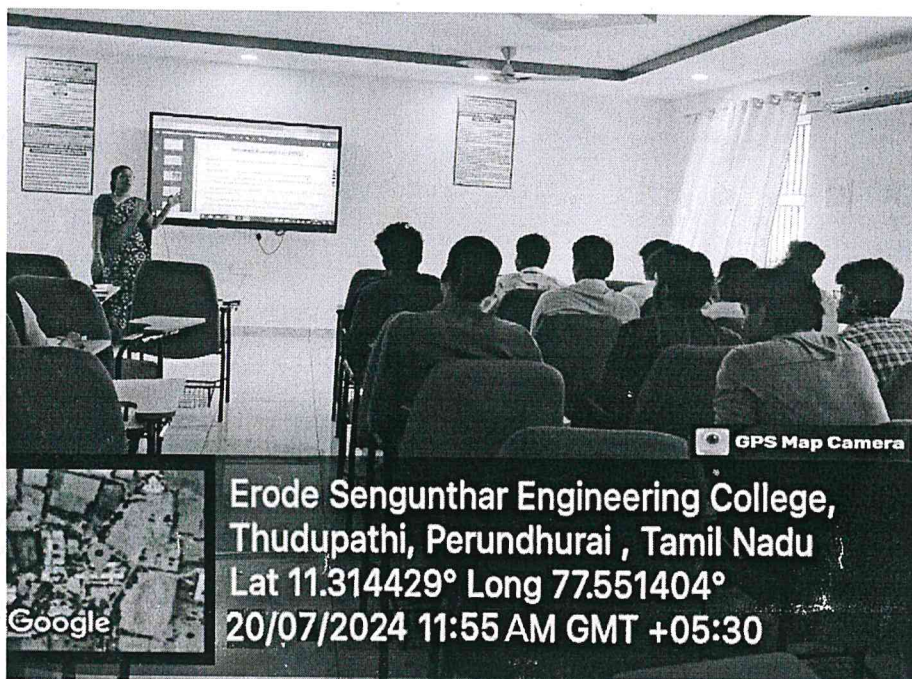
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM701 Radiological Equipments
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 06.08.2024 & 4th Hour
5. Topic of the class : Iterative Method
6. Title of Innovative teaching learning process : Classroom Teaching- Tutorial
7. Objective :
To learn how iterative methods improve image reconstruction in Computed Tomography (CT) compared to traditional analytical methods like Filtered Back Projection (FBP).

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH R
27.	730421121030	PRIYADHARSHINI M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121033	ROBIKA M
31.	730421121034	ROJA VARSHINI M
32.	730421121035	SAKTHIVEL P
33.	730421121037	SARUMATHI K
34.	730421121038	SIVA SANGARI S
35.	730421121039	SORNA DEVI .M
36.	730421121040	VASANTH KUMAR S
37.	730421121041	VIGNESH M
38.	730421121042	YASWANTHIKA B P
39.	730421121043	SHANKAR M
40.	730421121044	MANISH PATEL
41.	730421121045	ABINESH M
42.	730421121046	KEERTHIVASAN R
43.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR

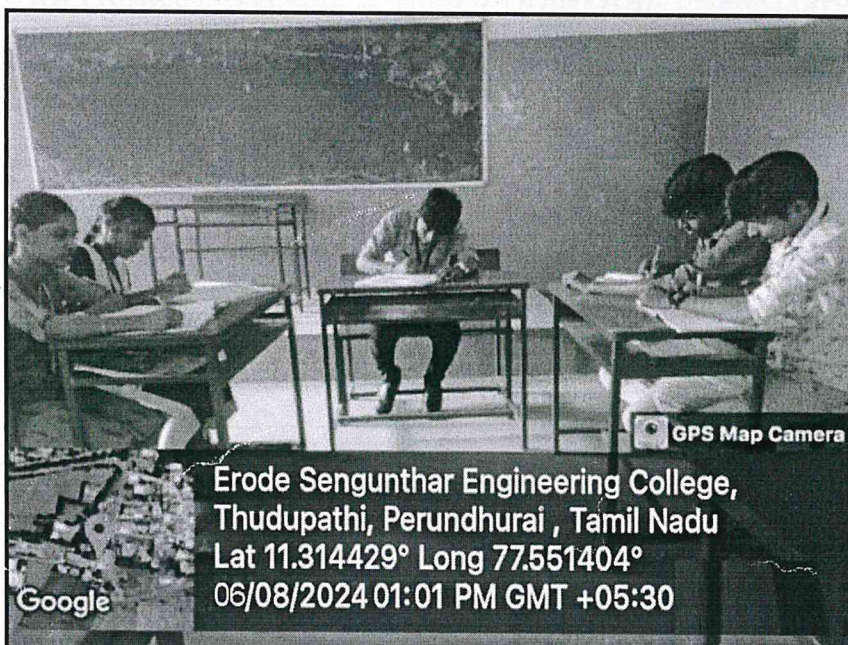
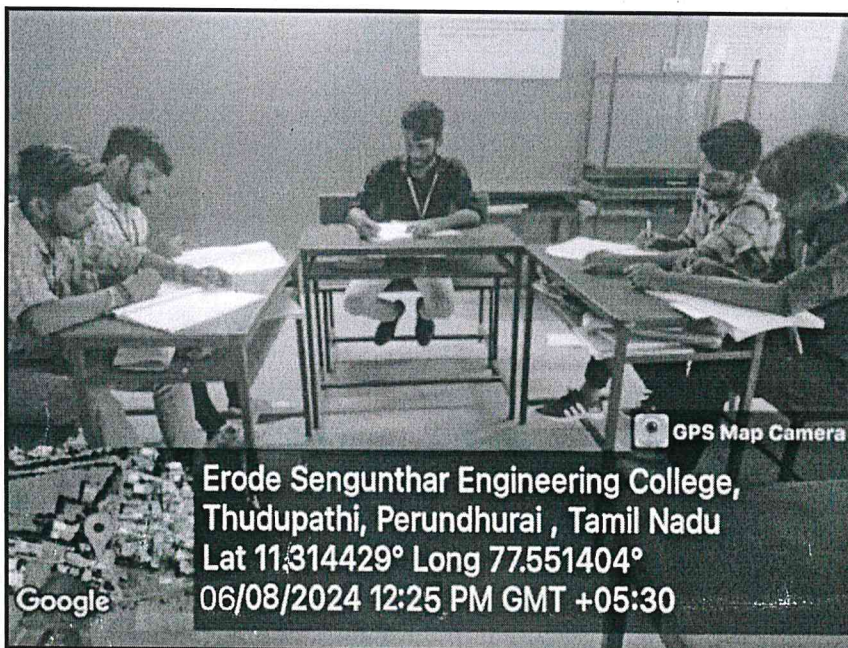
ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM701 Radiological Equipments
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 13.08.2024 & 6th Hour
5. Topic of the class : Block Diagram approach of MRI System
6. Title of Innovative teaching learning process : Role Play
7. Objective :
To learn the fundamental components and their functions to generate MRI images, including RF excitation, signal reception, and image reconstruction.

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH R
27.	730421121030	PRIYADHARSHINI M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121033	ROBIKA M
31.	730421121034	ROJA VARSHINI M
32.	730421121035	SAKTHIVEL P
33.	730421121037	SARUMATHI K
34.	730421121038	SIVA SANGARI S
35.	730421121039	SORNA DEVI .M
36.	730421121040	VASANTH KUMAR S
37.	730421121041	VIGNESH M
38.	730421121042	YASWANTHIKA B P
39.	730421121043	SHANKAR M
40.	730421121044	MANISH PATEL
41.	730421121045	ABINESH M
42.	730421121046	KEERTHIVASAN R
43.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR

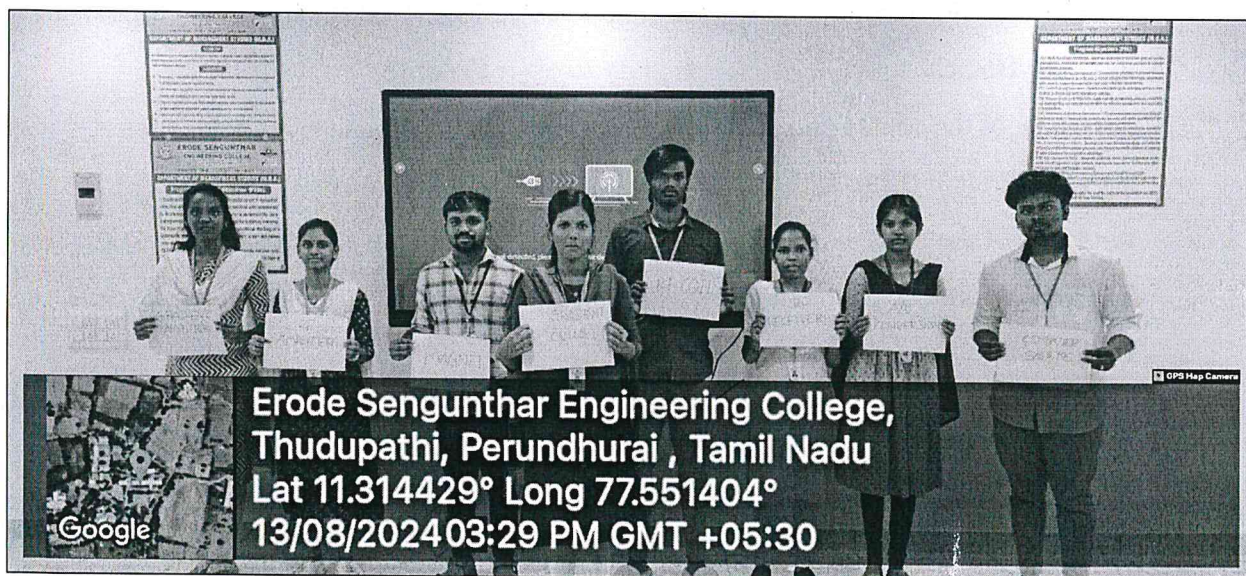
ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM701 Radiological Equipments
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 21.08.2024 & 3rd Hour
5. Topic of the class : Radio Isotopes – alpha, beta, and gamma radiations
6. Title of Innovative teaching learning process : Group Discussion
7. Objective :
To understand the penetration ability of each type of radiation

Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P

Group II		
S.No	Register No.	Name of the Student
1.	730421121008	DHIVYA L
2.	730421121010	EZHILARASU S
3.	730421121011	GIRIPRASANTH S
4.	730421121012	GOWTHAM D
5.	730421121013	GUHAN RAHUL V
6.	730421121014	HEMA J
7.	730421121015	JEEVANANTHAM S

Group III		
S.No	Register No.	Name of the Student
1.	730421121016	JEGADHEESH S
2.	730421121017	KALANITHI S.V
3.	730421121018	KAMALNATH .R
4.	730421121019	KANIMOZHI K
5.	730421121020	KARTHICK M
6.	730421121021	KIRUTHIGA S
7.	730421121022	KISHORE M

Group IV		
S.No	Register No.	Name of the Student
1.	730421121023	MADHUMITHA C
2.	730421121024	MATHAN A
3.	730421121025	NAVEEN KUMAR V
4.	730421121026	NITHIP S
5.	730421121029	PRAKASH R
6.	730421121030	PRIYADHARSHINI M
7.	730421121031	RAJATHI R



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group V		
S.No	Register No.	Name of the Student
1.	730421121032	RENUGADEVI D
2.	730421121033	ROBIKA M
3.	730421121034	ROJA VARSHINI M
4.	730421121035	SAKTHIVEL P
5.	730421121037	SARUMATHI K
6.	730421121038	SIVA SANGARI S
7.	730421121039	SORNA DEVI .M

Group VI		
S.No	Register No.	Name of the Student
1.	730421121040	VASANTH KUMAR S
2.	730421121041	VIGNESH M
3.	730421121042	YASWANTHIKA B P
4.	730421121043	SHANKAR M
5.	730421121044	MANISH PATEL
6.	730421121045	ABINESH M
7.	730421121046	KEERTHIVASAN R
8.	730421121301	GUNAVATHI N



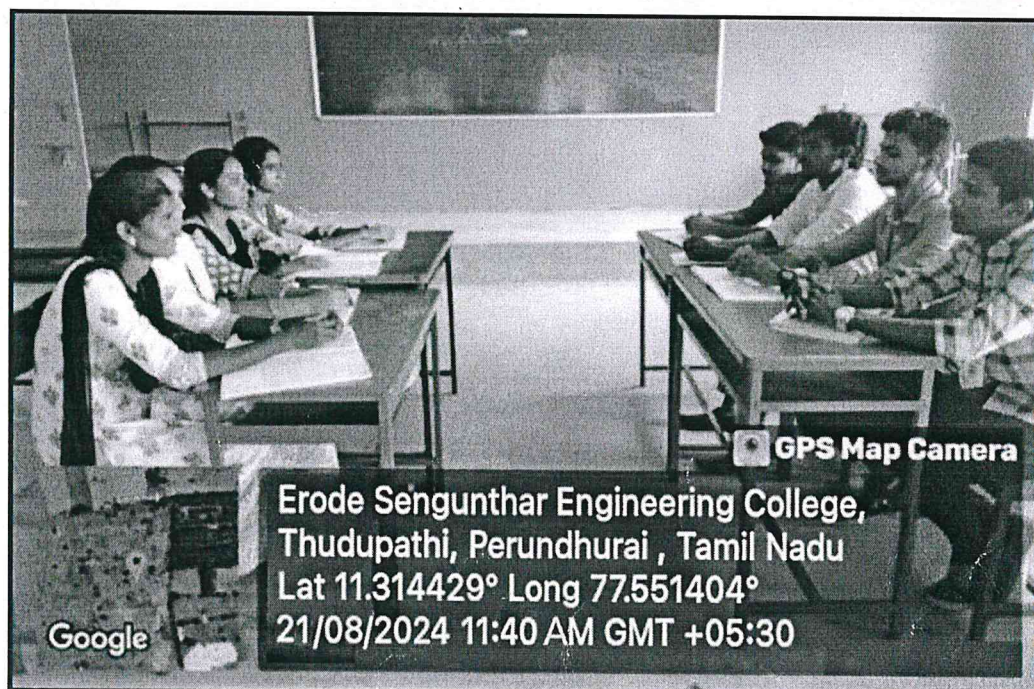
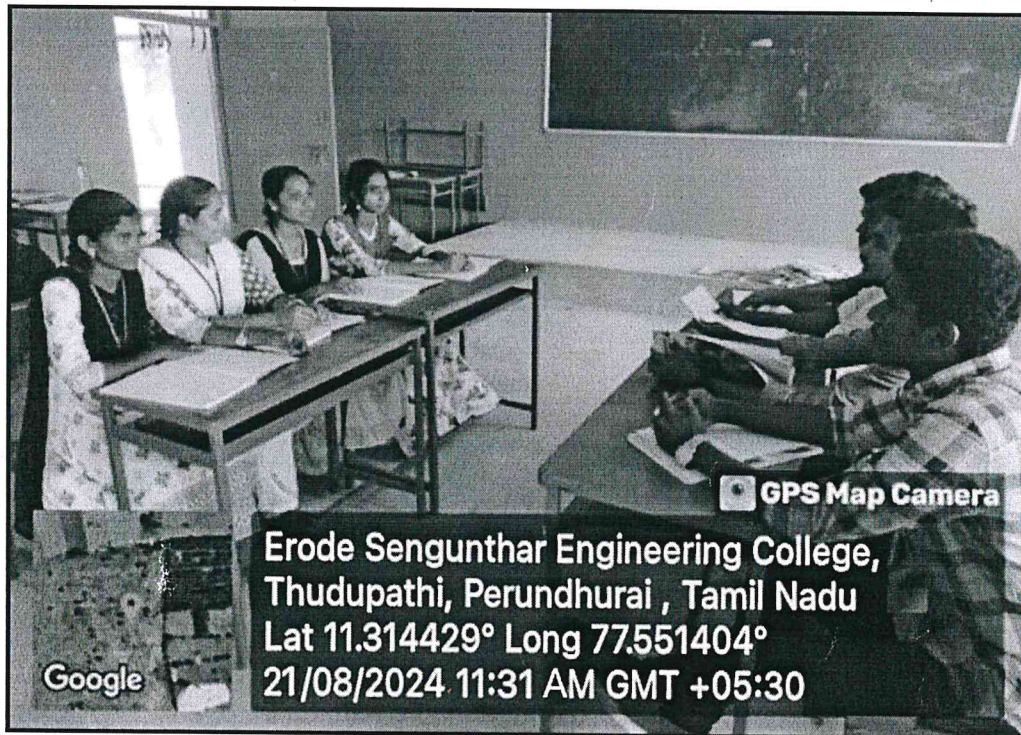
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM701 Radiological Equipments
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 06.09.2024 & 4th Hour
5. Topic of the class : Linear Accelerator
6. Title of Innovative teaching learning process : Technology based Learning
7. Objective :
To learn how a Linear Accelerator (LINAC) generates and delivers high-energy radiation for medical applications.

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH R
27.	730421121030	PRIYADHARSHINI M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121033	ROBIKA M
31.	730421121034	ROJA VARSHINI M
32.	730421121035	SAKTHIVEL P
33.	730421121037	SARUMATHI K
34.	730421121038	SIVA SANGARI S
35.	730421121039	SORNA DEVI .M
36.	730421121040	VASANTH KUMAR S
37.	730421121041	VIGNESH M
38.	730421121042	YASWANTHIKA B P
39.	730421121043	SHANKAR M
40.	730421121044	MANISH PATEL
41.	730421121045	ABINESH M
42.	730421121046	KEERTHIVASAN R
43.	730421121301	GUNAVATHI N



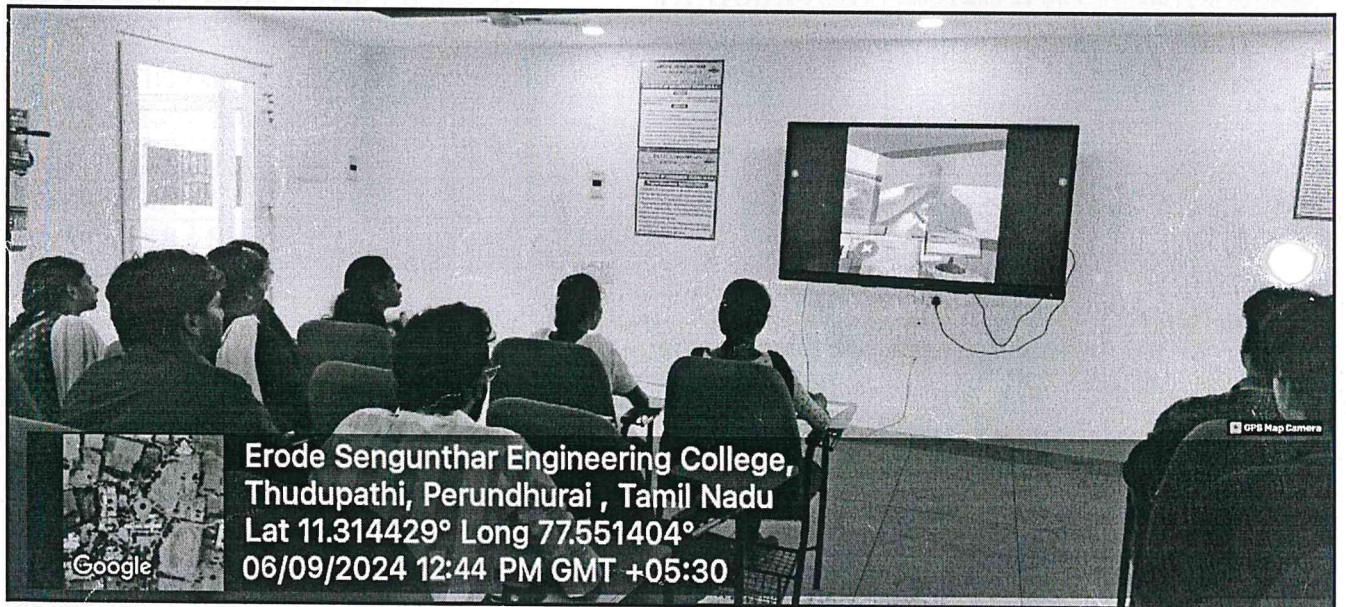
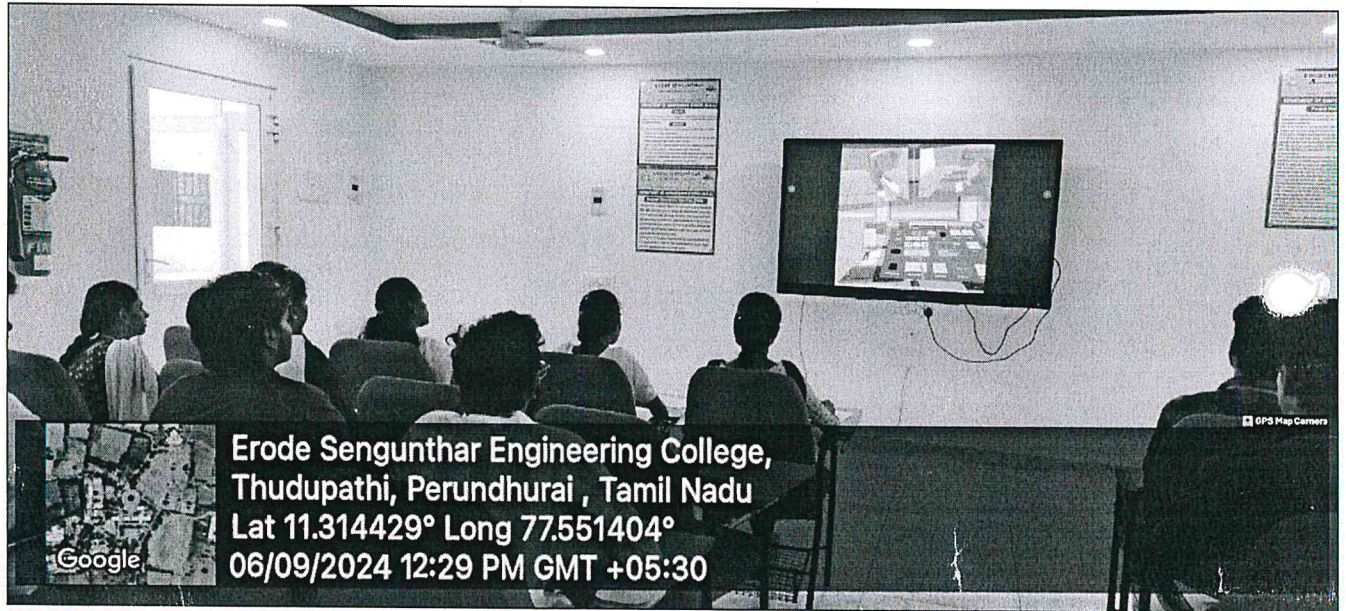
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotagged Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM702 Human Assist Devices
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 12.07.2023 & 3rd Hour
5. Topic of the class : Indication for cardiac transplant
6. Title of Innovative teaching learning process : Quiz
7. Objective :

To understand the primary indications and decision-making process for cardiac transplantation.

8. Students Name list

S.No	Register No.	Name of the Student
1.	20121001	ANITHA T
2.	20121002	ANUSHREE P
3.	20121003	ARUMUGAM S
4.	20121004	DHANUSH KUMAR R
5.	20121005	DHARANI K
6.	20121006	DHARSHINI S S
7.	20121007	DHINESH S
8.	20121008	DURGADEVI S
9.	20121009	ELANGO VAN M
10.	20121010	FAIYAZ M
11.	20121011	GOKILHASHREE M
12.	20121012	GOWTHAM RAJA S
13.	20121013	HARIHARA SUDHAN S
14.	20121015	ILAMVALUTHI S
15.	20121016	JANANI V
16.	20121017	KALAISELVAN K

S.No	Register No.	Name of the Student
17.	20121018	KALAIIVANI M
18.	20121019	KANIKA T
19.	20121020	KARTHIKA S
20.	20121021	KARTHIKEYAN B
21.	20121022	KAVIYA S
22.	20121023	KEERTHIVASAN S
23.	20121024	LOGESH G
24.	20121025	MALLESHWARI S
25.	20121026	MANIKANDAN M
26.	20121027	MANIMARAN A
27.	20121028	MURUGAN R
28.	20121029	NAVEEN S
29.	20121030	NAVEENA S
30.	20121031	NAVEENKUMAR K
31.	20121032	NAVEENKUMAR T
32.	20121033	NISHA SRI S M



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register No.	Name of the Student
33.	20121034	NIVETHA A
34.	20121035	PAVITHRA S
35.	20121036	POONGUNDRAN M A
36.	20121037	POORNIMADEVI R
37.	20121038	PRANAV C SHAJI
38.	20121039	PRAVEEN R
39.	20121040	PRAVIN V
40.	20121041	RAGUL M
41.	20121042	RAJ ARYAN
42.	20121043	RAJENDRAN S
43.	20121044	RANJITH KUMAR G
44.	20121045	SANJAY K
45.	20121046	SARANYAN K
46.	20121047	SASIKUMAR E
47.	20121048	SHANDHINI
48.	20121049	SIVADASS P

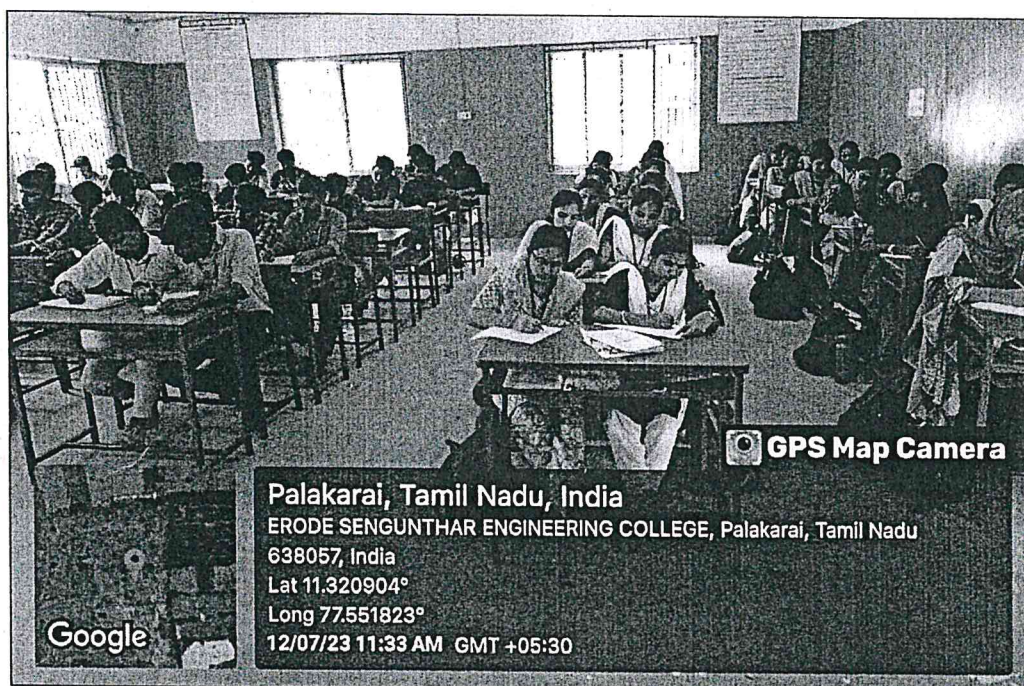
S.No	Register No.	Name of the Student
49.	20121050	SNEHA A
50.	20121051	SNEHA S
51.	20121052	SOWBARANIKAA S
52.	20121053	SUBASH S
53.	20121054	SUMANRAJ M
54.	20121055	SURESHKUMAR K
55.	20121056	SURYAPRIYA K
56.	20121057	SWETHA K
57.	20121058	SWETHA R
58.	20121059	TAMILARASAN S
59.	20121060	UMAY SALMA S
60.	20121062	YOGALAKSHMI T
61.	20121063	YUVARAJ M
62.	20121301	SHOBANA M
63.	20121501	GODWIN MANOJA
64.	20121502	PRIYADHARSHINI S



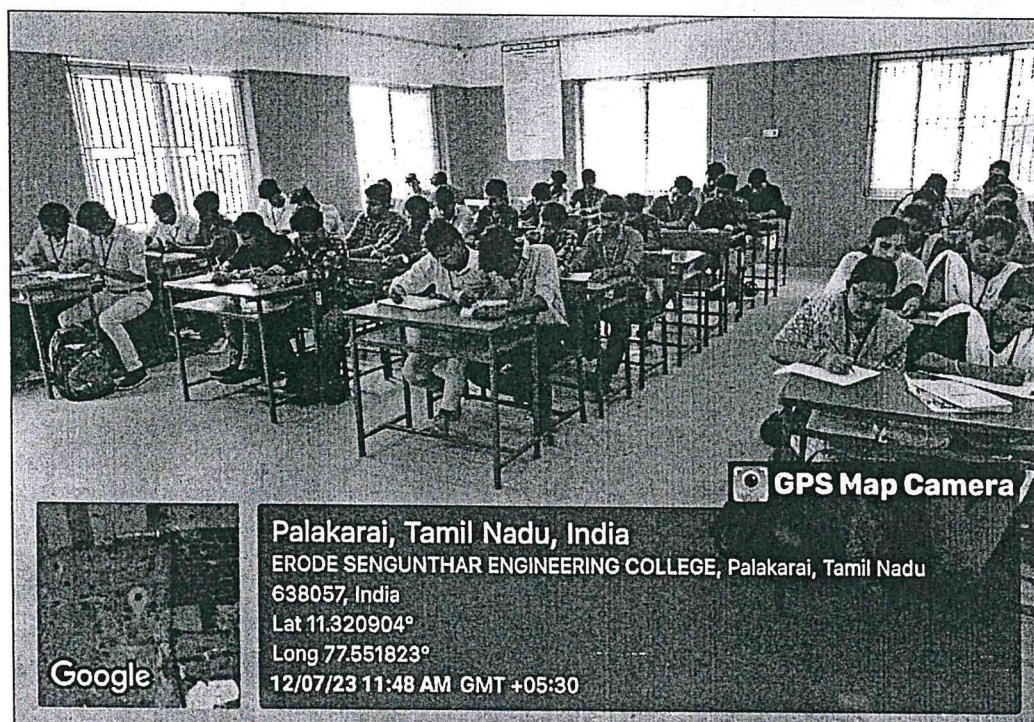
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Palakarai, Tamil Nadu, India
ERODE SENGUNTHAR ENGINEERING COLLEGE, Palakarai, Tamil Nadu
638057, India
Lat 11.320904°
Long 77.551823°
12/07/23 11:33 AM GMT +05:30



Palakarai, Tamil Nadu, India
ERODE SENGUNTHAR ENGINEERING COLLEGE, Palakarai, Tamil Nadu
638057, India
Lat 11.320904°
Long 77.551823°
12/07/23 11:48 AM GMT +05:30



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai.
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM702 Human Assist Devices
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 28.07.2023 & 7th Hour
5. Topic of the class : Biomaterials for implantable purposes
6. Title of Innovative teaching learning process : Group discussion
7. Objective :

To explore the various biomaterials commonly employed for implantable devices, such as metals, polymers, ceramics and composites.

8. Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	20121001	ANITHA T
2.	20121002	ANUSHREE P
3.	20121003	ARUMUGAM S
4.	20121004	DHANUSH KUMAR R
5.	20121005	DHARANI K
6.	20121006	DHARSHINI S S
7.	20121007	DHINESH S
8.	20121008	DURGADEVI S

Group III		
S.No	Register No.	Name of the Student
1.	20121018	KALAIVANI M
2.	20121019	KANIKA T
3.	20121020	KARTHIKA S
4.	20121021	KARTHIKEYAN B
5.	20121022	KAVIYA S
6.	20121023	KEERTHIVASAN S
7.	20121024	LOGESH G
8.	20121025	MALLESHWARI S

Group II		
S.No	Register No.	Name of the Student
9.	20121009	ELANGO VAN M
10.	20121010	FAIYAZ M
11.	20121011	GOKILHASHREE M
12.	20121012	GOWTHAM RAJA S
13.	20121013	HARIHARA SUDHAN S
14.	20121015	ILAMVALUTHI S
15.	20121016	JANANI V
16.	20121017	KALAISELVAN K

Group IV		
S.No	Register No.	Name of the Student
1.	20121026	MANIKANDAN M
2.	20121027	MANIMARAN A
3.	20121028	MURUGAN R
4.	20121029	NAVEEN S
5.	20121030	NAVEENA S
6.	20121031	NAVEENKUMAR K
7.	20121032	NAVEENKUMAR T
8.	20121033	NISHA SRI S M



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group V		
S.No	Register No.	Name of the Student
1.	20121034	NIVETHA A
2.	20121035	PAVITHRA S
3.	20121036	POONGUNDRAN M A
4.	20121037	POORNIMADEVI R
5.	20121038	PRANAV C SHAJI
6.	20121039	PRAVEEN R
7.	20121040	PRAVIN V
8.	20121041	RAGUL M

Group VI		
S.No	Register No.	Name of the Student
1.	20121042	RAJ ARYAN
2.	20121043	RAJENDRAN S
3.	20121044	RANJITH KUMAR G
4.	20121045	SANJAY K
5.	20121046	SARANYAN K
6.	20121047	SASIKUMAR E
7.	20121048	SHANDHINI
8.	20121049	SIVADASS P

Group VII		
S.No	Register No.	Name of the Student
1.	20121050	SNEHA A
2.	20121051	SNEHA S
3.	20121052	SOWBARANIKAA S
4.	20121053	SUBASH S
5.	20121054	SUMANRAJ M
6.	20121055	SURESHKUMAR K
7.	20121056	SURYAPRIYA K
8.	20121057	SWETHA K

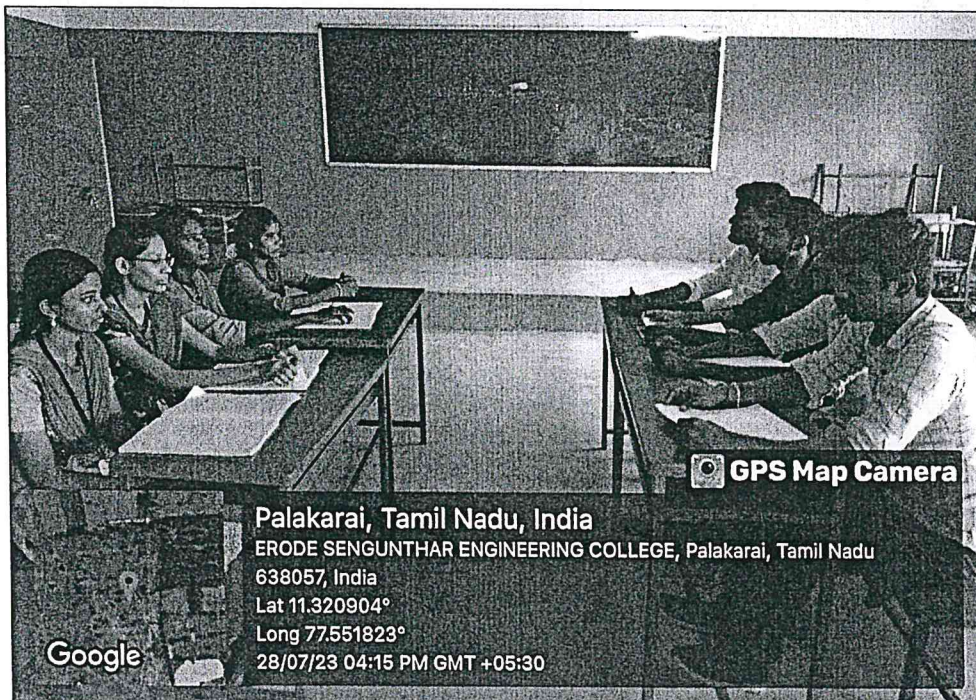
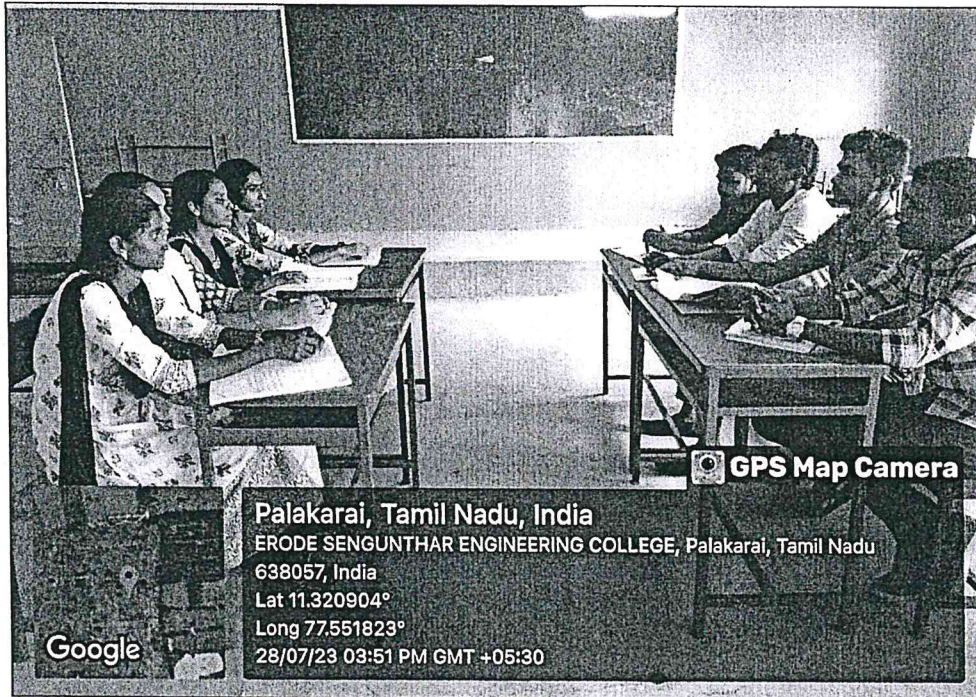
Group VIII		
S.No	Register No.	Name of the Student
1.	20121058	SWETHA R
2.	20121059	TAMILARASAN S
3.	20121060	UMAY SALMA S
4.	20121062	YOGALAKSHMI T
5.	20121063	YUVARAJ M
6.	20121304	SHOBANA
7.	20121501	GODWIN MANOJA
8.	20121502	PRIYADHARSHINI S



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai.
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM702 Human Assist Devices
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 02.08.2023 & 3rd Hour
5. Topic of the class : Indication and principle of Haemodialysis
6. Title of Innovative teaching learning process : Practical based learning
7. Objective :

To understand the need for hemodialysis as a renal replacement therapy and fundamental principles underlying hemodialysis.

8. Students Name list

S.No	Register No.	Name of the Student
1.	20121001	ANITHA T
2.	20121002	ANUSHREE P
3.	20121003	ARUMUGAM S
4.	20121004	DHANUSH KUMAR R
5.	20121005	DHARANI K
6.	20121006	DHARSHINI S S
7.	20121007	DHINESH S
8.	20121008	DURGADEVI S
9.	20121009	ELANGO VAN M
10.	20121010	FAIYAZ M
11.	20121011	GOKILHASHREE M
12.	20121012	GOWTHAM RAJA S
13.	20121013	HARIHARA SUDHAN S
14.	20121015	ILAMVALUTHI S
15.	20121016	JANANI V
16.	20121017	KALAISELVAN K

S.No	Register No.	Name of the Student
17.	20121018	KALAI VANI M
18.	20121019	KANIKA T
19.	20121020	KARTHIKA S
20.	20121021	KARTHIKEYAN B
21.	20121022	KAVIYA S
22.	20121023	KEERTHIVASAN S
23.	20121024	LOGESH G
24.	20121025	MALLESHWARI S
25.	20121026	MANIKANDAN M
26.	20121027	MANIMARAN A
27.	20121028	MURUGAN R
28.	20121029	NAVEEN S
29.	20121030	NAVEENA S
30.	20121031	NAVEENKUMAR K
31.	20121032	NAVEENKUMAR T
32.	20121033	NISHA SRI S M



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai.
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register No.	Name of the Student
33.	20121034	NIVETHA A
34.	20121035	PAVITHRA S
35.	20121036	POONGUNDRAN M A
36.	20121037	POORNIMADEVI R
37.	20121038	PRANAV C SHAJI
38.	20121039	PRAVEEN R
39.	20121040	PRAVIN V
40.	20121041	RAGUL M
41.	20121042	RAJ ARYAN
42.	20121043	RAJENDRAN S
43.	20121044	RANJITH KUMAR G
44.	20121045	SANJAY K
45.	20121046	SARANYAN K
46.	20121047	SASIKUMAR E
47.	20121048	SHANDHINI
48.	20121049	SIVADASS P

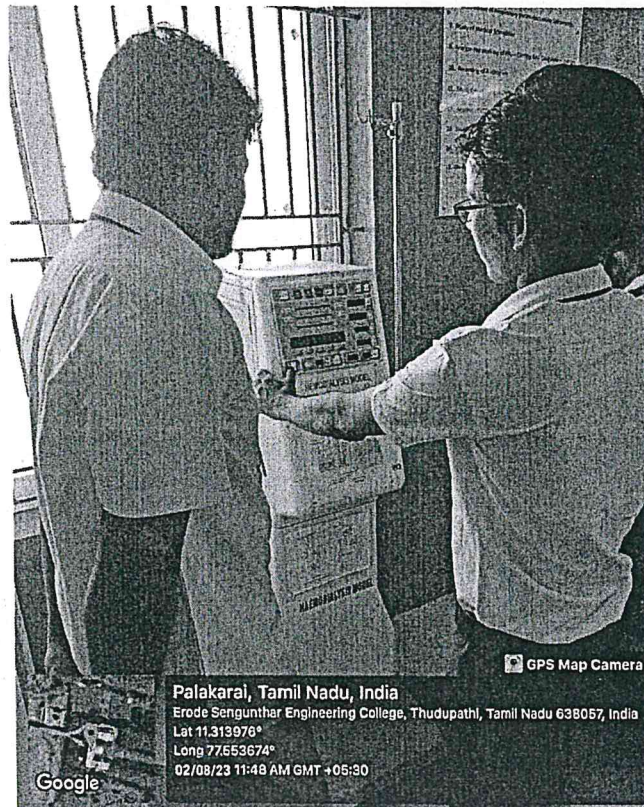
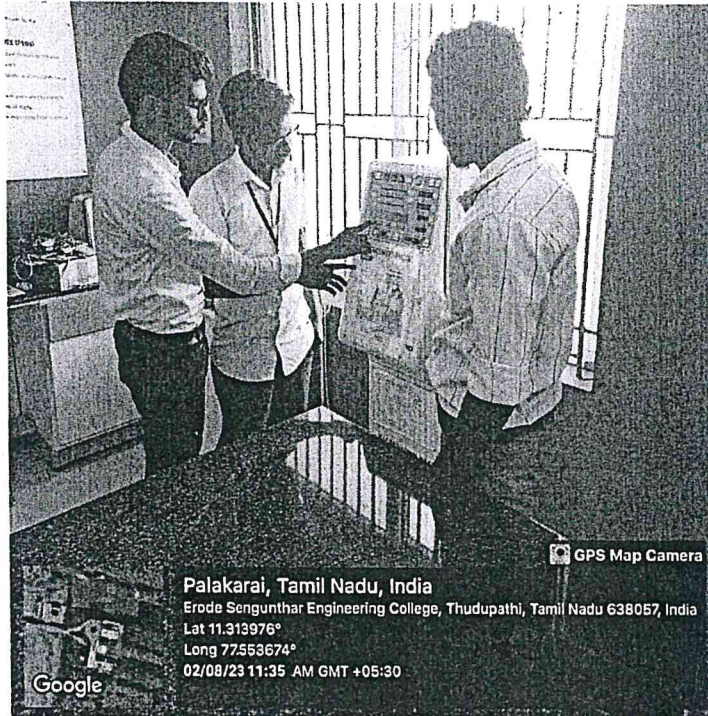
S.No	Register No.	Name of the Student
49.	20121050	SNEHA A
50.	20121051	SNEHA S
51.	20121052	SOWBARANIKAA S
52.	20121053	SUBASH S
53.	20121054	SUMANRAJ M
54.	20121055	SURESHKUMAR K
55.	20121056	SURYAPRIYA K
56.	20121057	SWETHA K
57.	20121058	SWETHA R
58.	20121059	TAMILARASAN S
59.	20121060	UMAY SALMA S
60.	20121062	YOGALAKSHMI T
61.	20121063	YUVARAJ M
62.	20121301	SHOBANA M
63.	20121501	GODWIN MANOJA
64.	20121502	PRIYADHARSHINI S



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai.
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM702 Human Assist Devices
2. Year/Branch : III/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 24.08.2023 & 2nd Hour
5. Topic of the class : Materials for prosthetic and orthotic devices
6. Title of Innovative teaching learning process : Peer group Learning
7. Objective :

To understand the materials commonly used in the fabrication of prosthetic and orthotic devices

8. Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	20121001	ANITHA T
2.	20121002	ANUSHREE P
3.	20121003	ARUMUGAM S
4.	20121004	DHANUSH KUMAR R
5.	20121005	DHARANI K

Group II		
S.No	Register No.	Name of the Student
1.	20121006	DHARSHINI S S
2.	20121007	DHINESH S
3.	20121008	DURGADEVI S
4.	20121009	ELANGO VAN M
5.	20121010	FAIYAZ M

Group III		
S.No	Register No.	Name of the Student
1.	20121011	GOKILHASHREE M
2.	20121012	GOWTHAM RAJA S
3.	20121013	HARIHARA SUDHAN S
4.	20121015	ILAMVALUTHI S
5.	20121016	JANANI V

Group IV		
S.No	Register No.	Name of the Student
1.	20121017	KALAISELVAN K
2.	20121018	KALAIVANI M
3.	20121019	KANIKA T
4.	20121020	KARTHIKA S
5.	20121021	KARTHIKEYAN B

Group V		
S.No	Register No.	Name of the Student
1.	20121022	KAVIYA S
2.	20121023	KEERTHIVASAN S
3.	20121024	LOGESH G
4.	20121025	MALLESHWARI S
5.	20121026	MANIKANDAN M

Group VI		
S.No	Register No.	Name of the Student
1.	20121027	MANIMARAN A
2.	20121028	MURUGAN R
3.	20121029	NAVEEN S
4.	20121030	NAVEENA S
5.	20121031	NAVEENKUMAR K



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group VII		
S.No	Register No.	Name of the Student
1.	20121032	NAVEENKUMAR T
2.	20121033	NISHA SRI S M
3.	20121034	NIVETHA A
4.	20121035	PAVITHRA S
5.	20121036	POONGUNDRAN M A

Group IX		
S.No	Register No.	Name of the Student
1.	20121042	RAJ ARYAN
2.	20121043	RAJENDRAN S
3.	20121044	RANJITH KUMAR G
4.	20121045	SANJAY K
5.	20121046	SARANYAN K

Group XI		
S.No	Register No.	Name of the Student
1.	20121052	SOWBARANIKAA S
2.	20121053	SUBASH S
3.	20121054	SUMANRAJ M
4.	20121055	SURESHKUMAR K
5.	20121056	SURYAPRIYA K

Group VIII		
S.No	Register No.	Name of the Student
1.	20121037	POORNIMADEVI R
2.	20121038	PRANAV C SHAJI
3.	20121039	PRAVEEN R
4.	20121040	PRAVIN V
5.	20121041	RAGUL M

Group X		
S.No	Register No.	Name of the Student
1.	20121047	SASIKUMAR E
2.	20121048	SHANDHINI
3.	20121049	SIVADASS P
4.	20121050	SNEHA A
5.	20121051	SNEHA S

Group XII		
S.No	Register No.	Name of the Student
1.	20121057	SWETHA K
2.	20121058	SWETHA R
3.	20121059	TAMILARASAN S
4.	20121060	UMAY SALMA S
5.	20121062	YOGALAKSHMI T

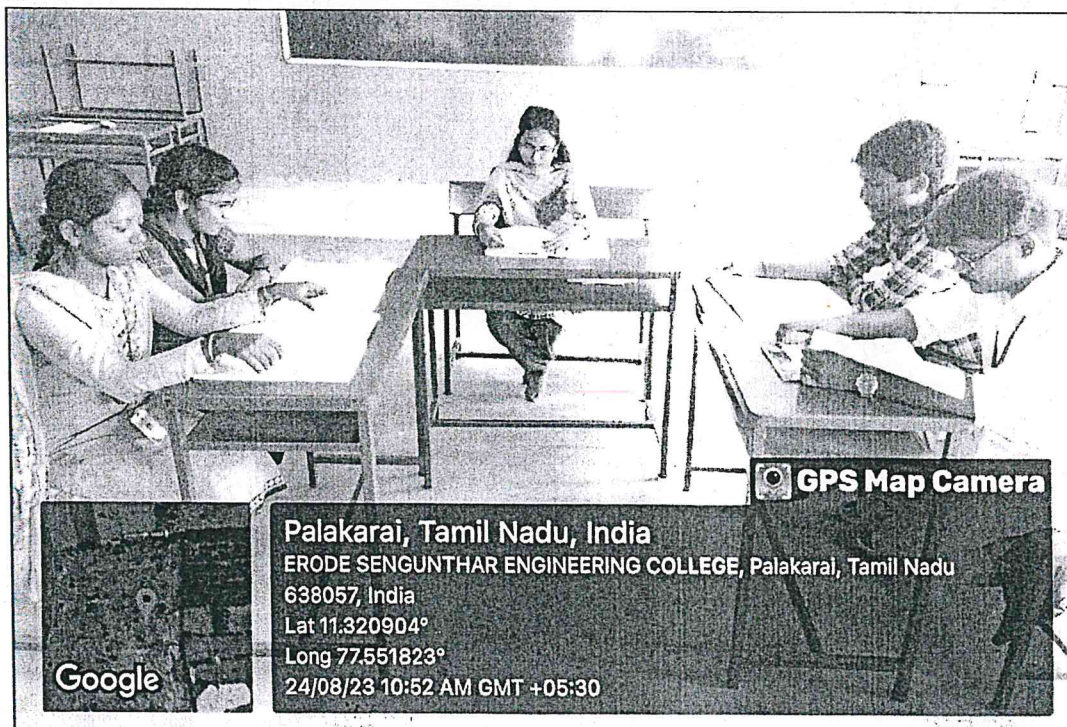
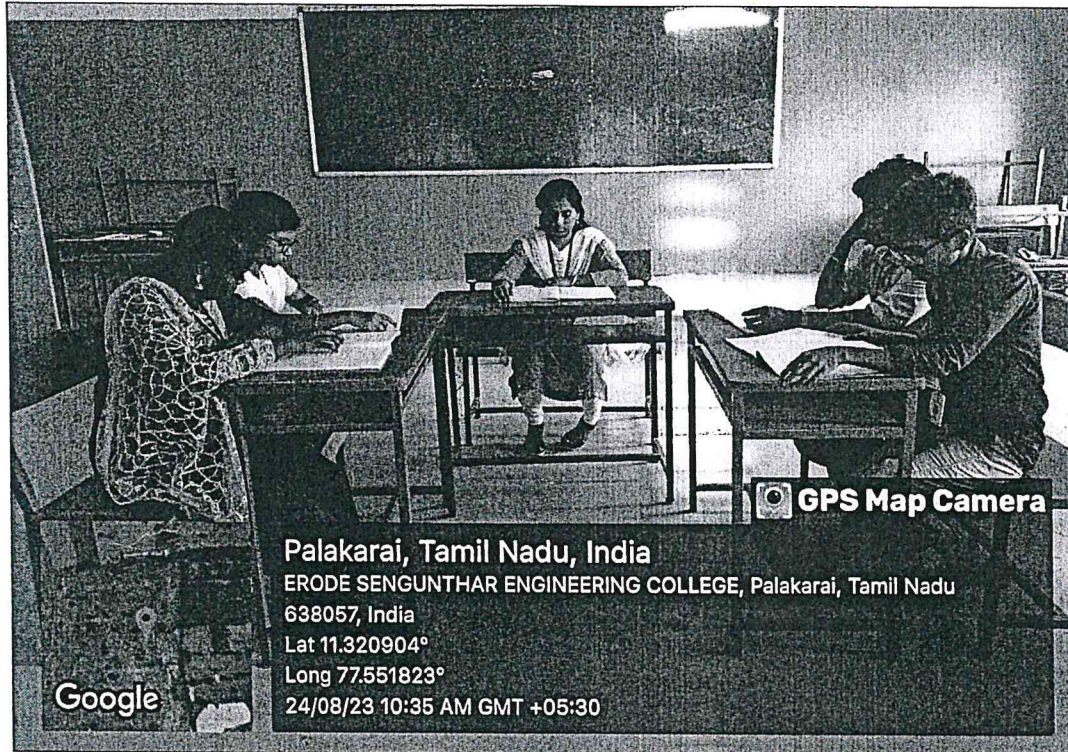
Group XIII		
S.No	Register No.	Name of the Student
1.	20121063	YUVARAJ M
2.	20121301	SHOBANA M
3.	20121501	GODWIN MANOJA
4.	20121502	PRIYADHARSHINI S



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai.
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BM702 Human Assist Devices
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 11.09.2023 & 7th Hour
5. Topic of the class : Spirometer
6. Title of Innovative teaching learning process : Practical based learning
7. Objective :

To familiarize in the key components of a spirometer and their respective functions.

8. Students Name list

S.No	Register No.	Name of the Student
1.	20121001	ANITHA T
2.	20121002	ANUSHREE P
3.	20121003	ARUMUGAM S
4.	20121004	DHANUSH KUMAR R
5.	20121005	DHARANI K
6.	20121006	DHARSHINI S S
7.	20121007	DHINESH S
8.	20121008	DURGADEVI S
9.	20121009	ELANGO VAN M
10.	20121010	FAIYAZ M
11.	20121011	GOKILHASHREE M
12.	20121012	GOWTHAM RAJA S
13.	20121013	HARIHARA SUDHAN S
14.	20121015	ILAMVALUTHI S
15.	20121016	JANANI V
16.	20121017	KALAISELVAN K

S.No	Register No.	Name of the Student
17.	20121018	KALAIIVANI M
18.	20121019	KANIKA T
19.	20121020	KARTHIKA S
20.	20121021	KARTHIKEYAN B
21.	20121022	KAVIYA S
22.	20121023	KEERTHIVASAN S
23.	20121024	LOGESH G
24.	20121025	MALLESHWARI S
25.	20121026	MANIKANDAN M
26.	20121027	MANIMARAN A
27.	20121028	MURUGAN R
28.	20121029	NAVEEN S
29.	20121030	NAVEENA S
30.	20121031	NAVEENKUMAR K
31.	20121032	NAVEENKUMAR T
32.	20121033	NISHA SRI S M



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



S.No	Register No.	Name of the Student
33.	20121034	NIVETHA A
34.	20121035	PAVITHRA S
35.	20121036	POONGUNDRAN M A
36.	20121037	POORNIMADEVI R
37.	20121038	PRANAV C SHAJI
38.	20121039	PRAVEEN R
39.	20121040	PRAVIN V
40.	20121041	RAGUL M
41.	20121042	RAJ ARYAN
42.	20121043	RAJENDRAN S
43.	20121044	RANJITH KUMAR G
44.	20121045	SANJAY K
45.	20121046	SARANYAN K
46.	20121047	SASIKUMAR E
47.	20121048	SHANDHINI
48.	20121049	SIVADASS P

S.No	Register No.	Name of the Student
49.	20121050	SNEHA A
50.	20121051	SNEHA S
51.	20121052	SOWBARANIKAA S
52.	20121053	SUBASH S
53.	20121054	SUMANRAJ M
54.	20121055	SURESHKUMAR K
55.	20121056	SURYAPRIYA K
56.	20121057	SWETHA K
57.	20121058	SWETHA R
58.	20121059	TAMILARASAN S
59.	20121060	UMAY SALMA S
60.	20121062	YOGALAKSHMI T
61.	20121063	YUVARAJ M
62.	20121301	SHOBANA M
63.	20121501	GODWIN MANOJA
64.	20121502	PRIYADHARSHINI S



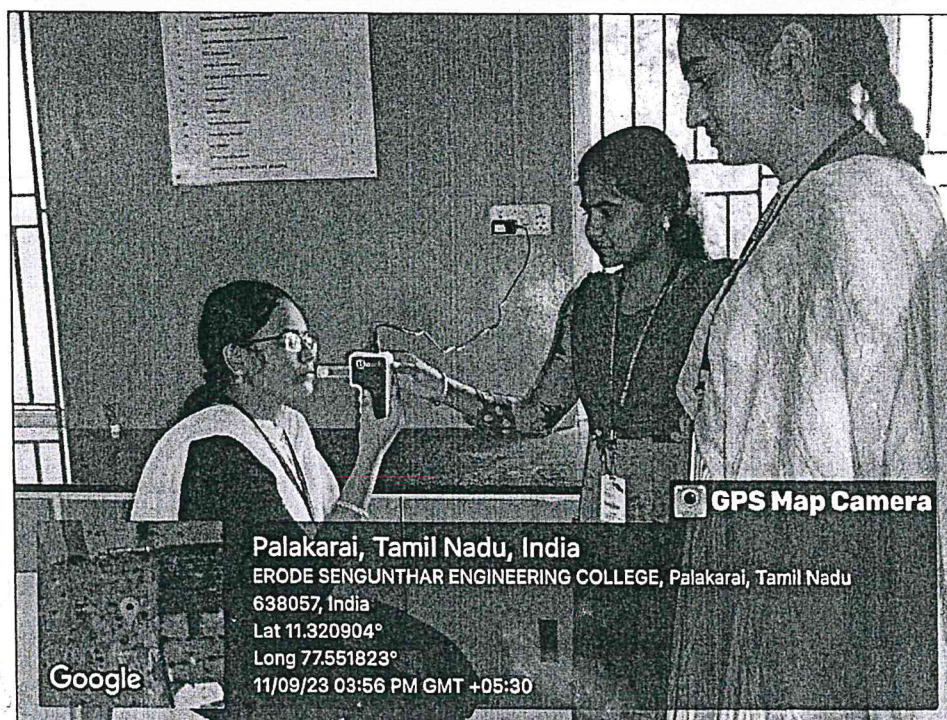
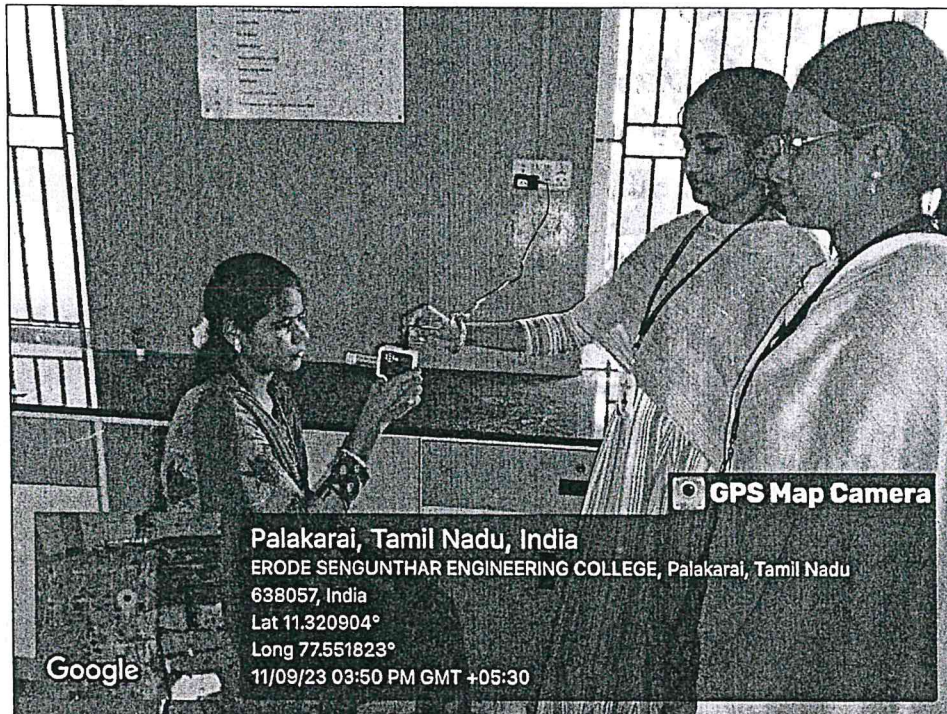
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geo Tagged Photo





ERODESENGUNTHAR ENGINEERINGCOLLEGE

(AnAutonomousInstitution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
NationalAssessmentandAccreditationCouncil(NAAC),Bangalorewith 'A' Grade
PERUNDURAI-638051,TAMILNADU,INDIA.

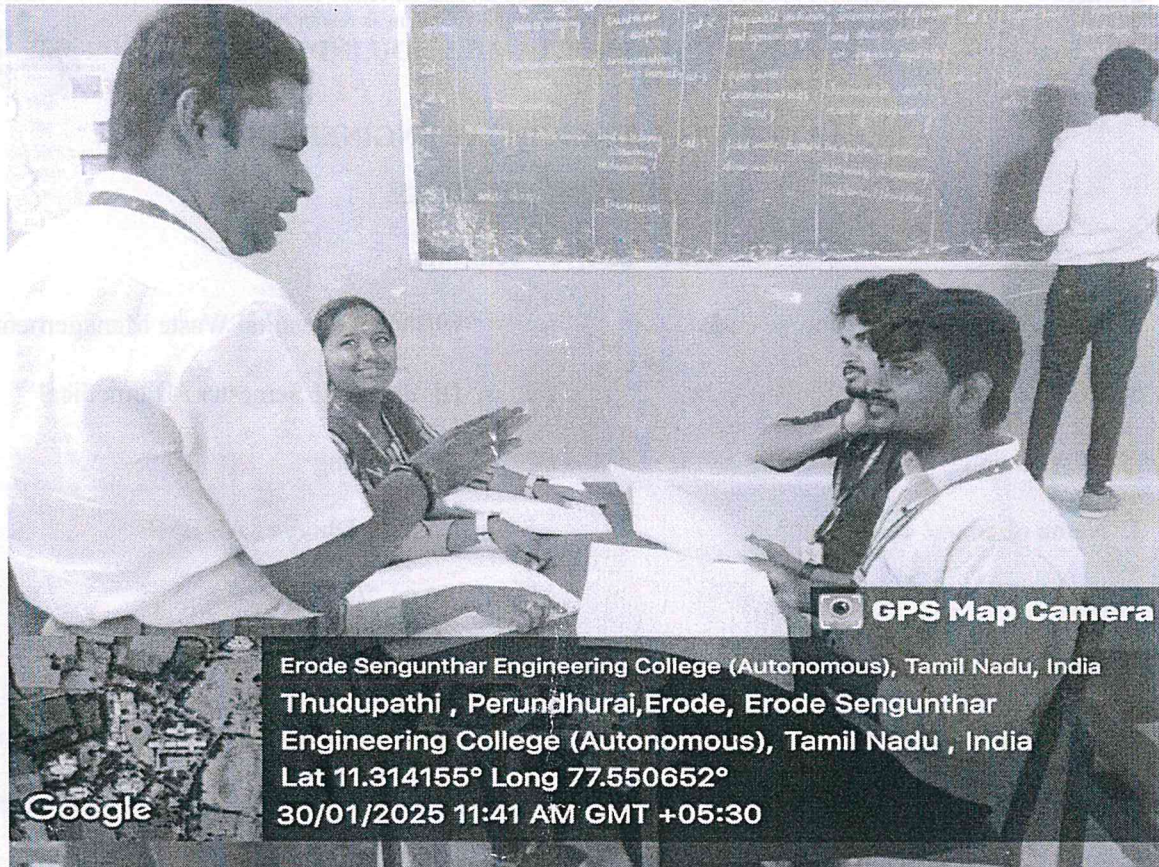


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX03Hospital Waste Management
2. Class / Year / Branch : III Year / VI Semester / Biomedical
Engineering
3. Name of course coordinator : Ms. M. Dhivya , AP/BME
4. Date : 30.01.2025
5. Topic of the class : Personal Protective Equipment
6. Title of Innovative teaching learning process : Innovative teaching – group Discussion
7. Objective : The objective of studying Personal Protective
Equipment (PPE) is to understand its role in
minimizing workplace hazards, preventing
injuries, and ensuring compliance with
safety regulations.



Reflective Criteria :

Reflective practice involves thinking critically about your experience with PPE to improve future performance, safety, and compliance.

Challenges of PPE (Personal Protective Equipment)

Discomfort and Heat

- **Problem:** Wearing PPE for long periods (e.g., masks, gloves, gowns) can cause heat stress, sweating, rashes, or dehydration.
- **Impact:** Leads to fatigue, reduced concentration, and lower job performance.



ERODESENGUNTHAR ENGINEERINGCOLLEGE

(AnAutonomousInstitution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.

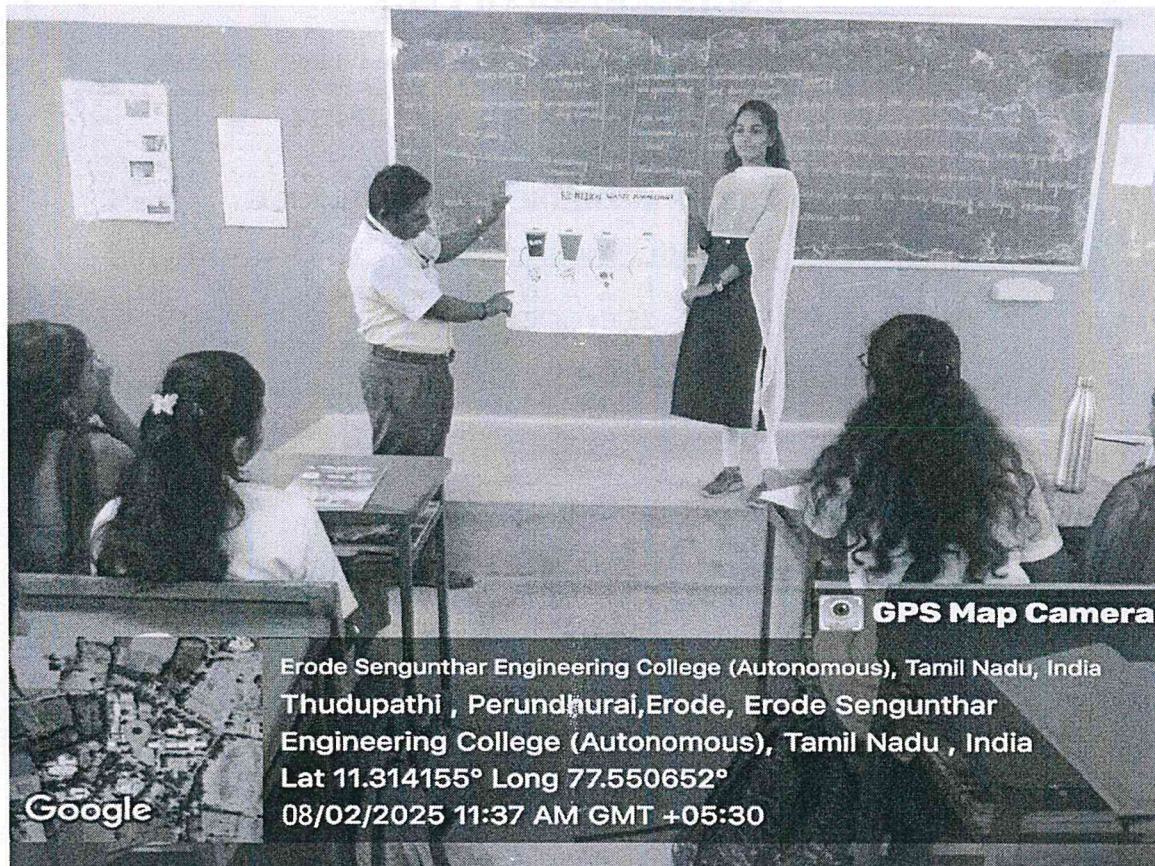


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX03 Hospital Waste Management
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : Ms. M. Dhivya , AP/BME
4. Date : 08.02.2025
5. Topic of the class : Categories and Classification of biomedical waste
6. Title of Innovative teaching learning process : Innovative teaching – Chart Presentation
7. Objective : To understand the proper segregation, handling, treatment, and disposal of different types of medical waste to minimize health risks and environmental pollution. This knowledge ensures compliance with safety regulations, prevents the spread of infections, and promotes sustainable waste management practices in healthcare settings.



Reflective Critique :

When reflecting on the practice and management of biomedical waste (BMW), use these **criteria** to critically assess your understanding and performance

Challenges in Categories and Classification of Biomedical Waste

Lack of Awareness or Training

- **Issue:** Staff may not know the exact classification of various types of waste.
- **Impact:** Leads to improper segregation, which increases risk of contamination and environmental harm.

ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.

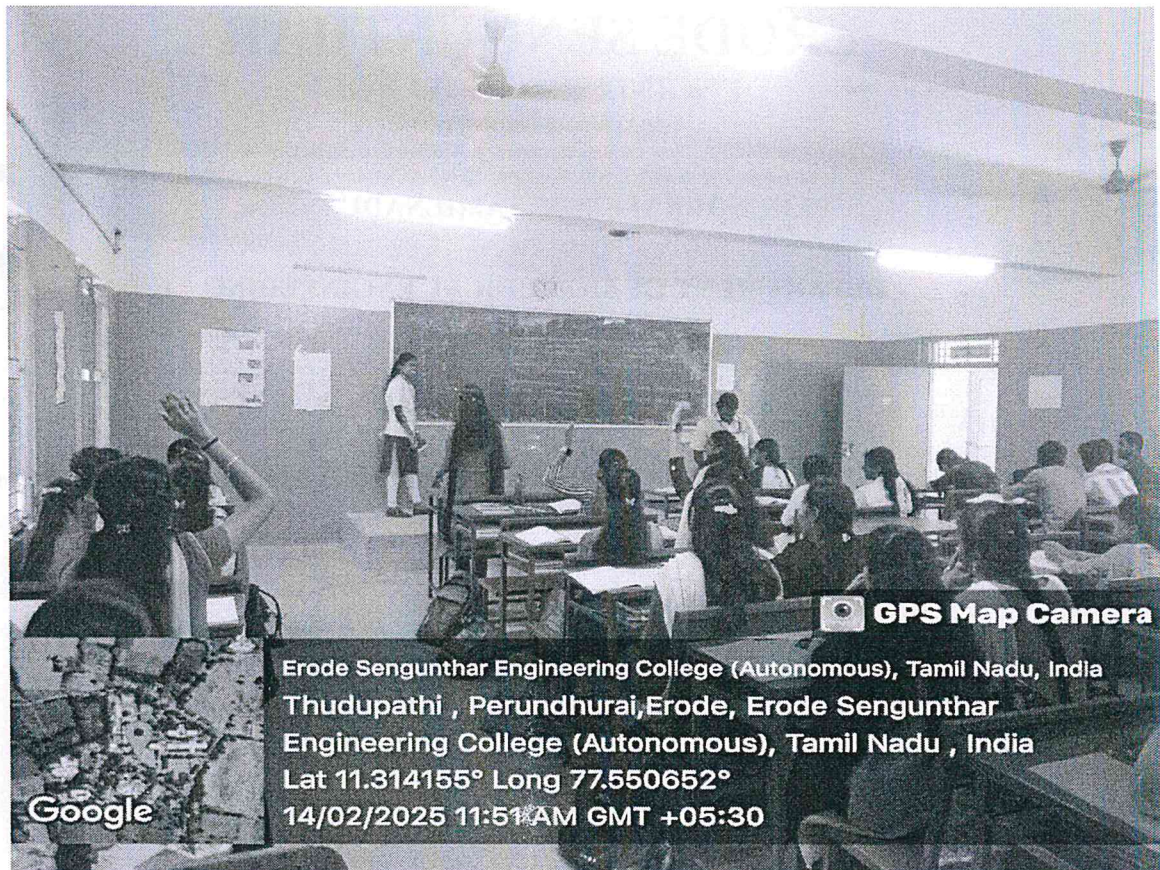


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX03 Hospital Waste Management
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : Ms. M. Dhivya , AP/BME
4. Date : 14.02.2025
5. Topic of the class : Medical Gas system
6. Title of Innovative teaching learning process : Innovative teaching – Quiz
7. Objective : To ensure the continuous and reliable supply of essential gases like oxygen, nitrous oxide, and medical air in healthcare facilities. This knowledge helps healthcare professionals and engineers prevent leaks, contamination, and pressure failures while ensuring compliance with medical regulations, ultimately safeguarding patient health and optimizing hospital operations



Reflective Critique:

1. Understanding of the different medical gases (e.g., oxygen, nitrous oxide) and their uses.
2. Correct handling, storage, and connection of gas cylinders and pipelines.
3. Awareness of emergency procedures and regular equipment checks for safety compliance.

Challenges :

1. Risk of gas leakage or incorrect gas delivery due to equipment failure or human error.
2. Inadequate training or unfamiliarity with gas labeling and flow settings.
3. Emergency preparedness and response may be lacking in case of system failure or fire



ERODESENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.

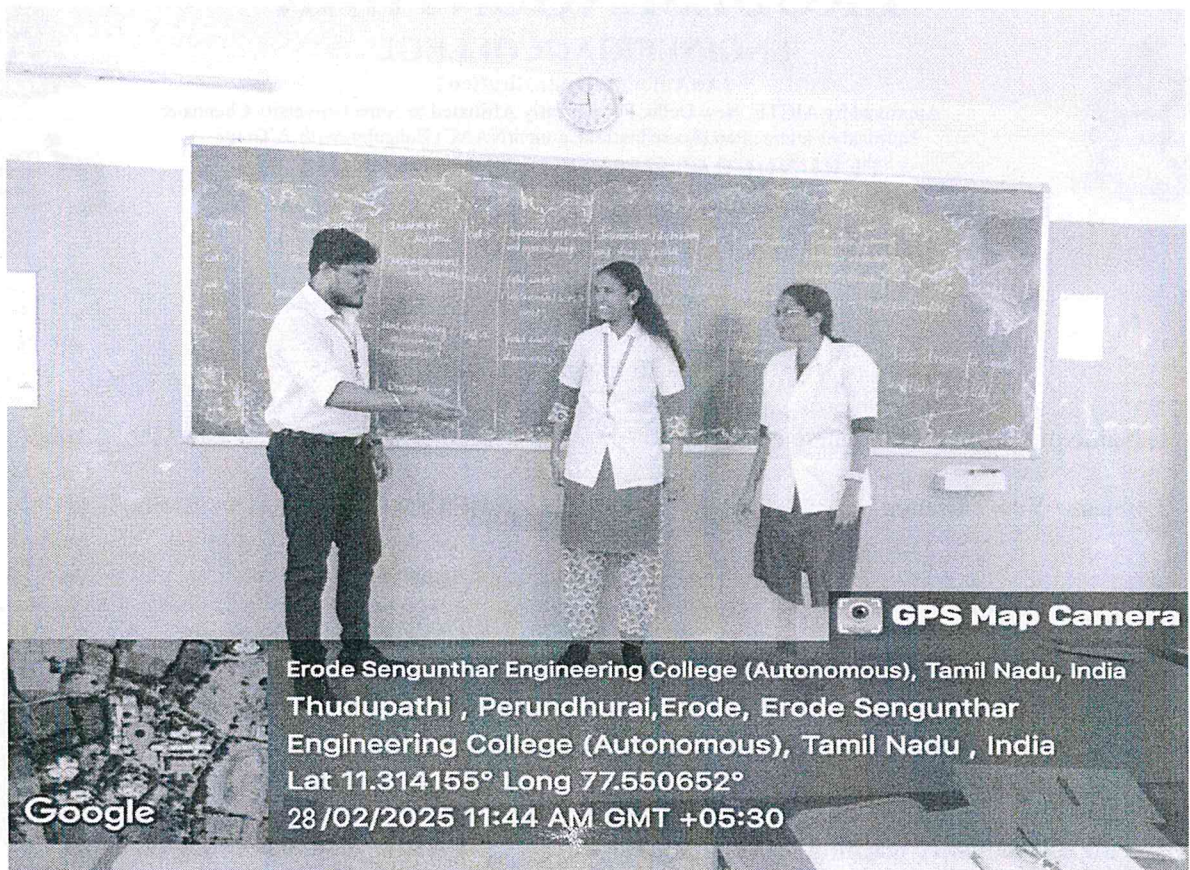


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX03 Hospital Waste Management
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : Ms. M. Dhivya , AP/BME.
4. Date : 28.02.2025
5. Topic of the class : Control of Hazardous Energy
6. Title of Innovative teaching learning process : Innovative teaching – Peer Teaching
7. Objective : To prevent accidental startup or release of stored energy during maintenance, reducing the risk of injuries and fatalities. It ensures that proper procedures are followed to isolate energy sources, protecting workers from electrical, mechanical, hydraulic, and other hazardous energies.



Reflective Critique :

Reflecting on hazardous emergency control involves assessing your knowledge of protocols, response speed, and ability to use PPE and containment tools effectively. It also includes evaluating communication, teamwork, and decision-making under pressure.

Challenges :

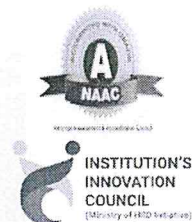
Common challenges include delayed response due to panic, lack of training, or unclear roles during emergencies. Equipment failure or poor coordination can also worsen the situation and increase risk to staff and patients.



ERODESENGUNTHAR ENGINEERINGCOLLEGE

(AnAutonomousInstitution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
NationalAssessmentandAccreditationCouncil(NAAC),Bangalorewith'A'Grade
PERUNDURAI-638057,TAMILNADU,INDIA.

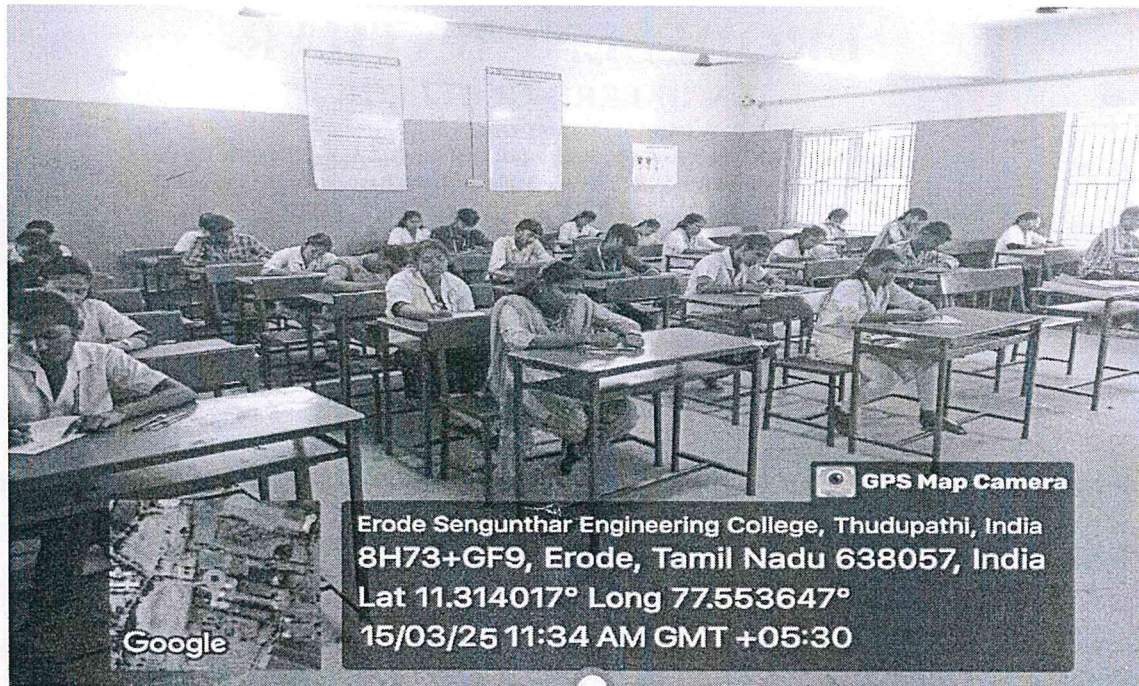


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX03 Hospital Waste Management
2. Class / Year / Branch : III Year / VI Semester / Biomedical
Engineering
3. Name of course coordinator : Ms. M. Dhivya , AP/BME
4. Date : 15.03.2025
5. Topic of the class : Disinfectants
6. Title of Innovative teaching learning process : Innovative teaching – PPT Presentation
7. Objective : To understand their composition,
effectiveness, proper usage, and impact
on health and the environment to ensure
safe and infection control



Reflective Critique:

Reflection on disinfectant use involves evaluating your understanding of correct types, concentrations, and application methods, as well as adherence to safety protocols. It also includes assessing the effectiveness and consistency of disinfection practices.

Challenges :

Challenges include improper dilution, use of the wrong disinfectant for specific pathogens, or neglecting contact time. Additionally, overuse or exposure can cause health issues like skin irritation or respiratory problems.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI - 638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

- | | |
|--|--|
| 1. Name of subjects with course code | : 19BMX07 Telehealth Technology |
| 2. Class / Year / Branch | : III Year / VI Semester / Biomedical Engineering |
| 3. Name of course coordinator | : K.K.Leka, AP/BME |
| 4. Date & Hour | : 27.01.2025 & 3 rd Hour |
| 5. Topic of the class | : Tele-care |
| 6. Title of Innovative teaching learning process | : Innovative teaching – Group Discussion |
| 7. Objective | : To explore the effectiveness, benefits, and challenges of tele-care in enhancing remote healthcare delivery, focusing on its impact on patient outcomes, accessibility, and healthcare efficiency. |

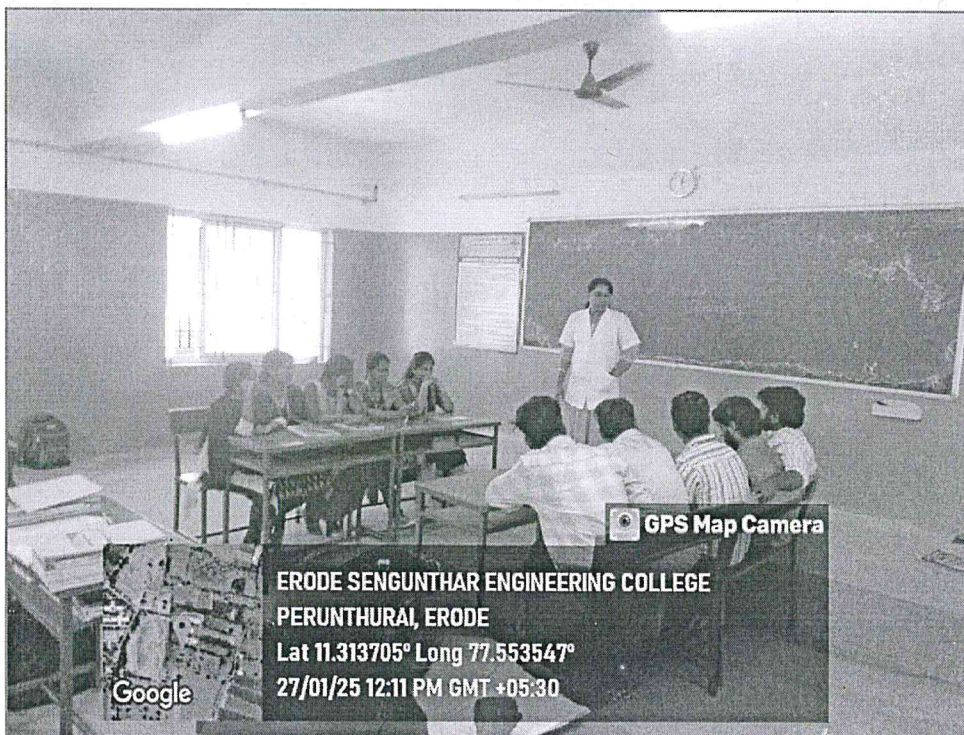
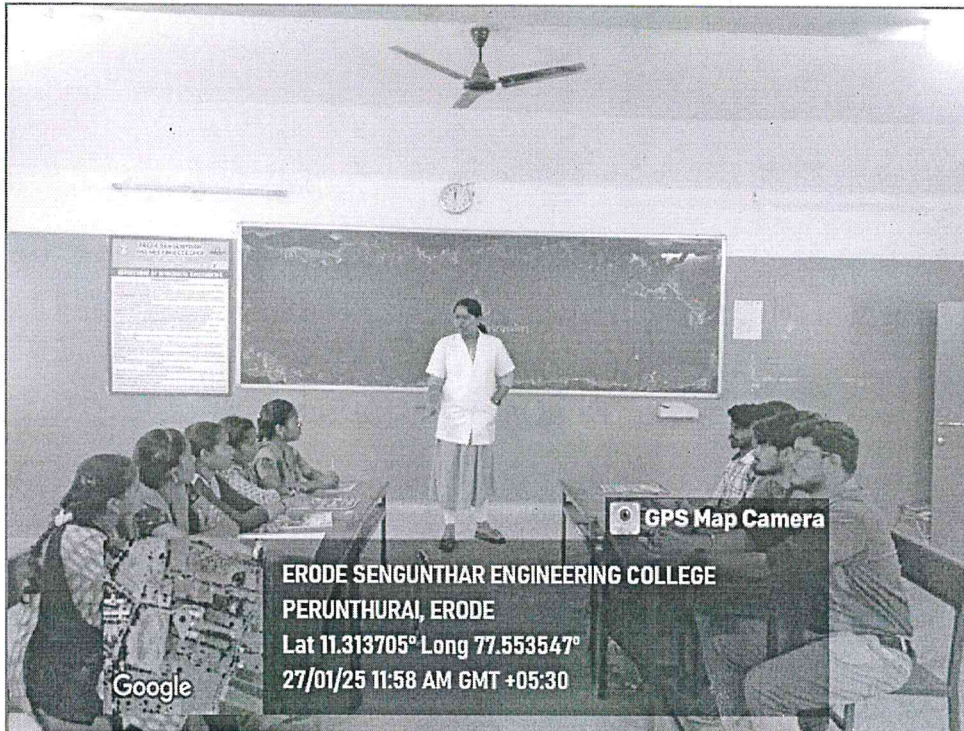
8. Student name list:

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
GROUP-II		
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
GROUP-III		
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
GROUP-IV		
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
GROUP-V		
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
GROUP-VI		
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIII J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D

Innovative teaching Practices

Geotagged Photo:



Group Discussion

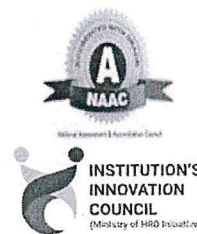


ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai & National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

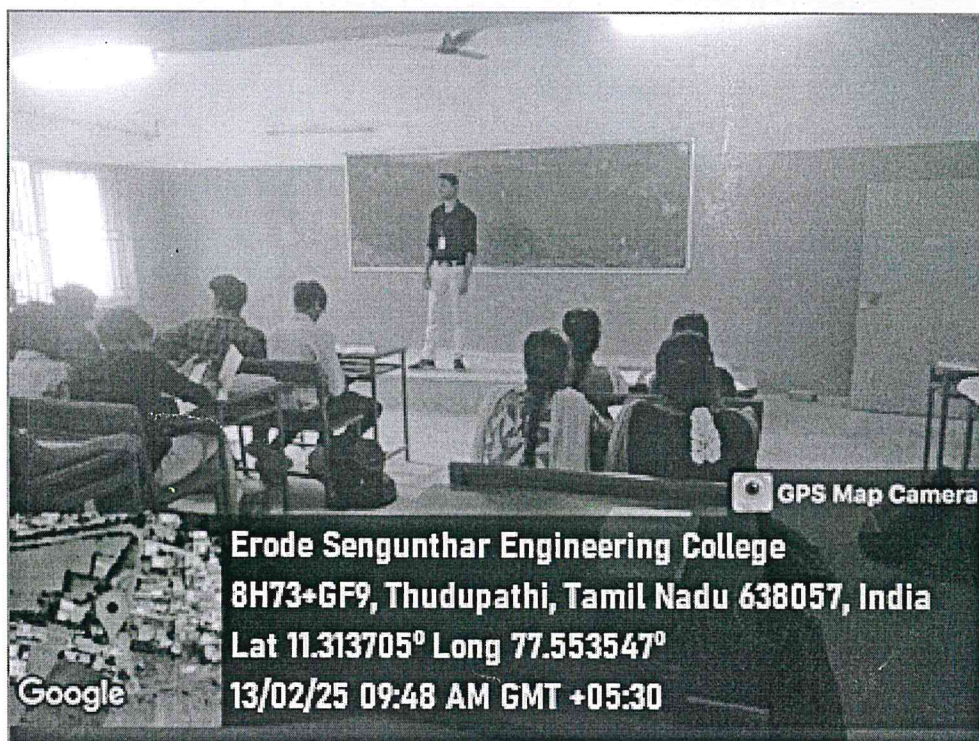
2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX07 Telehealth Technology
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 13.02.2025 & 1st Hour
5. Topic of the class : Wireless Communications
6. Title of Innovative teaching learning process : Innovative teaching – Flipped Classroom
7. Objective : To examine the evolution, technologies, and applications of wireless communications, evaluating their role in fostering connectivity, mobility, and innovation across various sectors such as telecommunications, IoT, and smart cities.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



Flipped Classroom

ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

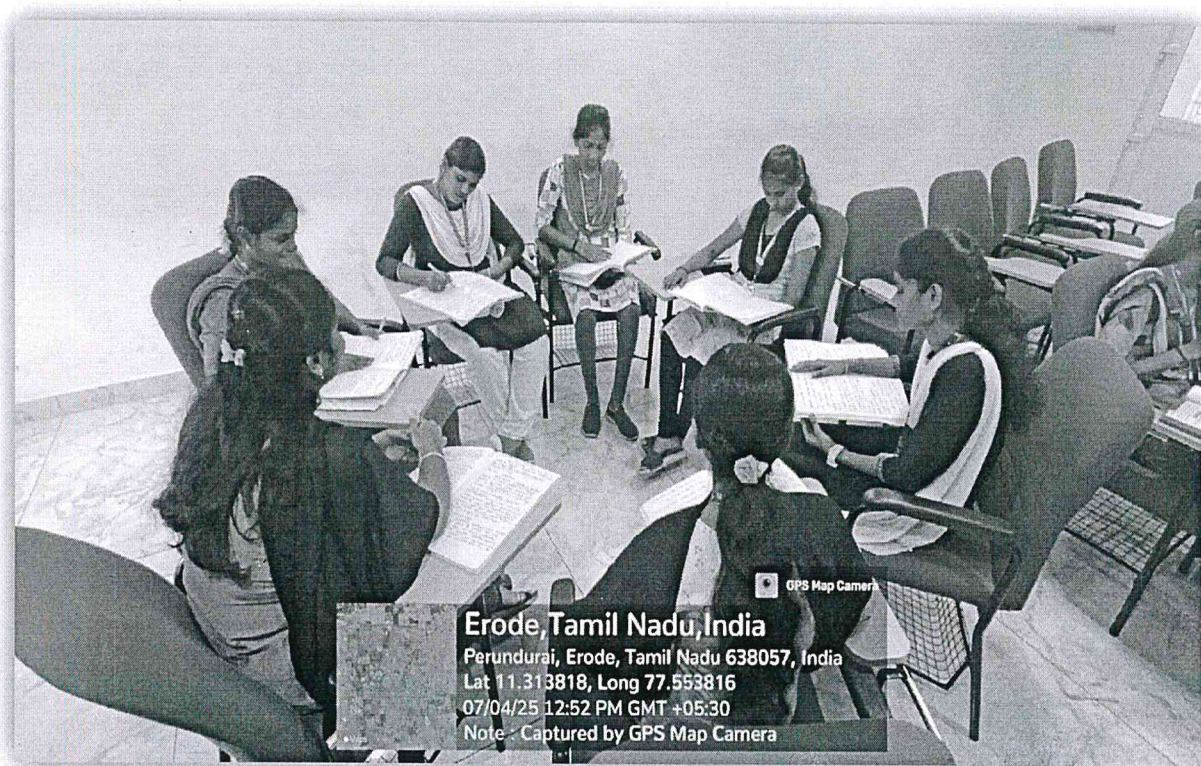
2024 – 25 Even Semester

- | | |
|--|---|
| 1. Name of subjects with course code | : 19BMX07 Telehealth Technology |
| 2. Class / Year / Branch | : III Year / VI Semester / Biomedical Engineering |
| 3. Name of course coordinator | : K.K.Leka, AP/BME |
| 4. Date & Hour | : 07.04.2024 & 4 th Hour |
| 5. Topic of the class | : Telepathology |
| 6. Title of Innovative teaching learning process | : Innovative teaching – Peer Teaching |
| 7. Objective | : To investigate the applications, benefits, and challenges of telepathology in modern healthcare settings, examining its impact on diagnostic accuracy, healthcare accessibility, and collaboration among pathologists, with a focus on optimizing pathology services and patient care delivery. |

8. Student name list

S. No	Register No	Name of the Candidate
Group I		
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
Group II		
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
Group III		
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
Group IV		
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
Group V		
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
Group VI		
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



Peer Teaching



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

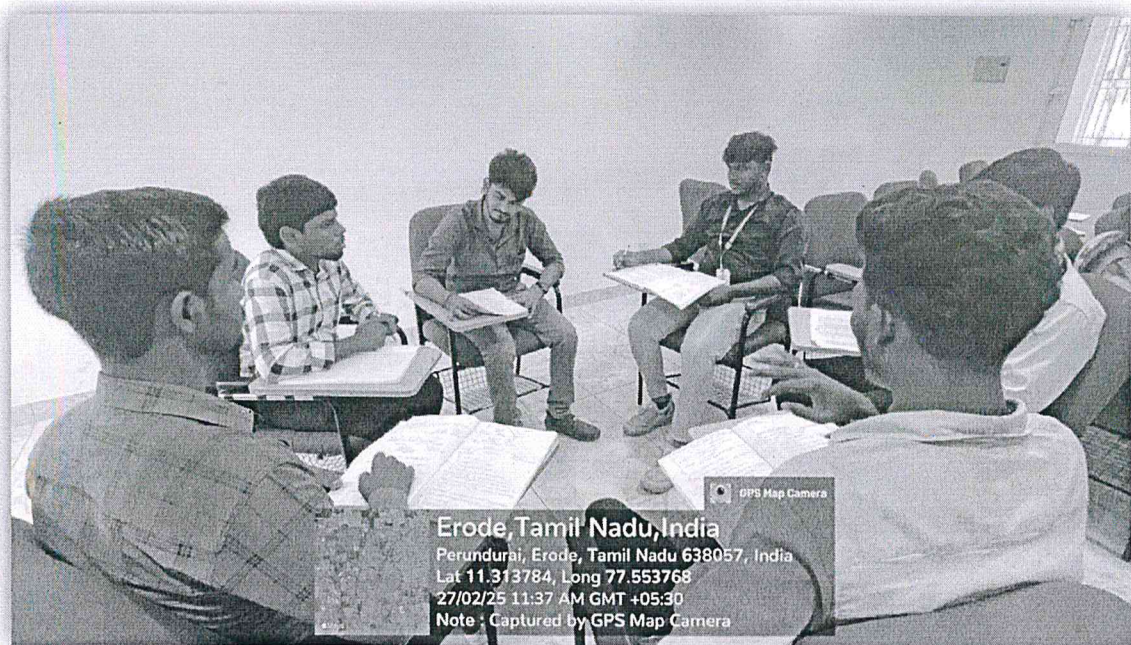
2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX07 Telehealth Technology
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 27.02.2024 & 3rd Hour
5. Topic of the class : Patient – Doctor Relationship
6. Title of Innovative teaching learning process : Innovative teaching – Peer Teaching
7. Objective : To investigate the dynamics, significance, and evolving trends of the patient-doctor relationship in contemporary healthcare contexts, analyzing its impact on patient satisfaction, treatment adherence, and overall healthcare outcomes.

8. Student name list

S. No	Register No	Name of the Candidate
Group I		
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
Group II		
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
Group III		
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
Group IV		
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
Group V		
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
Group VI		
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



Peer Teaching



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

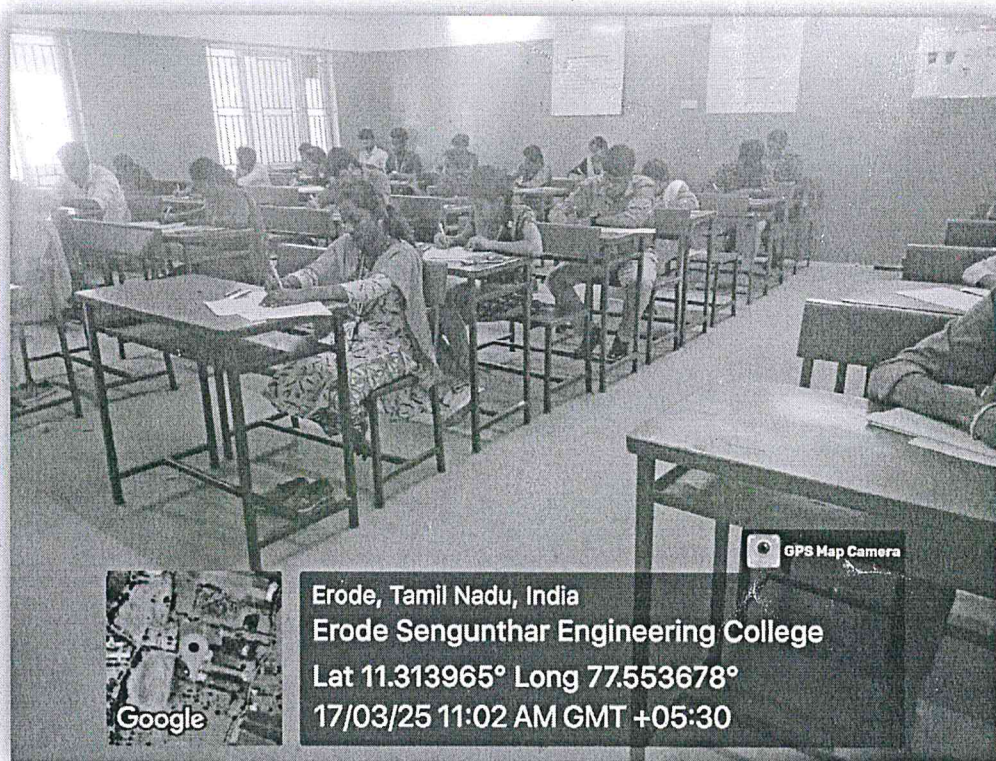
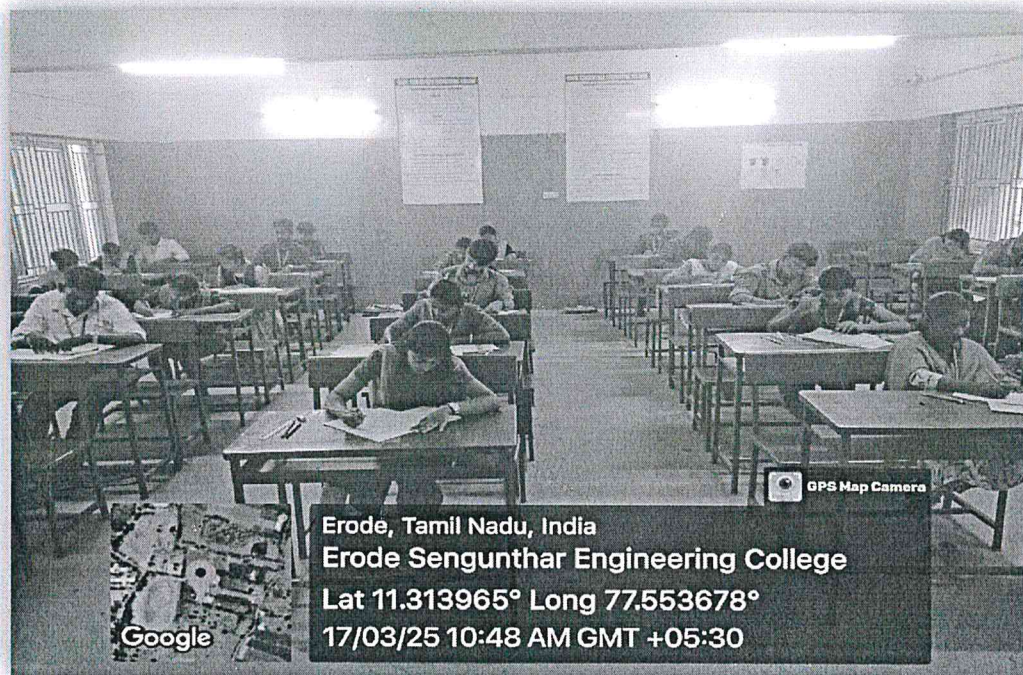
2024 – 25 Even Semester

1. Name of subjects with course code : 19BMX07 Telehealth Technology
2. Class / Year / Branch : III Year / VI Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 17.03.2024 & 2nd Hour
5. Topic of the class : PACS strategic plan and needs
6. Title of Innovative teaching learning process : Innovative teaching - Quiz
7. Objective : To develop a comprehensive strategic plan and conduct a thorough needs assessment for implementing a PACS in healthcare institutions, focusing on optimizing medical image management, enhancing diagnostic efficiency, and improving overall patient care outcomes.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D

30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S
49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730423121301	VENKATESHWARAN D



Quiz

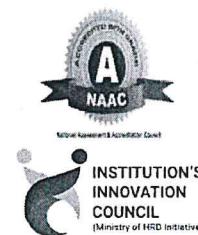


ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.K.K.Leka, AP/BME
Name of the subject with code : 19BMX21- Clinical Engineering
Year/Semester/Class : III/V/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Role and functions of primary Healthcare	Group discussion
2.	II	Uninterrupted Power supply for ICU	Flipped Class room
3.	III	Deodorization	Peer teaching
4.	IV	Training of men for medical equipments	Quiz
5.	V	Computerization in pharmacy	Peer teaching

Signature of the Course Coordinator

HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI- 638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BMX21 CLINICAL ENGINEERING
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 09.07.2024 & 2nd Hour
5. Topic of the class : Role and functions of primary health care.
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective : To highlight the importance of primary health care in providing accessible, affordable and comprehensive health services. It focuses on prevention, treatment, and health promotion within communities. The topic emphasizes the role of primary health care in reducing health disparities and ensuring equity in health systems.

8. Student name list

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730421121001	AJAYKUMAR.R
2.	730421121002	AKASHRAJ.T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA .K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA.L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH.S
GROUP-II		
11.	730421121012	GOWTHAM . D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA.J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH.S
16.	730421121017	KALANITHI.S.V
17.	730421121018	KAMALNATH. R
18.	730421121019	KANIMOZHILK
19.	730421121020	KARTHICK.M

20.	730421121021	KIRUTHIGA.S
GROUP-III		
21.	730421121022	KISHORE M
22.	730421121023	MADHUMITHA.C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR.V
25.	730421121029	PRAKASH. R
26.	730421121030	PRIYADHARSHINI.M
27.	730421121032	RENUGADEVI D
28.	730421121034	ROJA VARSHINI.M
29.	730421121035	SAKTHIVEL.P
30.	730421121037	SARUMATHI.K
GROUP-IV		
31.	730421121038	SIVASANGARI.S
32.	730421121039	SORNADEVIM
33.	730421121040	VASANTHAKUMAR S
34.	730421121041	VIGNESH M
35.	730421121042	YASWANTHIKA B P
36.	730421121043	SHANKAR M
37.	730421121044	MANISH PATEL
38.	730421121045	ABINESH M
39.	730421121046	KEERTHIVASAN. R
40.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

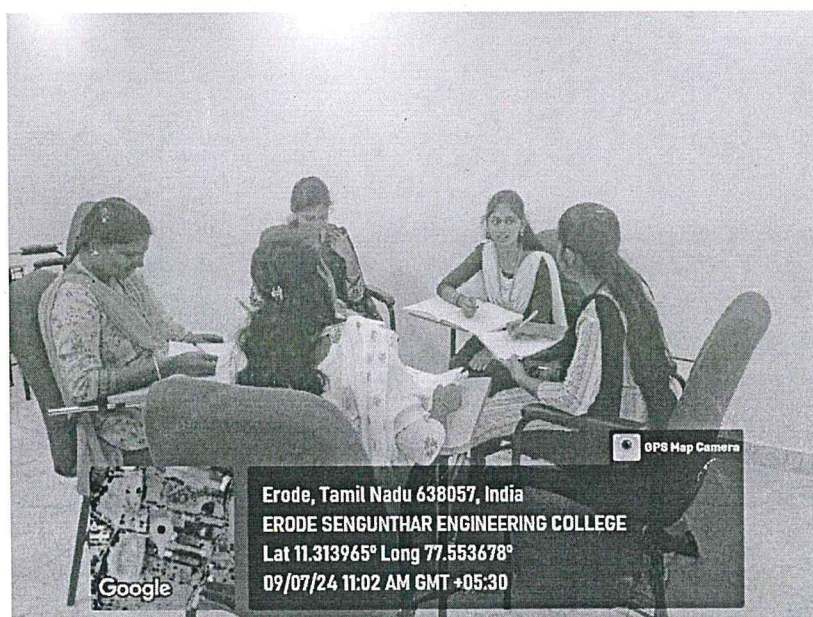
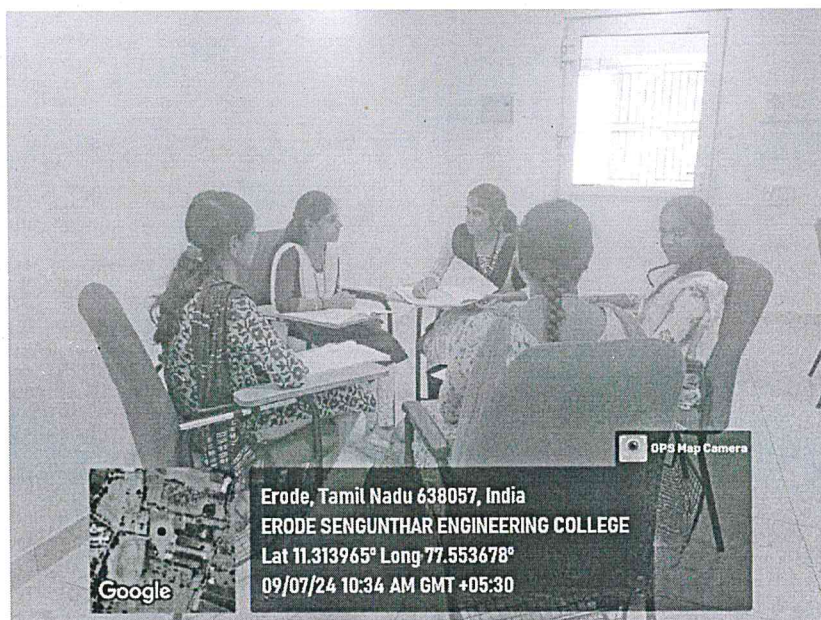
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Group Discussion



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BMX21 CLINICAL ENGINEERING
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 27.07.2024 & 2nd Hour
5. Topic of the class : Uninterrupted power supply for ICU
6. Title of Innovative teaching learning process : Innovative teaching – Flipped Classroom
7. Objective : To emphasize the critical importance of reliable power systems in Intensive Care Units (ICUs). It highlights the need for continuous electricity to support life-saving medical equipment and patient care. The topic focuses on ensuring safety and minimizing risks associated with power outages in high-dependency healthcare settings. It also explores strategies for implementing effective backup power solutions to maintain optimal ICU functionality.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730421121001	AJAYKUMAR.R
2.	730421121002	AKASHRAJ.T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA .K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA.L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH.S.
11.	730421121012	GOWTHAM . D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA.J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH.S
16.	730421121017	KALANITHI.S.V
17.	730421121018	KAMALNATH. R
18.	730421121019	KANIMOZHI.K
19.	730421121020	KARTHICK.M
20.	730421121021	KIRUTHIGA.S

21.	730421121022	KISHORE M
22.	730421121023	MADHUMITHA.C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR.V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH. R
27.	730421121030	PRIYADHARSHINI.M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121034	ROJA VARSHINI.M
31.	730421121035	SAKTHIVEL.P
32.	730421121037	SARUMATHI.K
33.	730421121038	SIVASANGARI.S
34.	730421121039	SORNADEVLM
35.	730421121040	VASANTHAKUMAR S
36.	730421121041	VIGNESH M
37.	730421121042	YASWANTHIKA B P
38.	730421121043	SHANKAR M
39.	730421121044	MANISH PATEL
40.	730421121045	ABINESH M
41.	730421121046	KEERTHIVASAN. R
42.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

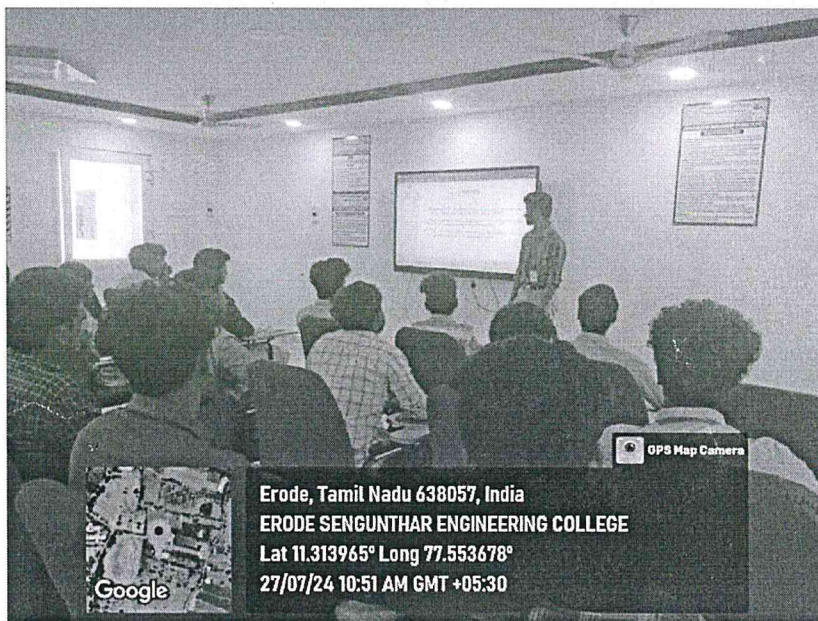
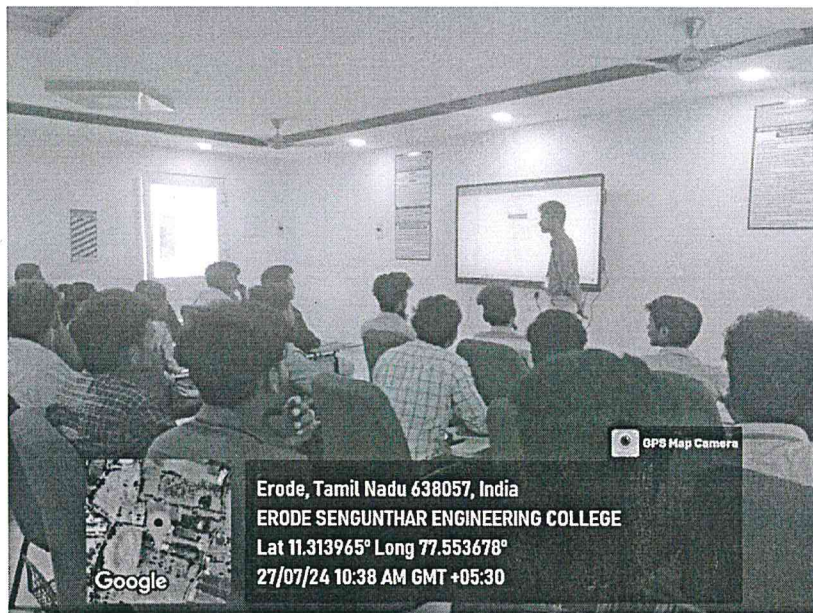
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Flipped Classroom

ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BMX21 CLINICAL ENGINEERING
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 05.08.2024 & 1st Hour
5. Topic of the class : Deodorization
6. Title of Innovative teaching learning process : Innovative teaching – Peer Teaching
7. Objective : To highlight the importance of maintaining a clean and odor-free environment in healthcare settings. It focuses on the impact of odors on patient comfort, staff productivity, and overall hygiene. The topic emphasizes the role of effective deodorization methods in preventing the spread of infections and ensuring a healthy atmosphere. It also aims to explore various deodorization techniques and their application in hospitals.

8. Student name list

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730421121001	AJAYKUMAR.R
2.	730421121002	AKASHRAJ.T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA .K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA.L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH.S
GROUP-II		
11.	730421121012	GOWTHAM . D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA.J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH.S
16.	730421121017	KALANITHI.S.V
17.	730421121018	KAMALNATH. R
18.	730421121019	KANIMOZHI.K
19.	730421121020	KARTHICK.M
20.	730421121021	KIRUTHIGA.S

GROUP-III		
21.	730421121022	KISHORE M
22.	730421121023	MADHUMITHA.C
23.	730421121024	MATHAN A
24.	730421121026	NITHIP S
25.	730421121029	PRAKASH. R
26.	730421121030	PRIYADHARSHINI.M
27.	730421121031	RAJATHI R
28.	730421121032	RENUGADEVI D
29.	730421121034	ROJA VARSHINI.M
30.	730421121035	SAKTHIVEL.P
GROUP-IV		
31.	730421121037	SARUMATHI.K
32.	730421121038	SIVASANGARI.S
33.	730421121039	SORNADEVI.M
34.	730421121040	VASANTHAKUMAR S
35.	730421121041	VIGNESH M
36.	730421121042	YASWANTHIKA B P
37.	730421121043	SHANKAR M
38.	730421121044	MANISH PATEL
39.	730421121045	ABINESH M
40.	730421121046	KEERTHIVASAN. R
41.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

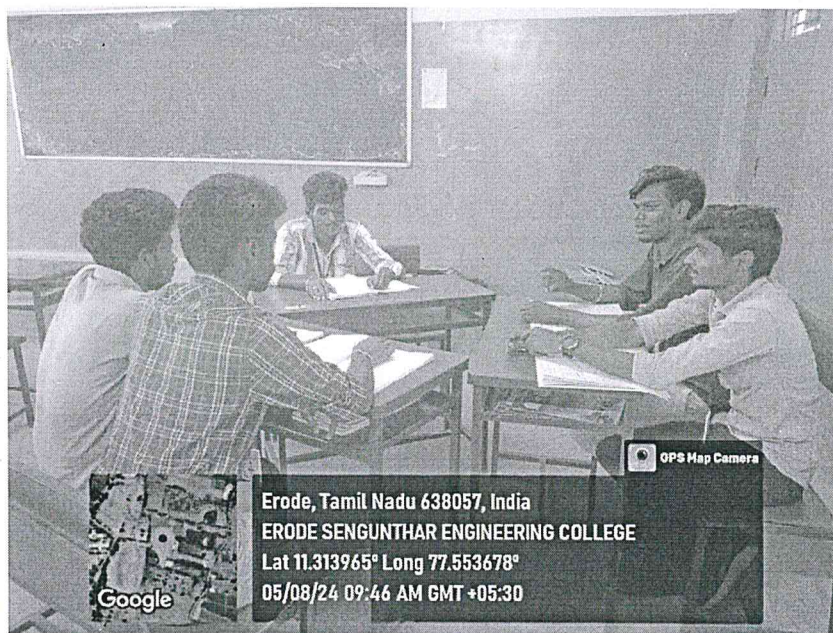
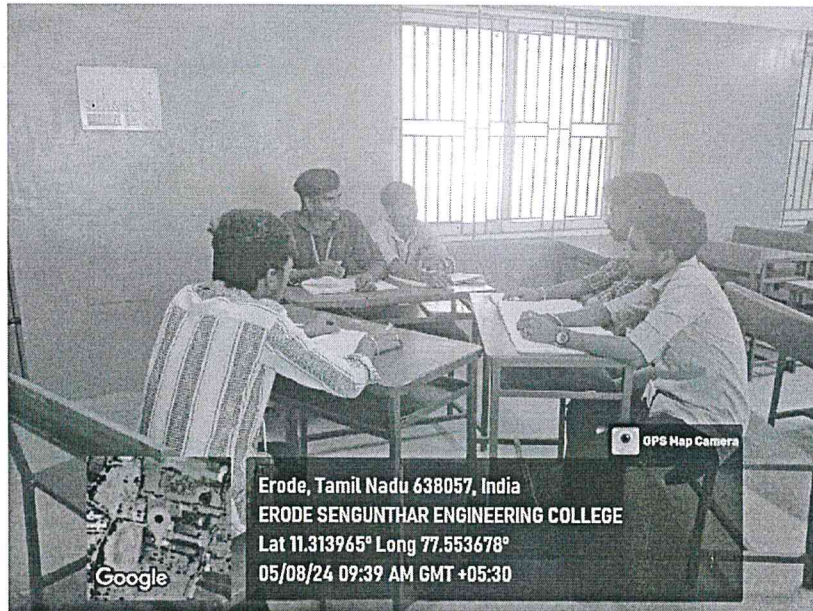
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



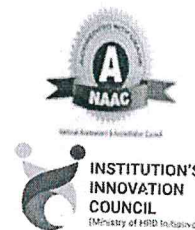
Peer Teaching



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BMX21 CLINICAL ENGINEERING
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 19.08.2024 & 1st Hour
5. Topic of the class : Training of men for medical Equipments
6. Title of Innovative teaching learning process : Innovative teaching – Quiz
7. Objective : To emphasize the importance of equipping healthcare workers with the necessary skills to operate medical devices effectively. It focuses on ensuring proper maintenance, troubleshooting, and safety of medical equipment. The topic aims to highlight the role of training in enhancing patient care and reducing equipment-related errors.

8. Student name list

S. No	Register No	Name of the Candidate
1.	730421121001	AJAYKUMAR.R
2.	730421121002	AKASHRAJ.T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA .K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA.L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH.S
11.	730421121012	GOWTHAM . D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA.J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH.S
16.	730421121017	KALANITHI.S.V
17.	730421121018	KAMALNATH. R
18.	730421121019	KANIMOZHI.K
19.	730421121020	KARTHICK.M
20.	730421121021	KIRUTHIGA.S

21.	730421121022	KISHORE M
22.	730421121023	MADHUMITHA.C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR.V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH. R
27.	730421121030	PRIYADHARSHINI.M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121034	ROJA VARSHINI.M
31.	730421121035	SAKTHIVEL.P
32.	730421121037	SARUMATHI.K
33.	730421121038	SIVASANGARI.S
34.	730421121039	SORNADEVIL.M
35.	730421121041	VIGNESH M
36.	730421121042	YASWANTHIKA B P
37.	730421121043	SHANKAR M
38.	730421121044	MANISH PATEL
39.	730421121045	ABINESH M
40.	730421121046	KEERTHIVASAN. R
41.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

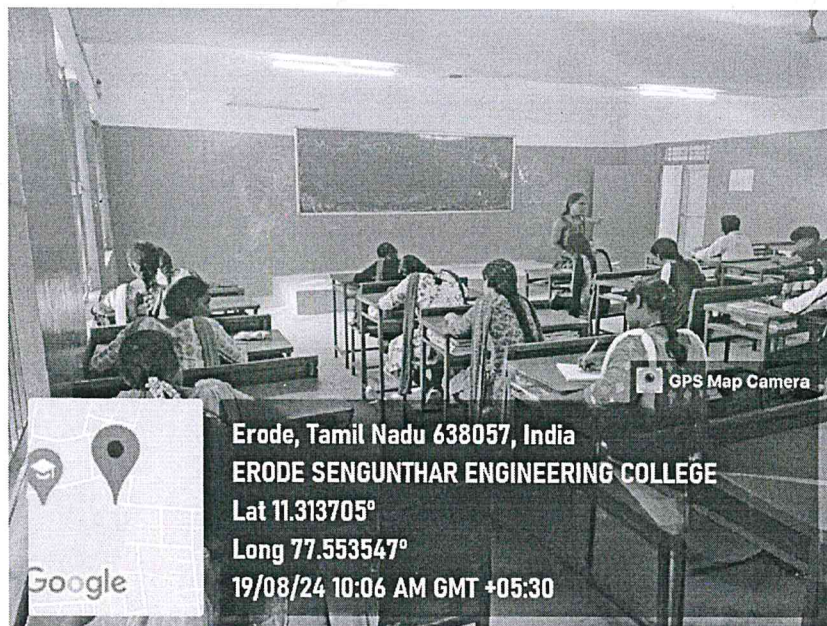
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Quiz



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI - 638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester

1. Name of subjects with course code : 19BMX21 CLINICAL ENGINEERING
2. Class / Year / Branch : III Year / V Semester / Biomedical Engineering
3. Name of course coordinator : K.K.Leka, AP/BME
4. Date & Hour : 03.09.2024 & 2nd Hour
5. Topic of the class : Computerization in Pharmacy
6. Title of Innovative teaching learning process : Innovative teaching – Peer Teaching
7. Objective : To highlight the role of technology in improving the efficiency and accuracy of pharmacy operations. It focuses on automating tasks like inventory management, prescription processing, and patient records. The topic emphasizes how computerization enhances patient safety and reduces medication errors

8. Student name list

S. No	Register No	Name of the Candidate
GROUP-I		
1.	730421121001	AJAYKUMAR.R
2.	730421121002	AKASHRAJ.T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA .K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA.L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH.S
GROUP-II		
11.	730421121012	GOWTHAM . D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA.J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH.S
16.	730421121017	KALANITHI.S.V
17.	730421121018	KAMALNATH. R
18.	730421121019	KANIMOZHI.K
19.	730421121020	KARTHICK.M

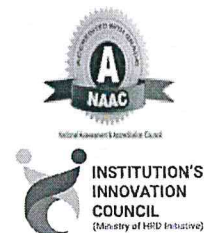
20.	730421121021	KIRUTHIGA.S
GROUP-III		
21.	730421121022	KISHORE M
22.	730421121023	MADHUMITHA.C
23.	730421121024	MATHAN A
24.	730421121026	NITHIP S
25.	730421121029	PRAKASH. R
26.	730421121030	PRIYADHARSHINI.M
27.	730421121031	RAJATHI R
28.	730421121032	RENUGADEVI D
29.	730421121034	ROJA VARSHINI.M
30.	730421121035	SAKTHIVEL.P
GROUP-IV		
31.	730421121037	SARUMATHI.K
32.	730421121038	SIVASANGARI.S
33.	730421121039	SORNADEVI.M
34.	730421121041	VIGNESH M
35.	730421121042	YASWANTHIKA B P
36.	730421121043	SHANKAR M
37.	730421121044	MANISH PATEL
38.	730421121045	ABINESH M
39.	730421121046	KEERTHIVASAN. R
40.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

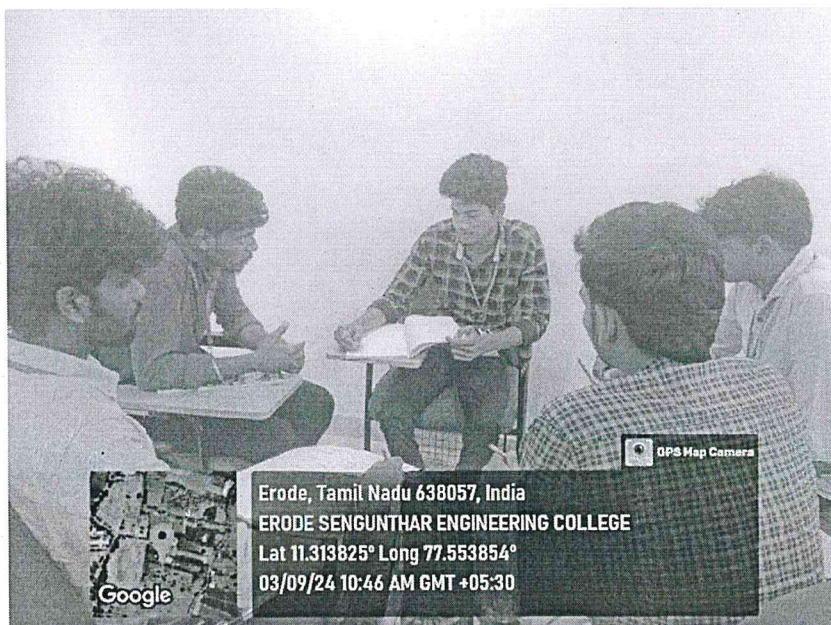
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Innovative teaching Practices

Geotagged Photo:



Peer Teaching



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.M.Mohanavalli, AP/BME
Name of the subject with code : 19BMX29- Brain Computer Interface and Applications
Year/Semester/Class : III/VI/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Basic Medical Instrumentation System	Role play
2.	II	EEG 10-20 Electrode System	Practical based learning
3.	III	Instrumentation Amplifier	Peer group learning
4.	IV	Measurement of Pulse rate	Practical based learning
5.	V	Bed side Monitors	Practical based learning

Signature of the Course Coordinator


HOD/BME



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BMX29 Brain computer Interface and Applications
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 20.12.2024 & 3rd Hour
5. Topic of the class : Neuronal Activity in brain cortex
6. Title of Innovative teaching learning process : Role Play
7. Objective :
To study how different regions contribute to BCI control and signal processing.

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121029	PRAKASH R
26.	730421121030	PRIYADHARSHINI M
27.	730421121031	RAJATHI R
28.	730421121032	RENUGADEVI D
29.	730421121034	ROJA VARSHINI M
30.	730421121035	SAKTHIVEL P
31.	730421121037	SARUMATHI K
32.	730421121038	SIVA SANGARI S
33.	730421121039	SORNA DEVI .M
34.	730421121040	VASANTH KUMAR S
35.	730421121041	VIGNESH M
36.	730421121042	YASWANTHIKA B P
37.	730421121043	SHANKAR M
38.	730421121044	MANISH PATEL
39.	730421121045	ABINESH M
40.	730421121046	KEERTHIVASAN R
41.	730421121301	GUNAVATHI N



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotag Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BMX29 Brain Computer Interface and Applications
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 24.12.2024 & 3rd Hour
5. Topic of the class : EEG signal acquisition
6. Title of Innovative teaching learning process : Practical Based Learning
7. Objective :
To know the acquisition of electrical signals from the brain's using electrodes and 10-20 electrode placement montage

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121026	NITHIP S
26.	730421121029	PRAKASH R
27.	730421121030	PRIYADHARSHINI M
28.	730421121031	RAJATHI R
29.	730421121032	RENUGADEVI D
30.	730421121033	ROBIKA M
31.	730421121034	ROJA VARSHINI M
32.	730421121035	SAKTHIVEL P
33.	730421121037	SARUMATHI K
34.	730421121038	SIVA SANGARI S
35.	730421121039	SORNA DEVI .M
36.	730421121040	VASANTH KUMAR S
37.	730421121041	VIGNESH M
38.	730421121042	YASWANTHIKA B P
39.	730421121043	SHANKAR M
40.	730421121044	MANISH PATEL
41.	730421121045	ABINESH M
42.	730421121046	KEERTHIVASAN R
43.	730421121301	GUNAVATHI N



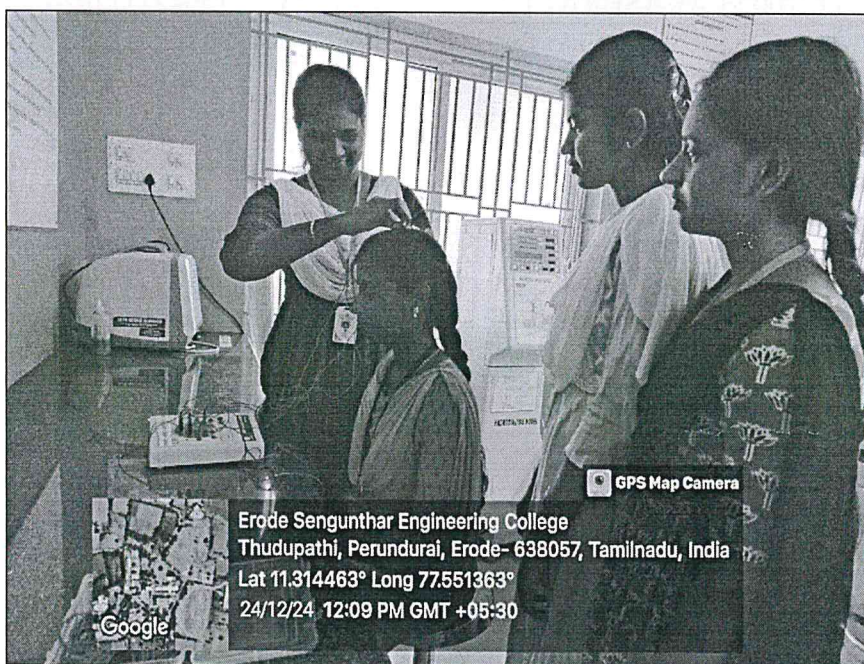
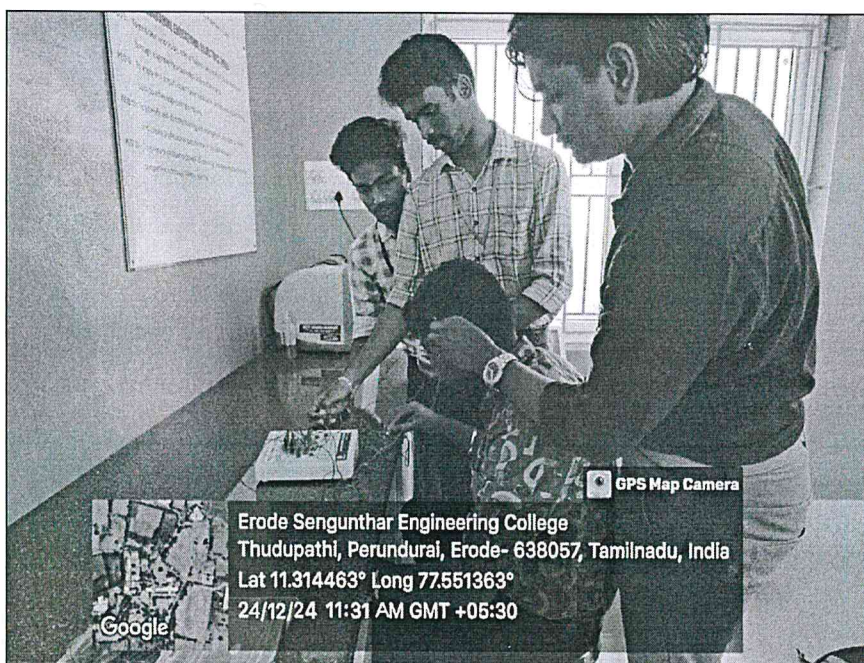
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotag Photos





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BMX29 Brain Computer Interface and applications
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 24.01.2025 & 3rd Hour
5. Topic of the class : Power Spectral Density (PSD)
6. Title of Innovative teaching learning process : Classroom teaching- Peer group learning
7. Objective :
To analyze the power content of a signal as a function of frequency features
8. Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S

Group II		
S.No	Register No.	Name of the Student
1.	730421121006	ATSHAYA K
2.	730421121007	BHARANI PRAKASH P
3.	730421121008	DHIVYA L
4.	730421121010	EZHILARASU S
5.	730421121011	GIRIPRASANTH S

Group III		
S.No	Register No.	Name of the Student
1.	730421121012	GOWTHAM D
2.	730421121013	GUHAN RAHUL V
3.	730421121014	HEMA J
4.	730421121015	JEEVANANTHAM S
5.	730421121016	JEGADHEESH S

Group IV		
S.No	Register No.	Name of the Student
1.	730421121017	KALANITHI S.V
2.	730421121018	KAMALNATH .R
3.	730421121019	KANIMOZHI K
4.	730421121020	KARTHICK M
5.	730421121021	KIRUTHIGA S



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group V		
S.No	Register No.	Name of the Student
1.	730421121022	KISHORE M
2.	730421121023	MADHUMITHA C
3.	730421121024	MATHAN A
4.	730421121025	NAVEEN KUMAR V
5.	730421121026	NITHIP S

Group VI		
S.No	Register No.	Name of the Student
1.	730421121029	PRAKASH R
2.	730421121030	PRIYADHARSHINI M
3.	730421121031	RAJATHI R
4.	730421121032	RENUGADEVI D
5.	730421121033	ROBIKA M

Group VII		
S.No	Register No.	Name of the Student
1.	730421121034	ROJA VARSHINI M
2.	730421121035	SAKTHIVEL P
3.	730421121037	SARUMATHI K
4.	730421121038	SIVA SANGARI S
5.	730421121039	SORNA DEVI .M

Group VIII		
S.No	Register No.	Name of the Student
1.	730421121040	VASANTH KUMAR S
2.	730421121041	VIGNESH M
3.	730421121042	YASWANTHIKA B P
4.	730421121043	SHANKAR M

Group IX		
S.No	Register No.	Name of the Student
1.	730421121044	MANISH PATEL
2.	730421121045	ABINESH M
3.	730421121046	KEERTHIVASAN R
4.	730421121301	GUNAVATHI N



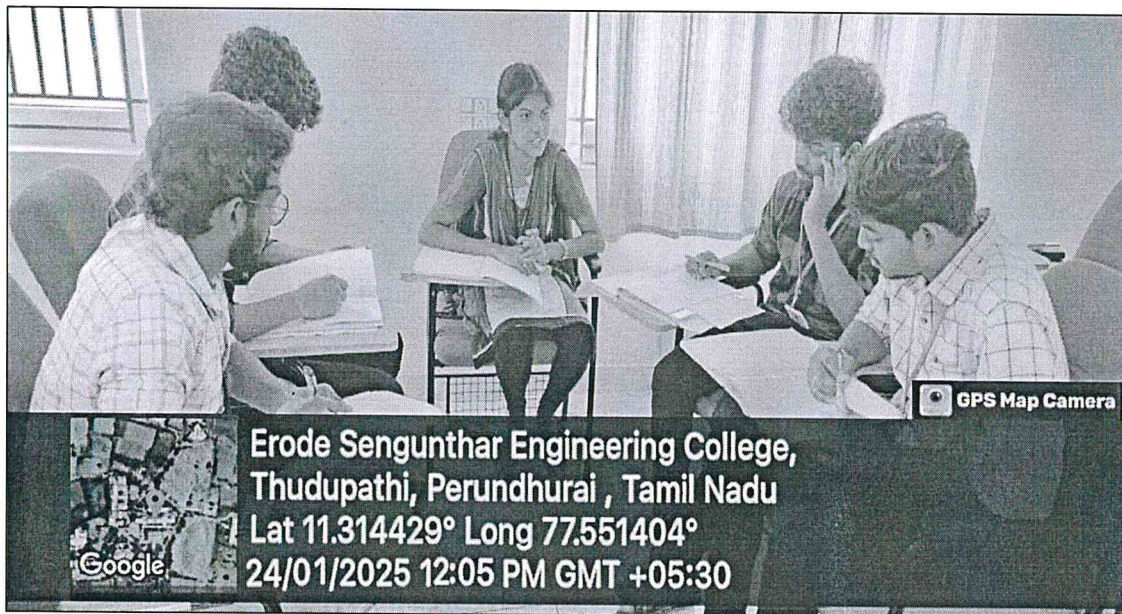
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotag Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BMX29 Brain Computer Interface and applications
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 25.02.2025 & 3rd Hour
5. Topic of the class : Analysis of different classification methods using Classification learner app in Matlab
6. Title of Innovative teaching learning process : Experiential & Active Learning
7. Objective :
To compare, visualize, and evaluate the performance of different classification algorithms on a dataset with ease.

Students Name list

S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S
6.	730421121006	ATSHAYA K
7.	730421121007	BHARANI PRAKASH P
8.	730421121008	DHIVYA L
9.	730421121010	EZHILARASU S
10.	730421121011	GIRIPRASANTH S
11.	730421121012	GOWTHAM D
12.	730421121013	GUHAN RAHUL V
13.	730421121014	HEMA J
14.	730421121015	JEEVANANTHAM S
15.	730421121016	JEGADHEESH S
16.	730421121017	KALANITHI S.V
17.	730421121018	KAMALNATH .R
18.	730421121019	KANIMOZHI K
19.	730421121020	KARTHICK M
20.	730421121021	KIRUTHIGA S
21.	730421121022	KISHORE M

S.No	Register No.	Name of the Student
22.	730421121023	MADHUMITHA C
23.	730421121024	MATHAN A
24.	730421121025	NAVEEN KUMAR V
25.	730421121029	PRAKASH R
26.	730421121030	PRIYADHARSHINI M
27.	730421121031	RAJATHI R
28.	730421121032	RENUGADEVI D
29.	730421121034	ROJA VARSHINI M
30.	730421121035	SAKTHIVEL P
31.	730421121037	SARUMATHI K
32.	730421121038	SIVA SANGARI S
33.	730421121039	SORNA DEVI .M
34.	730421121040	VASANTH KUMAR S
35.	730421121041	VIGNESH M
36.	730421121042	YASWANTHIKA B P
37.	730421121043	SHANKAR M
38.	730421121044	MANISH PATEL
39.	730421121045	ABINESH M
40.	730421121046	KEERTHIVASAN R
41.	730421121301	GUNAVATHI N



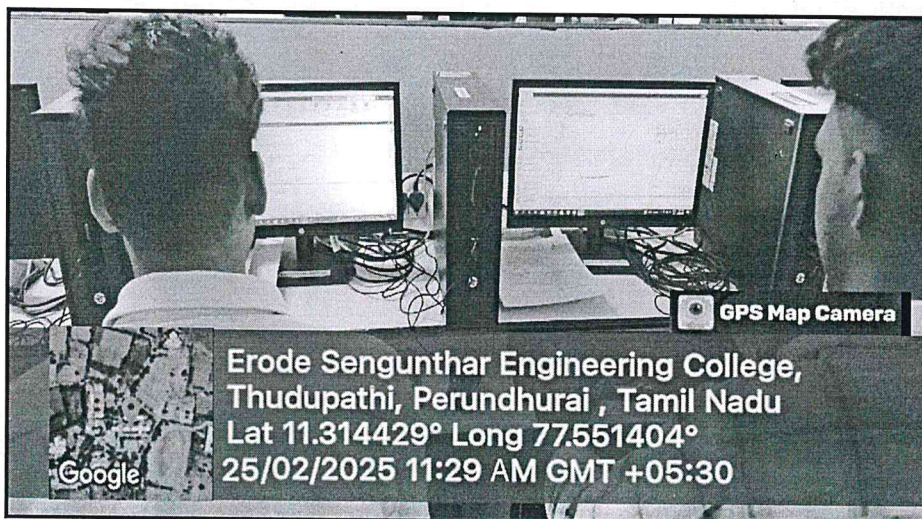
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotag Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Name of the Subject with Course code : 19BMX29 Brain Computer Interface and applications
2. Year/Branch : IV/BME
3. Name of the course co-ordinator : Ms.M.Mohanavalli
4. Date & Hour (Map with concern log book) : 26.02.2025 & 4th Hour
5. Topic of the class : Speller based on SSVEP
6. Title of Innovative teaching learning process : Classroom teaching- Peer group learning
7. Objective :

To create a speller system that leverages the SSVEP to decode user intentions by focusing on flickering stimuli at distinct frequencies.

Students Name list

Group I		
S.No	Register No.	Name of the Student
1.	730421121001	AJAYKUMAR R
2.	730421121002	AKASHRAJ T.T
3.	730421121003	ANANTHA PARTHIPAN G
4.	730421121004	ANBARASAN B
5.	730421121005	ARAVIND M S

Group II		
S.No	Register No.	Name of the Student
1.	730421121006	ATSHAYA K
2.	730421121007	BHARANI PRAKASH P
3.	730421121008	DHIVYA L
4.	730421121010	EZHILARASU S
5.	730421121011	GIRIPRASANTH S

Group III		
S.No	Register No.	Name of the Student
1.	730421121012	GOWTHAM D
2.	730421121013	GUHAN RAHUL V
3.	730421121014	HEMA J
4.	730421121015	JEEVANANTHAM S
5.	730421121016	JEGADHEESH S

Group IV		
S.No	Register No.	Name of the Student
1.	730421121017	KALANITHI S.V
2.	730421121018	KAMALNATH .R
3.	730421121019	KANIMOZHI K
4.	730421121020	KARTHICK M
5.	730421121021	KIRUTHIGA S



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Group V		
S.No	Register No.	Name of the Student
1.	730421121022	KISHORE M
2.	730421121023	MADHUMITHA C
3.	730421121024	MATHAN A
4.	730421121025	NAVEEN KUMAR V
5.	730421121026	NITHIP S

Group VI		
S.No	Register No.	Name of the Student
1.	730421121029	PRAKASH R
2.	730421121030	PRIYADHARSHINI M
3.	730421121031	RAJATHI R
4.	730421121032	RENUGADEVI D
5.	730421121033	ROBIKA M

Group VII		
S.No	Register No.	Name of the Student
1.	730421121034	ROJA VARSHINI M
2.	730421121035	SAKTHIVEL P
3.	730421121037	SARUMATHI K
4.	730421121038	SIVA SANGARI S
5.	730421121039	SORNA DEVI .M

Group VIII		
S.No	Register No.	Name of the Student
1.	730421121040	VASANTH KUMAR S
2.	730421121041	VIGNESH M
3.	730421121042	YASWANTHIKA B P
4.	730421121043	SHANKAR M

Group IX		
S.No	Register No.	Name of the Student
1.	730421121044	MANISH PATEL
2.	730421121045	ABINESH M
3.	730421121046	KEERTHIVASAN R
4.	730421121301	GUNAVATHI N



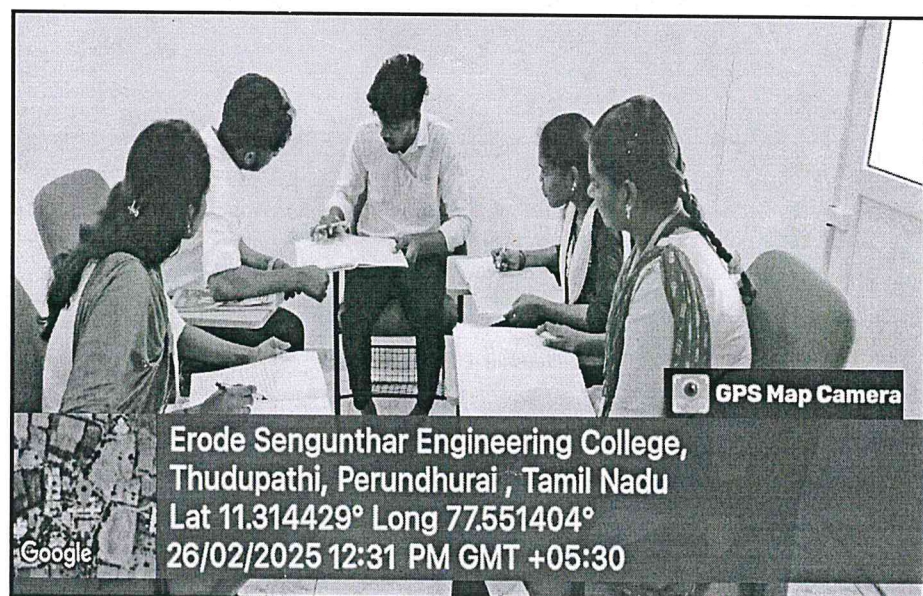
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



Geotag Photos





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM601 – Medical Image Processing
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.P.Brindha, ASP/BME
4. Date & Hour : 15.02.2025 & 3rd Hour
5. Topic of the class : Homomorphic filtering
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
7. Objective :
 1. Understand the concept of applying a filter in a transformed domain (often the frequency domain) and then converting it back to the original domain.
 2. Understand the mathematical principles behind the transformation and how it facilitates the separation of signal components.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

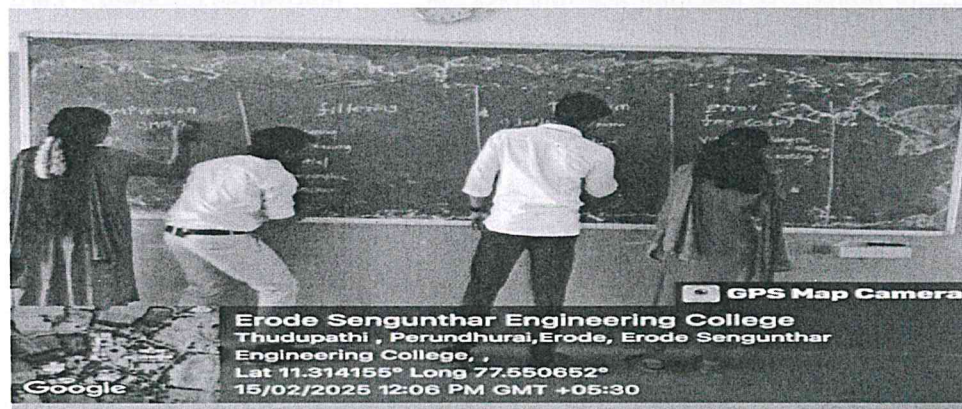
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

student has a clear understanding of the underlying mathematical operations, such as the use of logarithms to linearize multiplicative processes and the role of the Fourier Transform in shifting between domains.

Challenges

One of the significant challenges the student faced was determining **appropriate filter parameters**. Selecting the right **cutoff frequencies** for high-pass and low-pass filters is critical in homomorphic filtering, and small changes in these parameters can drastically affect the final output.

Students Namelist

Group 1:

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D

Group 2:

S. No	Register No	Name of the Candidate
1.	730422121006	DARSHAN K
2.	730422121007	DHANUSHMURUGAN R
3.	730422121008	DHARMENDRA KUMAR
4.	730422121009	DHARSHINI G J
5.	730422121010	DURGANANDHINI P

Group 3:

S. No	Register No	Name of the Candidate
1.	730422121011	ELANGO VAN M
2.	730422121012	ESHWARAN C
3.	730422121013	HARANI S
4.	730422121014	HARINI M
5.	730422121015	HARISH V

Group 4:

S. No	Register No	Name of the Candidate
1.	730422121016	JEGATHAMBAL C
2.	730422121017	KABILA S
3.	730422121018	KANISHKA A
4.	730422121019	KAVITHASRI T
5.	730422121020	KAVIYARASU P

Group 5:

S. No	Register No	Name of the Candidate
1.	730422121021	KEERTHANA S
2.	730422121022	KOWSHIK A
3.	730422121023	LAVANYA M
4.	730422121024	MADHUMITHA S
5.	730422121025	MOHAMED ANISH J

Group 6:

S. No	Register No	Name of the Candidate
1.	730422121026	MOHANAPRIYA K
2.	730422121027	MONIKA C
3.	730422121028	MURALI DAS P
4.	730422121029	NARMATHA D
5.	730422121030	NIVETHA S

Group 7:

S. No	Register No	Name of the Candidate
1.	730422121032	PRADEEPA S
2.	730422121034	PRIYADHARSHINI S
3.	730422121035	PUGAZHAMATHI P
4.	730422121036	RAMAPANDIAN M
5.	730422121037	RAMYA DEVI M

Group 8:

S. No	Register No	Name of the Candidate
1.	730422121038	RITHIKA M
2.	730422121039	SAISIVAM R
3.	730422121041	SANDHIYA T
4.	730422121043	SARANYA E
5.	730422121044	SEETHA S

Group 9:

S. No	Register No	Name of the Candidate
1.	730422121046	SHALINI V
2.	730422121047	SHIVANIKA S
3.	730422121048	SIBIRAJ S
4.	730422121049	SIVA S
5.	730422121050	SOWMIYA S

Group 11:

S. No	Register No	Name of the Candidate
1.	730422121056	VALAVAN V
2.	730422121057	VASANTH KUMAR O S
3.	730422121058	VASUDEVAN K
4.	730422121059	VELLIMALAR M
5.	730422121060	VIJI J

Group 10:

S. No	Register No	Name of the Candidate
1.	730422121051	SRILEKA M
2.	730422121052	SUBALAKHSMI S
3.	730422121053	SUGANYA S
4.	730422121054	SUNDARAM R
5.	730422121055	THRISHA R

Group 12:

S. No	Register No	Name of the Candidate
1.	730422121061	VIKRAM S
2.	730422121062	VISHWAPRASATH M
3.	730422121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM601 – Medical Image Processing
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.P.Brindha, ASP/BME
4. Date & Hour : 20.02.2025 & 4th Hour
5. Topic of the class : Elements of Information theory
6. Title of Innovative teaching learning process : Innovative teaching – Technical Quiz
7. Objective : 1. Learn the principles behind **Huffman coding, Lempel-Ziv-Welch (LZW)** algorithm, and other common compression techniques.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

Student has grasped the foundational concepts of **Information Theory**, particularly **entropy**, **mutual information**, and **Shannon's theorems**. They can articulate the role of **entropy** as a measure of uncertainty and understand how it quantifies the amount of information in a random variable or message.

Challenges

student faced challenges in understanding the practical implications of **channel capacity** in **noisy channels**. The real-world complexities of transmission environments (such as interference, bandwidth limitations, and signal degradation) made it harder to apply the theoretical framework of information theory directly to communication systems.

Students Participation Namelist

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P
11.	730422121011	ELANGO VAN M
12.	730422121012	ESHWARAN C
13.	730422121013	HARANI S
14.	730422121014	HARINI M
15.	730422121015	HARISH V
16.	730422121016	JEGATHAMBAL C
17.	730422121017	KABILA S
18.	730422121018	KANISHKA A
19.	730422121019	KAVITHASRI T
20.	730422121020	KAVIYARASU P
21.	730422121021	KEERTHANA S
22.	730422121022	KOWSHIK A
23.	730422121023	LAVANYA M
24.	730422121024	MADHUMITHA S
25.	730422121025	MOHAMED ANISH J
26.	730422121026	MOHANAPRIYA K
27.	730422121027	MONIKA C
28.	730422121028	MURALI DAS P
29.	730422121029	NARMATHA D
30.	730422121030	NIVETHA S
31.	730422121032	PRADEEPA S
32.	730422121034	PRIYADHARSHINI S
33.	730422121035	PUGAZHAMATHI P
34.	730422121036	RAMAPANDIAN M
35.	730422121037	RAMYA DEVI M
36.	730422121038	RITHIKA M
37.	730422121039	SAISIVAM R
38.	730422121041	SANDHIYA T
39.	730422121043	SARANYA E
40.	730422121044	SEETHA S
41.	730422121046	SHALINI V
42.	730422121047	SHIVANIKA S
43.	730422121048	SIBIRAJ S
44.	730422121049	SIVA S
45.	730422121050	SOWMIYA S
46.	730422121051	SRILEKA M
47.	730422121052	SUBALAKHSMI S
48.	730422121053	SUGANYA S

49.	730422121054	SUNDARAM R
50.	730422121055	THRISHA R
51.	730422121056	VALAVAN V
52.	730422121057	VASANTH KUMAR O S
53.	730422121058	VASUDEVAN K
54.	730422121059	VELLIMALAR M
55.	730422121060	VIJI J
56.	730422121061	VIKRAM S
57.	730422121062	VISHWAPRASATH M
58.	730422121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Technical Quiz

1. What is the entropy $H(X)H(X)H(X)$ of a fair coin toss?

- A. 0
- B. 0.5 bits
- C. 1 bit ☐
- D. 2 bits

2. Which of the following maximizes the entropy of a discrete random variable with n outcomes?

- A. Uniform distribution ☐
- B. Exponential distribution
- C. Binomial distribution
- D. Geometric distribution

3. Mutual information $I(X;Y)I(X;Y)I(X;Y)$ is always:

- A. Negative
- B. Zero or positive ☐
- C. Greater than entropy
- D. Less than conditional entropy

4. The Kullback-Leibler divergence $D(P\|Q)D(P\|Q)D(P\|Q)$ is:

- A. A distance metric
- B. Symmetric
- C. Always non-negative ☐
- D. Always less than 1

5. The entropy of a discrete uniform distribution over n symbols is:

- A. $\log(n)\log(n)$ ☐
- B. n
- C. $1/n$
- D. $n \log(n)$

6. Conditional entropy $H(Y|X)H(Y|X)H(Y|X)$ measures:

- A. Total uncertainty in Y
- B. Residual uncertainty in Y after knowing X ☐
- C. Entropy of X given Y
- D. Redundancy between X and Y

7. What is the capacity of a binary symmetric channel (BSC) with crossover probability p ?

- A. $1 - p$
- B. $H(p)$
- C. $1 - H(p)$
- D. $1 + H(p)$

8. Huffman coding minimizes:

- A. Entropy
- B. Average codeword length
- C. Channel capacity
- D. Kullback-Leibler divergence

9. In lossless source coding, the average length of the code satisfies:

- A. $L \geq H(X)$
- B. $L \leq H(X)$
- C. $L = H(X)$
- D. $L = 1/H(X)$

10. Fano's inequality provides a bound on:

- A. Channel capacity
- B. Code length
- C. Probability of error
- D. Entropy

11. Which theorem shows that data can be compressed to entropy $H(X)$ bits per symbol?

- A. Kraft's inequality
- B. Shannon's source coding theorem
- C. Fano's inequality
- D. Jensen's inequality

12. The capacity of an additive white Gaussian noise (AWGN) channel is given by:

- A. $\log(1 + S/N)$
- B. $\log(S/N)$
- C. S/N
- D. $\log(1 + N/S)$

13. The mutual information $I(X;Y)$ can be written as:

- A. $H(X|Y) + H(Y|X)$
- B. $H(X) - H(X|Y)$
- C. $H(X) + H(Y)$
- D. $H(Y|X) - H(Y)$

14. Kraft's inequality applies to:

- A. Channel noise models
- B. Prefix codes ☐
- C. Mutual information
- D. Joint entropy

15. Channel capacity is defined as:

- A. $\min I(X;Y)$ over all inputs
- B. $\max I(X;Y)$ over all inputs ☐
- C. $H(Y|X)$
- D. $H(X,Y)$

16. A code is uniquely decodable if:

- A. It uses equal-length codewords
- B. It is a prefix code
- C. No codeword is a prefix of another
- D. It can be decoded without ambiguity ☐

17. For a memoryless source, the entropy rate is:

- A. $H(X_n)$
- B. $H(X)/n$
- C. $H(X)$ ☐
- D. $\sum H(X_i)$

18. Jensen's inequality is used in proving:

- A. Entropy bounds
- B. Mutual information properties
- C. Non-negativity of KL divergence ☐
- D. Fano's inequality

19. Which statement is true about the data processing inequality?

- A. $I(X;Z) \geq I(X;Y)I(X;Z) \geq I(X;Y)$
- B. $I(X;Y) \geq I(X;Z)I(X;Y) \geq I(X;Z)$ for $X \rightarrow Y \rightarrow Z$
- C. $I(X;Y) = I(Y;Z)I(X;Y) = I(Y;Z)I(X;Y) = I(Y;Z)$
- D. $I(X;Z) \leq H(X) - H(Z) \leq H(X) - H(Z)I(X;Z) \leq H(X) - H(Z)$

20. The asymptotic equipartition property (AEP) implies:

- A. All sequences are equally likely
- B. Long sequences are typical and occur with high probability ☐
- C. The probability of a sequence is uniform
- D. Short sequences dominate the entropy



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM601 – Medical Image Processing
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.P.Brindha, ASP/BME
4. Date & Hour : 07.03.2025 & 2nd Hour
5. Topic of the class : Point detection
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective :
 1. student learns how to **evaluate the performance** of point detection algorithms in terms of **repeatability, robustness, and accuracy** under different conditions.
 2. Student also understands the trade-offs between accuracy and **computational efficiency**, especially in **real-time applications**.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

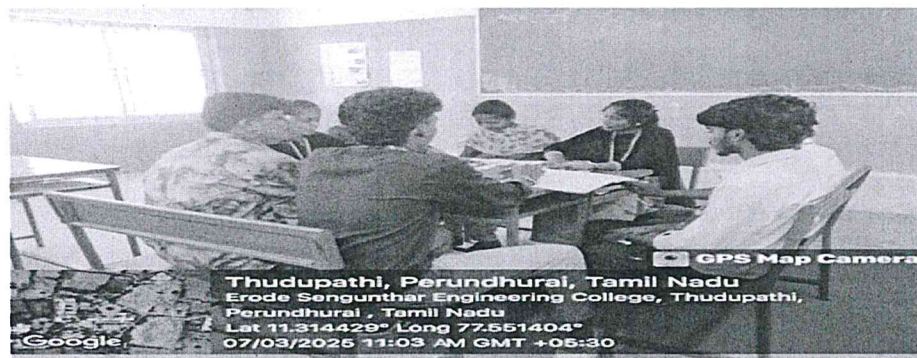
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

Student can explain the differences between methods based on **scale invariance**, **computational complexity**, and **robustness to noise**, helping them make informed choices about which algorithm to use depending on the task at hand.

Challenges

Student faced was the **sensitivity** of point detection algorithms to parameter settings. For instance, small adjustments in parameters like **thresholds for corner detection** or **scale factors in SIFT** and **SURF** can lead to drastic changes in the number of points detected, or the quality of the detected points.

THIRD YEAR NAME LIST

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P

S. No	Register No	Name of the Candidate
1.	730422121011	ELANGO VAN M
2.	730422121012	ESHWARAN C
3.	730422121013	HARANI S
4.	730422121014	HARINI M
5.	730422121015	HARISH V
6.	730422121016	JEGATHAMBAL C
7.	730422121017	KABILA S
8.	730422121018	KANISHKA A
9.	730422121019	KAVITHASRI T
10.	730422121020	KAVIYARASU P

S. No	Register No	Name of the Candidate
1.	730422121021	KEERTHANA S
2.	730422121022	KOWSHIK A
3.	730422121023	LAVANYA M
4.	730422121024	MADHUMITHA S
5.	730422121025	MOHAMED ANISH J
6.	730422121026	MOHANAPRIYA K
7.	730422121027	MONIKA C
8.	730422121028	MURALI DAS P
9.	730422121029	NARMATHA D
10.	730422121030	NIVETHA S

S. No	Register No	Name of the Candidate
1.	730422121032	PRADEEPA S
2.	730422121034	PRIYADHARSHINI S
3.	730422121035	PUGAZHAMATHI P
4.	730422121036	RAMAPANDIAN M
5.	730422121037	RAMYA DEVI M
6.	730422121038	RITHIKA M
7.	730422121039	SAISIVAM R
8.	730422121041	SANDHIYA T
9.	730422121043	SARANYA E
10.	730422121044	SEETHA S

S. No	Register No	Name of the Candidate
1.	730422121046	SHALINI V
2.	730422121047	SHIVANIKA S
3.	730422121048	SIBIRAJ S
4.	730422121049	SIVA S
5.	730422121050	SOWMIYA S
6.	730422121051	SRILEKA M
7.	730422121052	SUBALAKHSMI S
8.	730422121053	SUGANYA S
9.	730422121054	SUNDARAM R
10.	730422121055	THRISHA R

S. No	Register No	Name of the Candidate
1.	730422121056	VALAVAN V
2.	730422121057	VASANTH KUMAR O S
3.	730422121058	VASUDEVAN K
4.	730422121059	VELLIMALAR M
5.	730422121060	VIJI J
6.	730422121061	VIKRAM S
7.	730422121062	VISHWAPRASATH M
8.	730422121301	VENKATESHWARAN D



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 19BM601 – Medical Image Processing
2. Class / Year / Branch : III Year / VI Semester / BME
3. Name of course coordinator : Dr.P.Brindha, ASP/BME
4. Date & Hour : 21.03.2025 & 2nd Hour
5. Topic of the class : Regional descriptors
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective :
 1. Learn about various shape numbers, fourier descriptors, texture and their respective algorithms.
 2. Understand how image quality and compression efficiency are evaluated and measured.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

Students have learned to evaluate **compression efficiency** involves more than just reducing file sizes. They realized that visual quality is subjective and that **quality metrics** are not always sufficient to gauge how compression affects the user experience. One student suggested that **visual inspection** might still be the best method, especially when developing applications that require specific quality standards, such as **photography** or **digital arts**.

Challenges

The challenge arose when students debated the **reliability** of quality metrics, particularly when **compression artifacts** were present. While **PSNR** remains a standard metric, some students felt it was insufficient to measure image quality in a meaningful way.

THIRD YEAR NAME LIST

S. No	Register No	Name of the Candidate
1.	730422121001	ABISHEKH C
2.	730422121002	AKSHARA K
3.	730422121003	ANANTHI C
4.	730422121004	BALAJI J
5.	730422121005	BHUVANESHWARI D
6.	730422121006	DARSHAN K
7.	730422121007	DHANUSHMURUGAN R
8.	730422121008	DHARMENDRA KUMAR
9.	730422121009	DHARSHINI G J
10.	730422121010	DURGANANDHINI P

S. No	Register No	Name of the Candidate
1.	730422121011	ELANGO VAN M
2.	730422121012	ESHWARAN C
3.	730422121013	HARANI S
4.	730422121014	HARINI M
5.	730422121015	HARISH V
6.	730422121016	JEGATHAMBAL C
7.	730422121017	KABILA S
8.	730422121018	KANISHKA A
9.	730422121019	KAVITHASRI T
10.	730422121020	KAVIYARASU P

S. No	Register No	Name of the Candidate
1.	730422121021	KEERTHANA S
2.	730422121022	KOWSHIK A
3.	730422121023	LAVANYA M
4.	730422121024	MADHUMITHA S
5.	730422121025	MOHAMED ANISH J
6.	730422121026	MOHANAPRIYA K
7.	730422121027	MONIKA C
8.	730422121028	MURALI DAS P
9.	730422121029	NARMATHA D
10.	730422121030	NIVETHA S

S. No	Register No	Name of the Candidate
1.	730422121032	PRADEEPA S
2.	730422121034	PRIYADHARSHINI S
3.	730422121035	PUGAZHAMATHI P
4.	730422121036	RAMAPANDIAN M
5.	730422121037	RAMYA DEVI M
6.	730422121038	RITHIKA M
7.	730422121039	SAISIVAM R
8.	730422121041	SANDHIYA T
9.	730422121043	SARANYA E
10.	730422121044	SEETHA S

S. No	Register No	Name of the Candidate
1.	730422121046	SHALINI V
2.	730422121047	SHIVANIKA S
3.	730422121048	SIBIRAJ S
4.	730422121049	SIVA S
5.	730422121050	SOWMIYA S
6.	730422121051	SRILEKA M
7.	730422121052	SUBALAKHSMI S
8.	730422121053	SUGANYA S
9.	730422121054	SUNDARAM R
10.	730422121055	THRISHA R

S. No	Register No	Name of the Candidate
1.	730422121056	VALAVAN V
2.	730422121057	VASANTH KUMAR O S
3.	730422121058	VASUDEVAN K
4.	730422121059	VELLIMALAR M
5.	730422121060	VIJI J
6.	730422121061	VIKRAM S
7.	730422121062	VISHWAPRASATH M
8.	730422121301	VENKATESHWARAN D



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.B.Pradeepa , AP/BME
Name of the subject with code : 23BM301 Human Anatomy and Physiology
Year/Semester/Class : II/III/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Function of each component in the cell	Flipped classroom
2.	II	Changes during muscle contraction	Video enhanced active learning
3.	III	Blood : Composition & Functions	Hands on Labs
4.	IV	Skin and Sweat glands	Puzzle

Signature of the Course Coordinator

HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

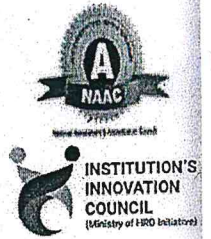
1. Name of the Subject with Code : 23BM301-HUMAN ANATOMY AND PHYSIOLOGY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : B.Pradeepa
4. Date & Hour : 16.08.2024 & 1st hour
5. Topic of the class : Functions of each component in the cell
6. Title of Innovative teaching learning process : Innovative teaching –Flipped Classroom
: To enhance student understanding of the functions of each cell component through interactive, technology-driven, and student-centered learning approaches that promote critical thinking, engagement, and retention.
7. Objective,



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

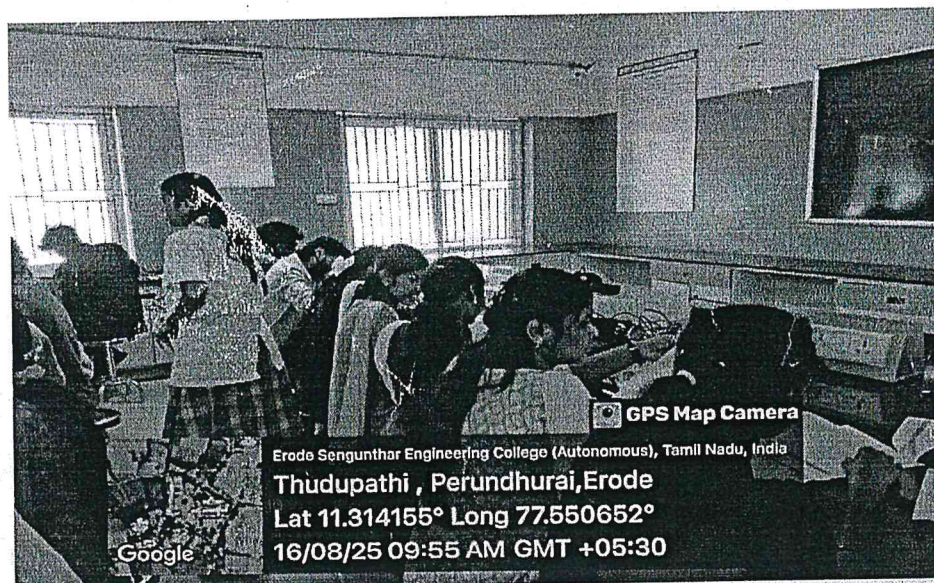
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Flipped classroom models encourage self-paced learning, allowing students to explore the functions of organelles before engaging in active discussions. Unlike traditional lectures, where students passively absorb information, the flipped classroom encourages active engagement through problem-solving, role-playing, and collaborative activities.

Challenges: Some students not completing pre-class activities (e.g., watching videos, reading materials) due to a lack of motivation, poor time management, or external commitments. Students accustomed to passive learning (traditional lectures) are resisting this method of self-directed learning.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024–25 Odd Semester

1. Name of the Subject with Code : 23BM301-HUMAN ANATOMY AND PHYSIOLOGY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : B. Pradeepa
4. Date & Hour : 10.09.2024 & 3rd hour
5. Topic of the class : Changes during muscle contraction
6. Title of Innovative teaching learning process : Innovative teaching –Video-Enhanced Active Learning (VEAL)
: 1. The Video-Enhanced Active Learning (VEAL) methodology aims to integrate multimedia-based instruction with active learning strategies to enhance student engagement, comprehension, and application of knowledge.
7. Objective : 2. Illustrate the role of actin, myosin, calcium ions, ATP hydrolysis, and sarcomere shortening in muscle contraction.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

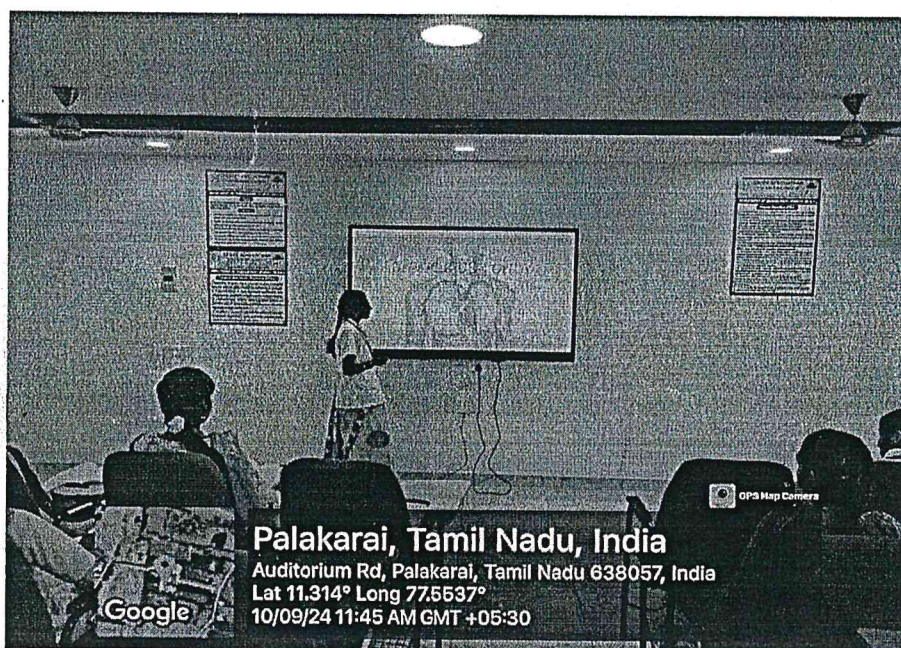
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: The use of animated video lectures effectively visualizes the sliding filament theory, actin-myosin interactions, ATP hydrolysis, and calcium ion dynamics. By incorporating high-quality simulations, students grasp complex molecular events more easily than through traditional lecture-based instruction.

Challenges: Traditional assessment methods (MCQs, written tests) may not fully capture students' higher-order thinking skills developed through VEAL. Developing high-quality videos, animations, and interactive elements requires significant time and effort.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

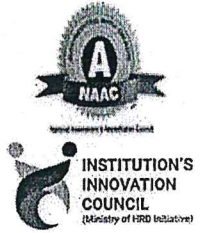
1. Name of the Subject with Code : 23BM301-HUMAN ANATOMY AND PHYSIOLOGY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : B.Pradeepa
4. Date & Hour : 21.09.2024 & 6th Hour
5. Topic of the class : Blood : Composition & Functions
6. Title of Innovative teaching learning process : Innovative teaching – Hands-on Labs
: To enable students to actively explore and understand the composition and functions of blood through hands-on laboratory activities, such as preparing and observing blood smears, simulating blood component separation, and demonstrating the functional roles of each component thereby enhancing experiential learning, critical thinking, and retention of physiological concepts.
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Students actively engage with the subject matter through microscopy, blood tests, and clotting experiments, making abstract concepts tangible and relatable. Visualizing RBCs, WBCs, and platelets under a microscope enhances retention better than passive textbook learning.

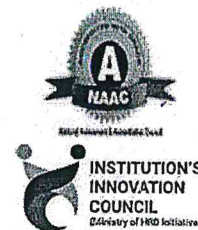
Challenges: Hands-on experiments require extended time for setup, execution, and analysis, making it difficult to cover all theoretical aspects within limited class hours. Blood-related experiments involve biohazard risks, ethical issues in handling human blood samples, and the need for strict safety protocols.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

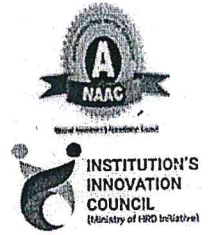
1. Name of the Subject with Code : 23BM301-HUMAN ANATOMY AND PHYSIOLOGY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : B.Pradeepa
4. Date & Hour : 17.10.2024 & 2nd Hour
5. Topic of the class : Skin and Sweat glands
6. Title of Innovative teaching learning process : Innovative teaching –Puzzle
: 1.The Puzzle-Based Learning methodology engages students through problem-solving, pattern recognition, and interactive challenges to enhance their understanding of Skin and Sweat Glands.
7. Objective : 2. Use crossword puzzles, word scrambles, and concept maps to reinforce key terminologies and functions



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

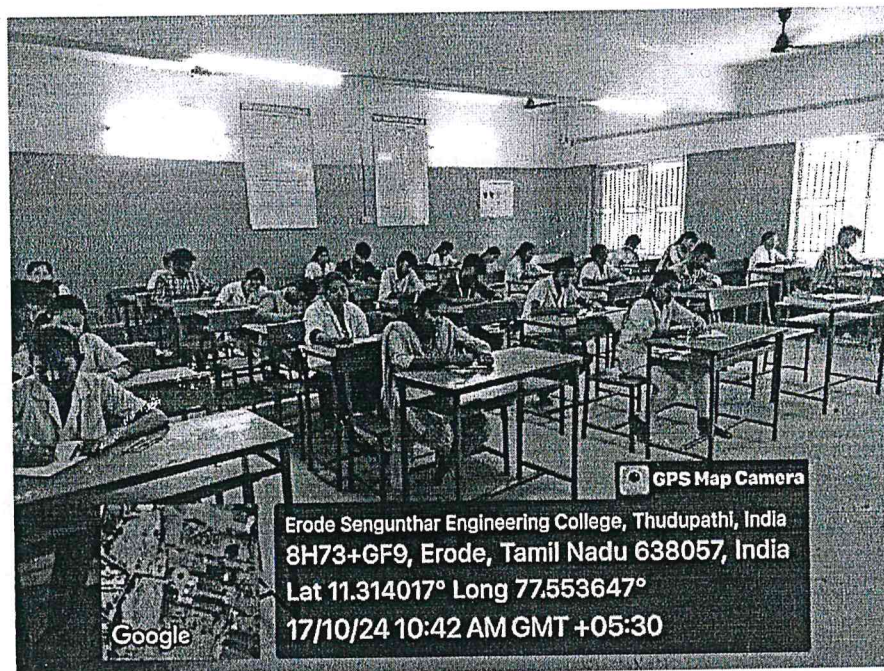
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: The Puzzle-Based Learning methodology is an engaging and interactive approach that enhances concept comprehension, problem-solving skills, and student participation. Breaking down complex concepts like skin layers, sweat gland functions, and thermoregulation into puzzles (e.g., crosswords, jigsaw puzzles, and word searches) promotes active learning.

Challenges: Some students prefer structured lectures or hands-on experiments, making puzzle-based learning less effective for them. Creating effective, subject-relevant puzzles that align with learning objectives requires significant preparation time. Some students may focus on completing the puzzle rather than deeply understanding the topic.



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Ms.B.Pradeepa , AP/BME
Name of the subject with code : 23BM303 – Human Physiology Laboratory
Year/Semester/Class : II/III/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Estimation of Hemoglobin	Video enhanced active learning
2.	II	Study and identification of different bones of human skeletal systems	Virtual lab simulations with case – based learning

Bp Pradeepa
Signature of the Course Coordinator

[Signature]
HOD/BME



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai & National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : 23BM303-HUMAN PHYSIOLOGY LABORATORY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : **B.Pradeepa, AP/BME**
4. Date & Hour : 1st Batch - 09.09.2024
2nd Batch - 04.09.2024
5. Topic of the class : Estimation of Hemoglobin
6. Title of Innovative teaching learning process : Innovative teaching –Video-Enhanced Active Learning (VEAL)
 - ✓ The Video-Enhanced Active Learning (VEAL) methodology aims to integrate multimedia-based instruction with active learning strategies to enhance student engagement, comprehension, and application of knowledge.
7. Objective
 - ✓ To enhance student understanding and skill acquisition in the estimation of hemoglobin levels by integrating interactive video demonstrations



ERODE SENGUNTHAR ENGINEERING COLLEGE

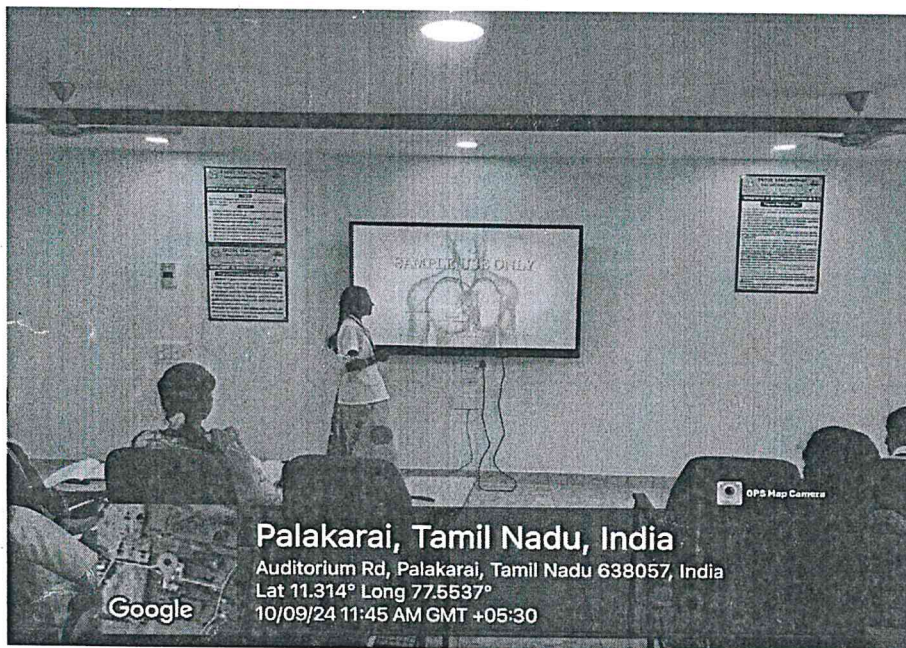
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Palakarai, Tamil Nadu, India

Auditorium Rd, Palakarai, Tamil Nadu 638057, India

Lat 11.314° Long 77.5537°

10/09/24 11:45 AM GMT +05:30

Reflective Critique: Video-based demonstrations allow learners to visually grasp complex steps, especially in handling delicate instruments like the Sahli's hemoglobinometer. Students show improved retention when steps are broken down and explained with visuals and narration.

Challenges: Incorporating videos and follow-up activities into a limited lab schedule requires careful time planning to avoid overshadowing the actual hands-on session. Without built-in interactive tasks, some students may treat it as a passive video and disengage.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024– 25 Odd Semester

1. Name of the Subject with Code : 23BM303-HUMAN PHYSIOLOGY LABORATORY
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course coordinator : **B.Pradeepa, AP/BME**
4. Date & Hour : 1st Batch - 18.11.2024
2nd Batch - 20.11.2024
5. Topic of the class : Study and identification of different bones of Human skeletal system
6. Title of Innovative teaching learning process : Innovative teaching – **Virtual Lab Simulations with Case-Based Learning**

✓ To enable students to accurately identify and differentiate various bones of the human skeletal system through interactive, hands-on, and technology-integrated learning approaches, fostering deeper anatomical understanding, spatial orientation, and clinical relevance in a collaborative learning environment.
7. Objective



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Odd Semester



Reflective Critique: Virtual simulations placed bone identification in real-life contexts (e.g., identifying fractured bones in trauma cases), making anatomy relevant and meaningful. Virtual labs provided a risk-free platform where students could repeatedly explore, rotate, and dissect 3D bone models without fear of damaging real specimens.

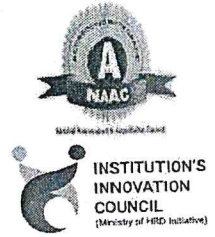
Challenges: Requires stable internet, compatible devices, and technical support—which can be a barrier in under-resourced institutions. Self-paced virtual learning may lack the interactive discussion and peer learning found in physical labs unless paired with group debriefs.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

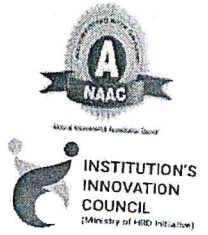
1. Name of subjects with course code : 23BM401 Biosensors And Transducers
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Mrs.B.Pradeepa, AP/BME
4. Date & Hour : 23.01.2025 & 6th
5. Topic of the class : Static and Dynamic Characteristic
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
(Recollecting Things)
7. Objective :
 - Strengthen memory by encouraging students to recollect previously learned concepts.
 - Create an interactive learning environment where students share knowledge and learn from each other.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

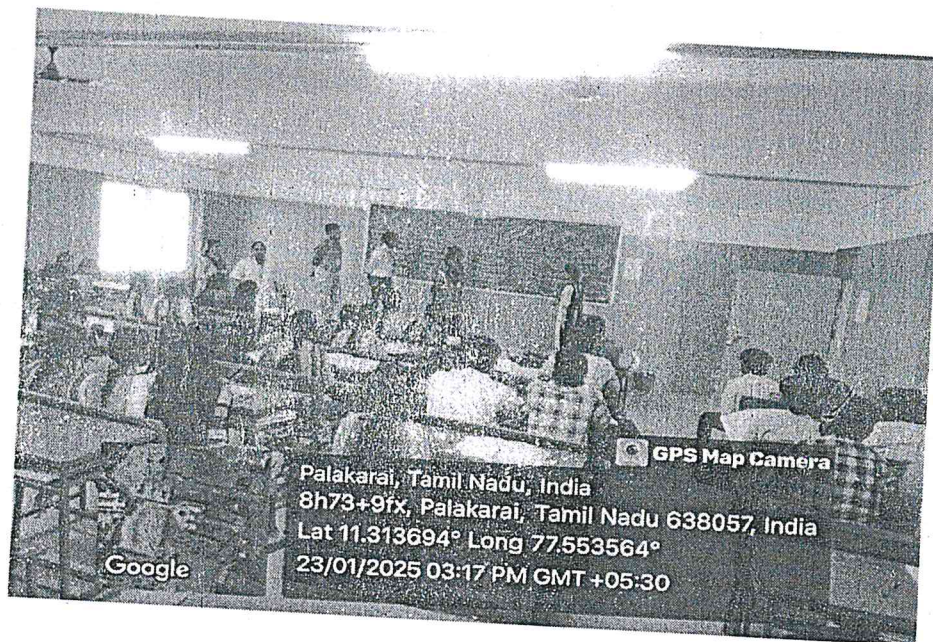
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique: Participative Learning through Recollecting Things is a powerful strategy that enhances memory, promotes engagement, and develops critical thinking. By integrating diverse techniques and fostering an encouraging environment, this method can significantly enhance the overall learning experience.

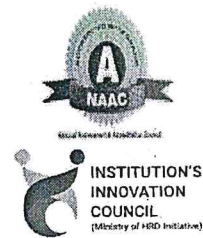
Challenges: Some students may struggle with confidence, prior knowledge, or learning styles, leading to unequal engagement. Encouraging active recollection takes more time than traditional lectures, making syllabus coverage challenging. Measuring individual contributions and learning outcomes in participative learning can be subjective.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



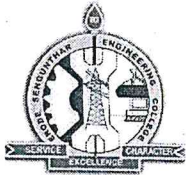
DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM401 Biosensors And Transducers
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Mrs.B.Pradeepa, AP/BME
4. Date & Hour : 18.02.2025 2nd Yr
5. Topic of the class : Biomedical Applications Of Temperature Sensors Capacitive Transducer
6. Title of Innovative teaching learning process : Innovative teaching – Puzzle Solving
7. Objective :

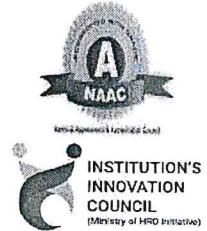
To enhance critical thinking, problem-solving skills, and conceptual understanding of Biomedical Applications of Temperature Sensors and Capacitive Transducers by engaging students in an interactive puzzle-based learning activity that encourages active participation, collaborative learning, and application of theoretical knowledge to practical biomedical scenarios.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

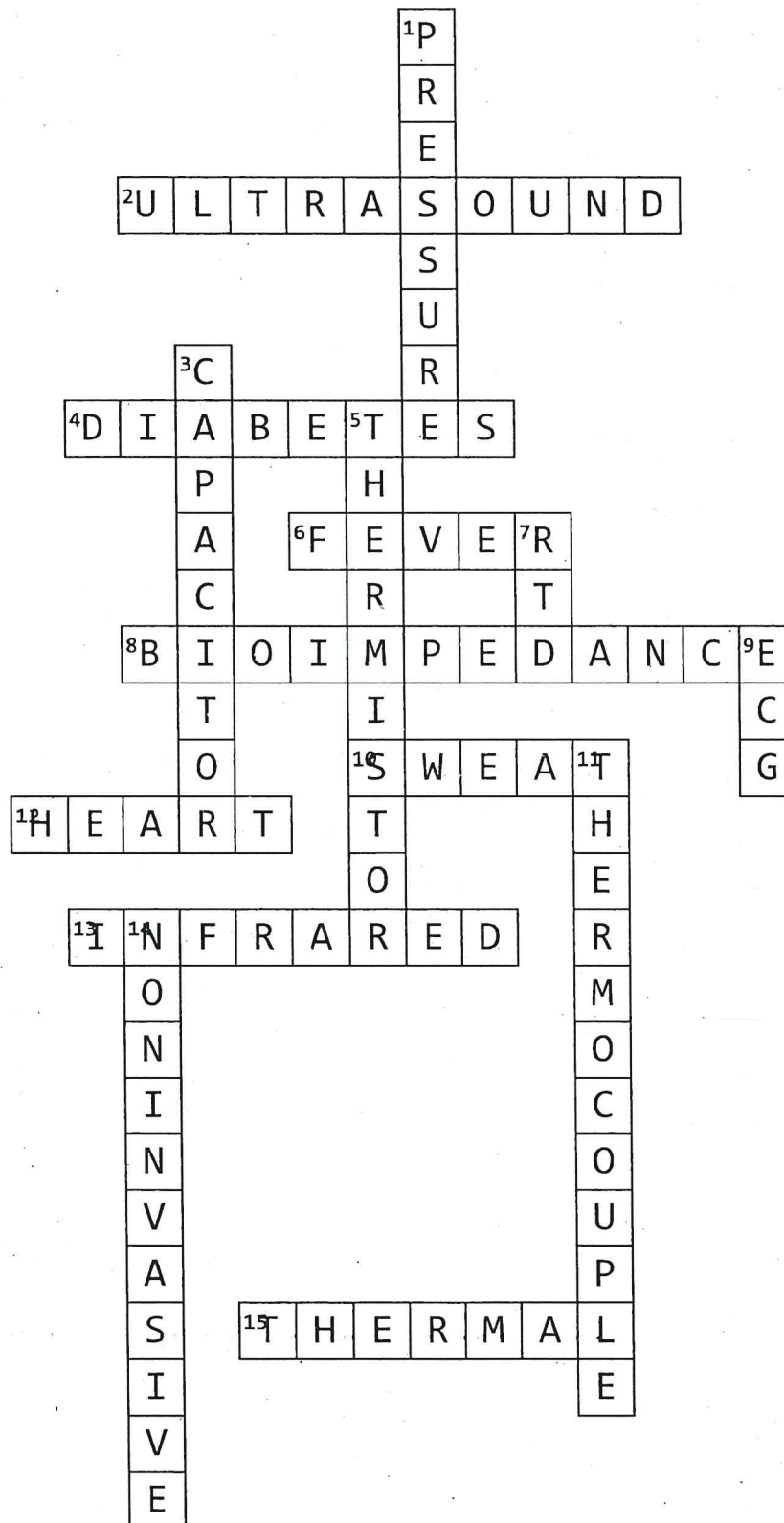
Innovative Teaching Process

2024 – 25 Even Semester

Reflective Critique: The Puzzle Solving Method provided a dynamic and student-centered approach to learning. By embedding key concepts of temperature sensors and capacitive transducers into puzzle formats (such as crosswords, matching pairs, or problem grids), students were more engaged and motivated to explore the topic.

Challenges: It was challenging to assess individual understanding objectively, as puzzle-solving is often collaborative. While some students quickly grasped the concepts and solved the puzzles, others struggled, leading to varying levels of engagement and occasional frustration among slower learners.

Biomedical applications of Temperature sensors Capacitive transducer



Across

Down

2. – Capacitive transducers are used in this imaging technique for medical diagnostics.

4. MONITOR – Capacitive sensors assist in non-invasive glucose monitoring.

6. SCANNER – A thermal imaging device used for detecting fever in patients.

8. – A biomedical application of capacitive sensors used for body composition analysis.

10. SENSOR – A biomedical application of temperature sensors for hydration and electrolyte monitoring.

12. RATE – A vital sign monitored using capacitive sensors in wearable health devices.

13. – A type of non-contact temperature sensor used in thermal imaging for medical diagnostics.

15. CAMERA – Used in healthcare for detecting infections and vascular issues.

1. SENSOR – Often combined with capacitive technology for measuring blood pressure.

3. – A device that stores electrical charge, fundamental to capacitive transducers.

5. – A temperature sensor whose resistance changes with temperature variations.

7. – A temperature sensor that uses resistance variation in metals like platinum (Resistance Temperature Detector).

9. ELECTRODE – A biomedical application where capacitive sensors detect electrical activity of the heart.

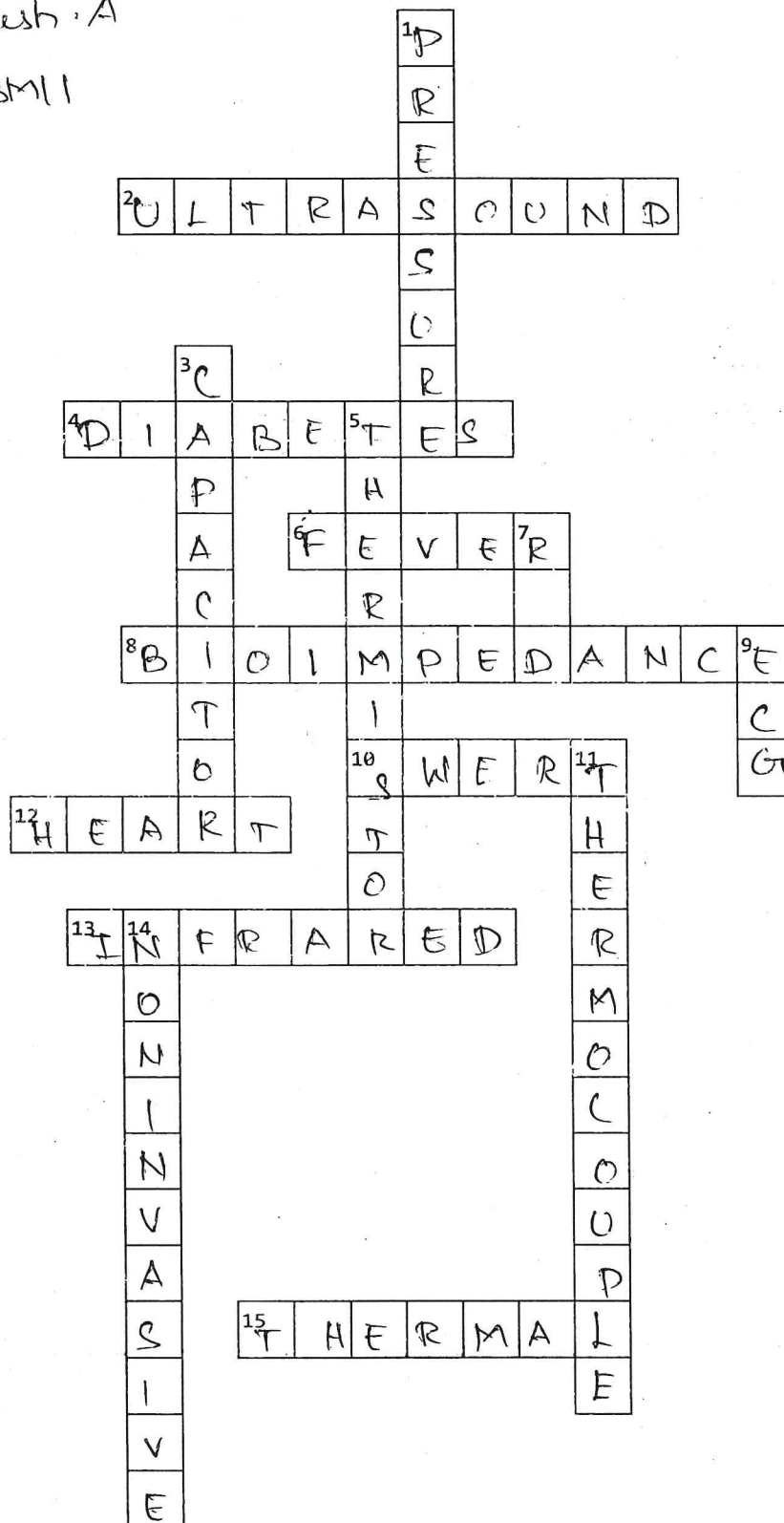
11. – A sensor made of two different metals that generates voltage based on temperature differences.

14. – A key advantage of capacitive and temperature sensors in biomedical applications.

Biomedical applications of Temperature sensors Capacitive transducer

Dhaneesh A

ES23BM11



Across

Down

2. – Capacitive transducers are used in this imaging technique for medical diagnostics.

4. MONITOR – Capacitive sensors assist in non-invasive glucose monitoring.

6. SCANNER – A thermal imaging device used for detecting fever in patients.

8. – A biomedical application of capacitive sensors used for body composition analysis.

10. SENSOR – A biomedical application of temperature sensors for hydration and electrolyte monitoring.

12. RATE – A vital sign monitored using capacitive sensors in wearable health devices.

13. – A type of non-contact temperature sensor used in thermal imaging for medical diagnostics.

15. CAMERA – Used in healthcare for detecting infections and vascular issues.

1. SENSOR – Often combined with capacitive technology for measuring blood pressure.

3. – A device that stores electrical charge, fundamental to capacitive transducers.

5. – A temperature sensor whose resistance changes with temperature variations.

7. – A temperature sensor that uses resistance variation in metals like platinum (Resistance Temperature Detector).

9. ELECTRODE – A biomedical application where capacitive sensors detect electrical activity of the heart.

11. – A sensor made of two different metals that generates voltage based on temperature differences.

14. – A key advantage of capacitive and temperature sensors in biomedical applications.



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM401 Biosensors And Transducers
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Mrs.B.Pradeepa, AP/BME
4. Date & Hour : 01-03-2025 & 2nd
5. Topic of the class : Photovoltaic Cell and Photoconductive Cell
6. Title of Innovative teaching learning process : Innovative teaching – Peer Group Learning
7. Objective :

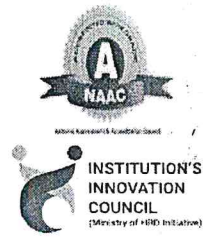
To enhance collaborative learning, critical thinking, and conceptual clarity on the topic Photovoltaic Cell and Photoconductive Cell by facilitating peer group discussions and knowledge exchange, where students explain concepts to one another, solve problems collectively, and connect theoretical principles to biomedical applications through shared understanding and cooperative engagement.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique: The peer group learning method significantly encouraged active student participation and collaborative understanding of the principles, construction, and biomedical applications of photovoltaic and photoconductive cells. This method promoted peer teaching, where explaining to others helped reinforce the explainer's understanding and boosted confidence.

Challenges: Not all students collaborated effectively; conflicts or mismatched engagement levels within groups occasionally hindered the learning process. Peer group learning required the instructor to actively monitor, guide, and intervene when necessary, which could be demanding in larger classes.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM401 Biosensors And Transducers
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Mrs.B.Pradeepa, AP/BME
4. Date & Hour : 26.03.2025 & 2nd
5. Topic of the class : Surface Electrodes and its types
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective :
 - ✓ Improve students' oral communication and teamwork abilities through structured peer discussions and argumentation.
 - ✓ To enhance students' conceptual understanding and critical thinking regarding surface electrodes and their types through collaborative learning, peer-to-peer interaction, and group-based critical analysis,



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

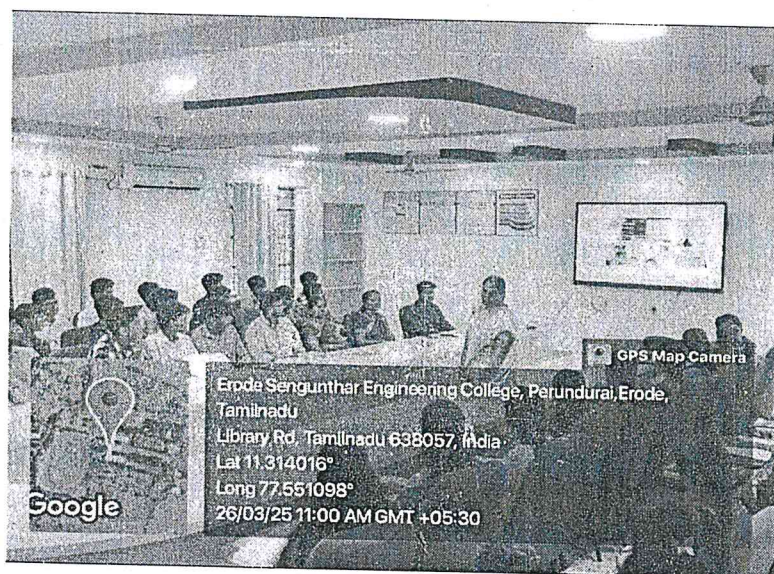
Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique: Most students were actively engaged, especially when discussion prompts focused on real-world scenarios and patient safety. Shy or reserved students showed improved confidence when encouraged to lead subtopics or summaries. Communication, listening, and leadership skills were observed to improve as students took roles like presenter, scribe, and moderator within groups.

Challenges: Without clear guidance, some groups drifted into general talk without addressing learning outcomes or missed key technical differences between electrode types.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM401 Biosensors And Transducers
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Mrs.B.Pradeepa, AP/BME
4. Date & Hour : 11.04.2025 2:15
5. Topic of the class : Digital Storage Oscilloscope
6. Title of Innovative teaching learning process : Innovative teaching – Practical Based Learning
7. Objective :

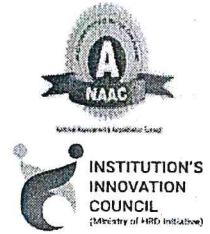
To provide hands-on experiential learning that enables students to understand the construction, working, and applications of a Digital Storage Oscilloscope (DSO) through practical-based activities, thereby bridging the gap between theoretical concepts and real-time signal analysis in biomedical engineering..



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique: Students who struggled with classroom lectures demonstrated a clearer understanding after interacting with real signals. Engagement levels were high as students found the practical aspect interactive and stimulating compared to passive lecture-based methods.

Challenges: Full practical coverage, including setup, experimentation, and discussion, was difficult within a single lab session, leading to incomplete tasks. Measuring individual learning outcomes objectively in a group practical setting was challenging without well-defined rubrics.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM402 – Biomedical Instrumentation
2. Class / Year / Branch : II Year / IV Semester / Biomedical
Engineering
3. Name of course coordinator : N.Ageela, AP/BME
4. Date & Hour : 04.02.2025 & 1st Hour
5. Topic of the class : co-based alloys
6. Title of Innovative teaching learning process : Innovative teaching – Peer group learning

7. Objective : To comprehensively understand the

- **To understand the composition and properties of cobalt-based alloys:** This includes studying the chemical composition, microstructure, and mechanical properties of cobalt-based alloys, focusing on how these elements influence their performance in various applications.
- **To investigate the applications of cobalt-based alloys in high-temperature environments:** Cobalt-based alloys are widely used in applications requiring resistance to extreme temperatures, such as turbine blades, jet engines, and nuclear reactors. The objective here is to explore the specific advantages these alloys offer in these environments.

Reflective critique

1. Fear of Criticism or Judgment

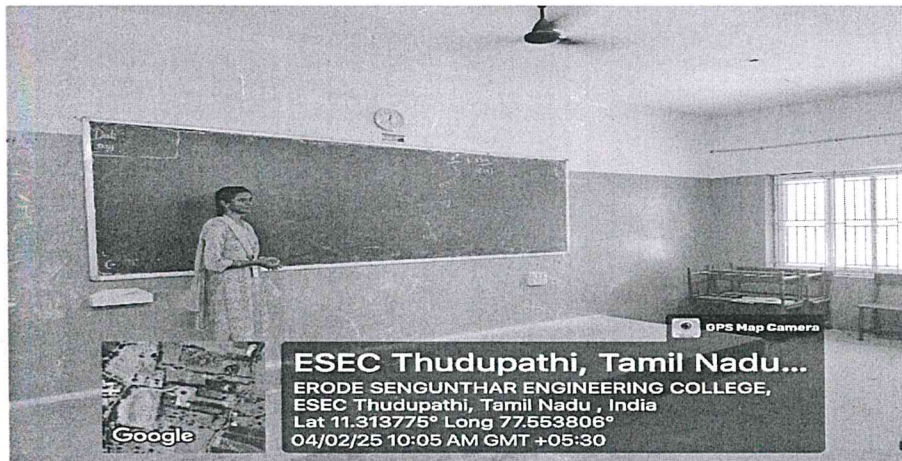
- **Challenge:** Students may hesitate to give or receive honest feedback due to fear of offending peers or damaging relationships.
- **Impact:** Leads to superficial feedback and missed opportunities for growth.

2. Lack of Constructive Feedback Skills

- **Challenge:** Not all students are trained to provide helpful, balanced, and actionable feedback.
- **Impact:** Feedback may be vague, overly critical, or overly positive, limiting its effectiveness.
- **Reflection:** Include training sessions or rubrics to guide peer critique practices.

3. Unequal Participation

- **Challenge:** Some students dominate discussions while others remain passive.
- **Impact:** The learning experience becomes unbalanced, and quieter students may not benefit equally.
- **Reflection:** Rotate roles or use structured formats to ensure every voice is heard.





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM402 – Biomedical Instrumentation
2. Class / Year / Branch : II Year / IV Semester / Biomedical
Engineering
3. Name of course coordinator : N.Ageela, AP/BME
4. Date & Hour : 26.02.2025 & 4th hour
5. Topic of the class : Differential bio-amplifier using BJT
6. Title of Innovative teaching learning process : Innovative teaching – peer group learning
7. Objective : To comprehensively understand the

To design and implement a differential bio-amplifier circuit using Bipolar Junction Transistors (BJTs) that can amplify low-amplitude biopotential signals (such as ECG or EMG) while rejecting common-mode noise, ensuring high gain, good linearity, and high input impedance for accurate biomedical signal acquisition.

Reflective critique

The design and implementation of a differential bio-amplifier using BJTs provided valuable insight into both analog circuit design and biomedical signal processing. One of the key achievements was the successful amplification of weak biopotential signals while suppressing common-mode interference, a critical requirement in medical electronics.

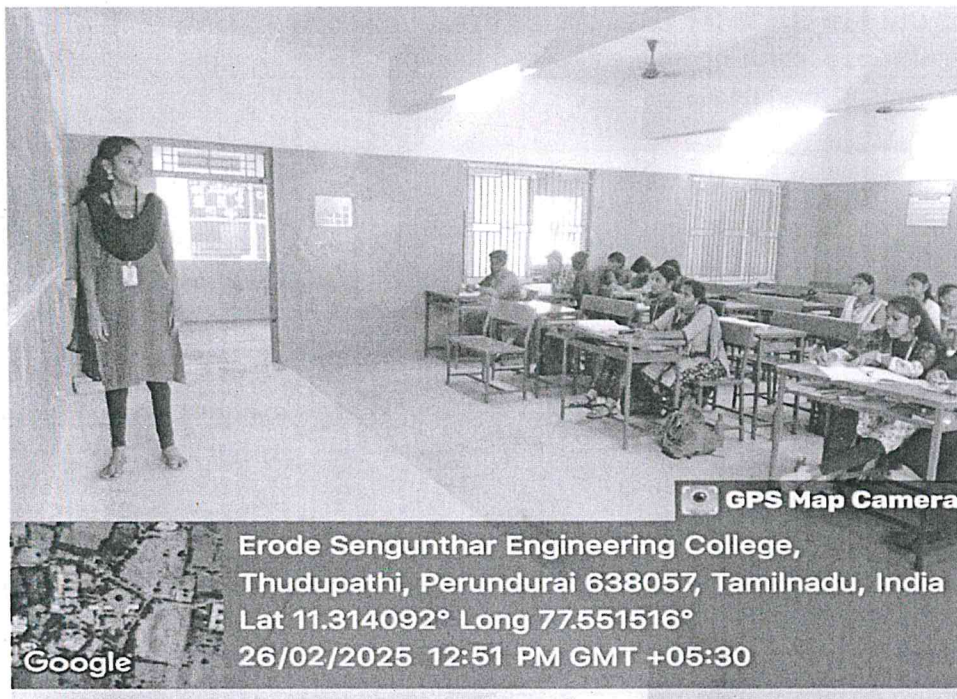
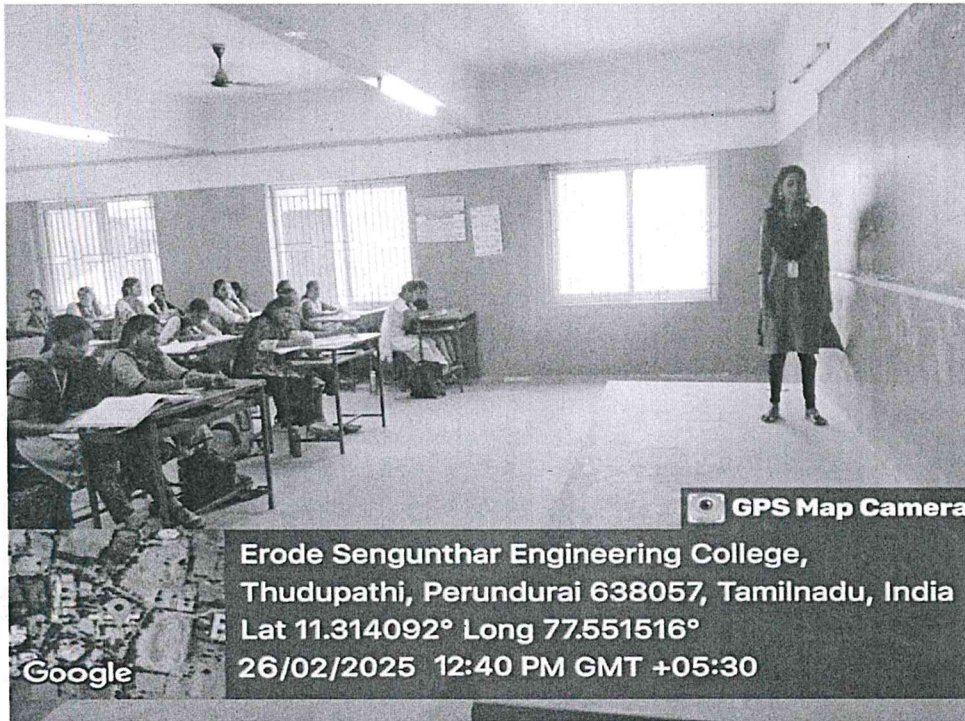
Another limitation observed was the relatively low input impedance of BJT-based designs compared to FET-based alternatives, which can load the signal source, especially when dealing with high-impedance biopotential electrodes.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.





ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM402 – Biomedical Instrumentation
2. Class / Year / Branch : II Year / IV Semester / Biomedical Engineering
3. Name of course coordinator : N.Ageela, AP/BME
4. Date & Hour : 01.04.2025 & 1st hour
5. Topic of the class : Ultrasonic stimulator
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective : To comprehensively understand the

To design and study the working of an ultrasonic stimulator used in therapeutic applications, with the aim of understanding how high-frequency mechanical vibrations (typically 1–3 MHz) are generated and transmitted to tissues for pain relief, muscle relaxation, and deep tissue healing. The experiment also focuses on safety considerations, frequency tuning, and output intensity control.

Reflective critique

The ultrasonic stimulator experiment provided valuable hands-on experience with therapeutic ultrasound devices and their biomedical applications. It highlighted the role of ultrasonic waves in promoting tissue healing, increasing blood flow, and reducing inflammation through deep tissue penetration.

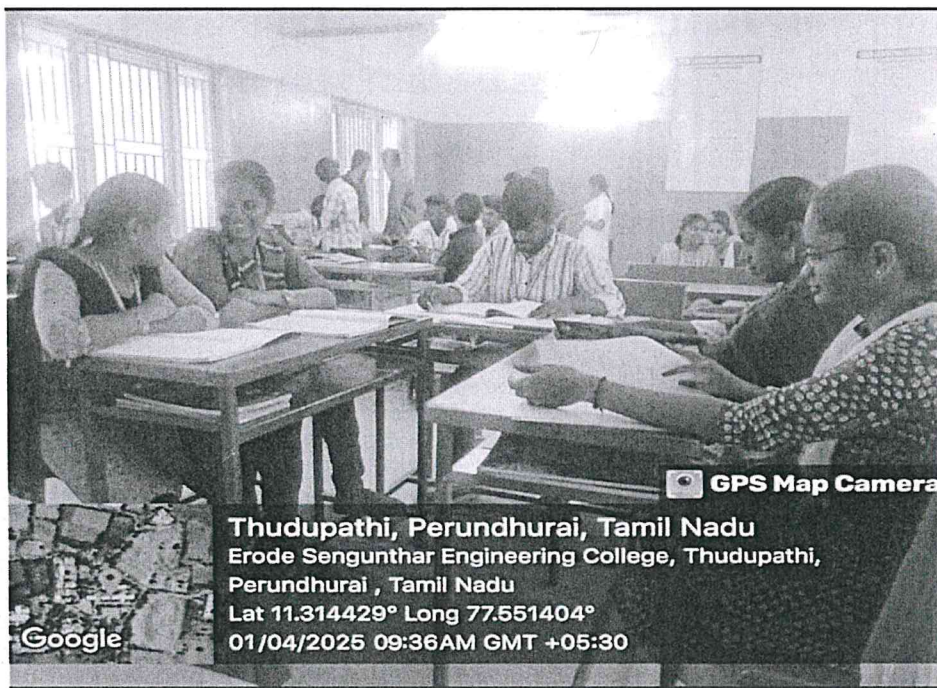
One of the strengths of the system was its non-invasive and controlled energy delivery, which allowed for focused therapeutic action without causing discomfort to the patient. The understanding of piezoelectric transducer behavior and how electrical energy is converted into mechanical vibrations was a key learning point. Adjusting frequency and duty cycles helped to explore both continuous and pulsed stimulation modes.



ERODE SENGUNTHAR ENGINEERING COLLEGE

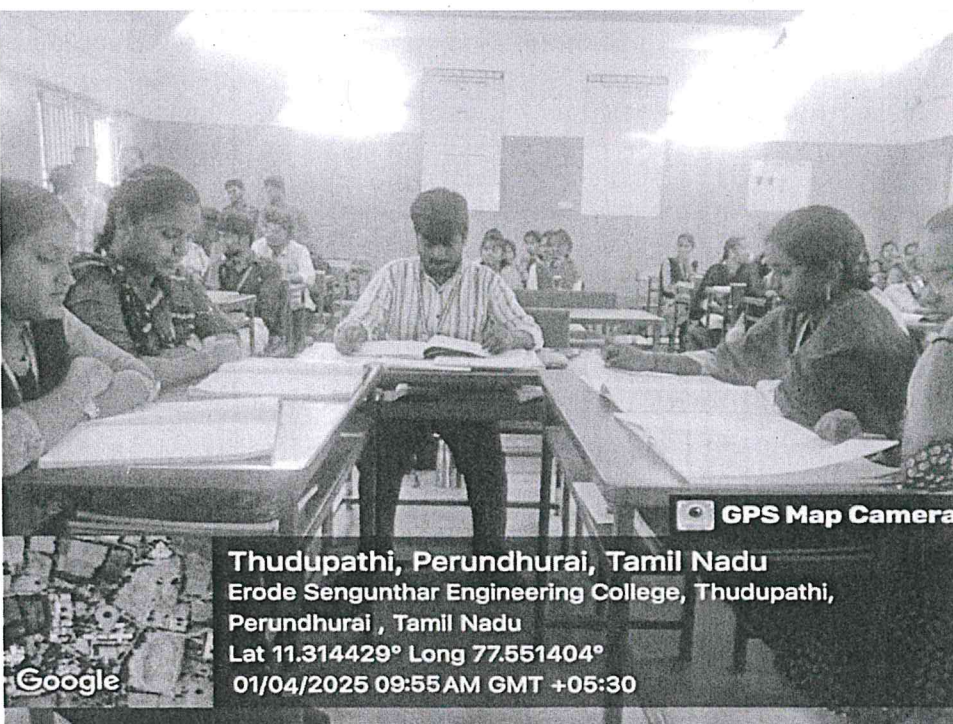
(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



GPS Map Camera

Thudupathi, Perundhurai, Tamil Nadu
Erode Sengunthar Engineering College, Thudupathi,
Perundhurai, Tamil Nadu
Lat 11.314429° Long 77.551404°
01/04/2025 09:36AM GMT +05:30



GPS Map Camera

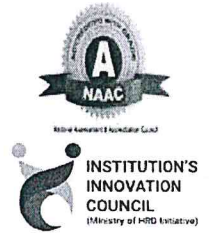
Thudupathi, Perundhurai, Tamil Nadu
Erode Sengunthar Engineering College, Thudupathi,
Perundhurai, Tamil Nadu
Lat 11.314429° Long 77.551404°
01/04/2025 09:55AM GMT +05:30



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM403 – Bio Signals and Systems
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Dr.G.S.Satheeshkumar, ASP/BME
4. Date & Hour : 10.02.2025 & 6th Hour
5. Topic of the class : Fourier Series of Periodic Signal
6. Title of Innovative teaching learning process : Innovative teaching – Group discussion
7. Objective :
 1. Gain an understanding of what each Fourier coefficient represents in terms of the signal's frequency content.
 2. Apply the Fourier Series to decompose and analyze standard periodic signals like square waves, sawtooth waves, and triangle waves.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING



Reflective Critique

Students gain a better understanding of the **mathematical rigor** behind the Fourier Series. However, they may feel overwhelmed by the complexity of the **integrals** involved in calculating the coefficients.

Challenges

Students often find it difficult to correctly compute these integrals, particularly when the signal is not a simple sinusoidal waveform but a more complex periodic function. Furthermore, they may struggle with **convergence issues** when the series doesn't converge in the traditional sense, such as with **square waves** or **sawtooth waves**.

Students Namelist

S. No	Roll No.	Register No	Name of the Candidate
1.	ES23BM01	2303730412121001	AJAY KUMAR G J
2.	ES23BM02	2303730412122002	AKSHAYA V
3.	ES23BM03	2303730412121003	ARIVAZHAGAN L
4.	ES23BM05	2303730412121005	BHARATHI B
5.	ES23BM06	2303730412122006	BHUVANESWARI P
6.	ES23BM07	2303730412122007	BOOMIKA B
7.	ES23BM08	2303730412121008	CHANDRU P
8.	ES23BM09	2303730412122009	DEEPIKA R
9.	ES23BM10	2303730412122010	DEEPIKA SRI T
10.	ES23BM11	2303730412121011	DHANUSH A
11.	ES23BM12	2303730412122012	DHARIKA M
12.	ES23BM13	2303730412122013	DHAVAMANI K
13.	ES23BM14	2303730412122014	DHEVADHARSHINI S
14.	ES23BM15	2303730412122015	DHIVYA S
15.	ES23BM16	2303730412122016	DIVYA S
16.	ES23BM17	2303730412122017	DURGA DEVI R
17.	ES23BM18	2303730412122018	ELAKKIYA OVIYA T
18.	ES23BM19	2303730412122019	GAYATHIRI A
19.	ES23BM20	2303730412122020	GOBIKA SRI M
20.	ES23BM21	2303730412122021	HARINI S
21.	ES23BM22	2303730412121022	HEMARAJ M
22.	ES23BM23	2303730412122023	HEMAVATHI S
23.	ES23BM24	2303730412121024	ILAYABHARATHI S
24.	ES23BM25	2303730412122025	INDRADEVI P
25.	ES23BM26	2303730412121026	JAASIM A J
26.	ES23BM27	2303730412121027	JEEVAKUMAR R
27.	ES23BM28	2303730412122028	JENIFERSWEETY R
28.	ES23BM29	2303730412121029	KABIL T
29.	ES23BM30	2303730412121030	KAMESHPRABHU M
30.	ES23BM32	2303730412122032	KOWSALYA R
31.	ES23BM33	2303730412122033	KRUBANANDHINI S R
32.	ES23BM35	2303730412121035	LOGESH A
33.	ES23BM36	2303730412122036	MADHANIKA S R
34.	ES23BM37	2303730412122037	MALARVIZHI K
35.	ES23BM38	2303730412122038	MALLIGA VARSHINI U
36.	ES23BM39	2303730412122039	MATHUMITHA P
37.	ES23BM40	2303730412122040	MEKALA A
38.	ES23BM41	2303730412122041	MOHANA PRIYA P
39.	ES23BM42	2303730412122042	MOHANADHARSHINI T
40.	ES23BM43	2303730412121043	MUKUNDHAN M P
41.	ES23BM44	2303730412122044	NATHIYA C
42.	ES23BM45	2303730412122045	NIVETHA R

43.	ES23BM46	2303730412122046	POMMINAYAKI K M
44.	ES23BM47	2303730412121047	PRAVEEN KUMAR S
45.	ES23BM48	2303730412121048	RAGULPRASATH R
46.	ES23BM49	2303730412121049	SACHIN N
47.	ES23BM50	2303730412122050	SARUMATHI S
48.	ES23BM51	2303730412121051	SATHASIVAM A
49.	ES23BM52	2303730412121052	SATHISHKUMAR V
50.	ES23BM53	2303730412122053	SIVAMBIKA D
51.	ES23BM54	2303730412122054	SOWMIYA S
52.	ES23BM55	2303730412122055	SRUTHI G
53.	ES23BM57	2303730412122057	SWETHA K T
54.	ES23BM58	2303730412122058	SWETHALATHA V
55.	ES23BM59	2303730412121059	THANGAVEL C
56.	ES23BM60	2303730412122060	VANITHA G
57.	ES23BM61	2303730412122061	VASUKI S
58.	ES23BM62	2303730412121062	VIGNESH M
59.	ES23BM63	2303730412122063	YOGESHWARI R



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM403 – Bio Signals and Systems
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Dr.G.S.Satheeshkumar, ASP/BME
4. Date & Hour : 17.02.2025 & 6th Hour
5. Topic of the class : Laplace transform and Convolution Integral
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
7. Objective :
 1. Learn and apply the **properties** of the Laplace Transform to simplify the analysis of signals and systems.
 2. Understand the **Convolution Integral** as a tool to calculate the output of an LTI system when the input signal and system's impulse response are known.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

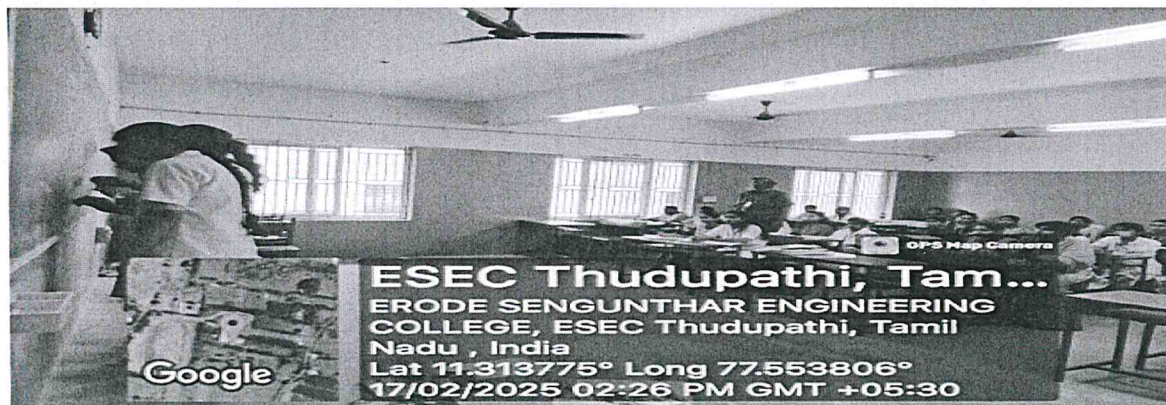
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

Students often find the transition from time-domain analysis to the s-domain abstract and challenging. Many struggle with understanding why this transformation is needed and how it relates to solving linear differential equations.

Challenges

Helps students connect theory with real-world applications, making the learning process more tangible. Encourages deeper reflection on why and how Laplace Transforms are used in system analysis.

PARTICIPATIVE NAME LIST

Group 1:

S. No	Register No	Name of the Candidate
1.	2303730412121001	AJAY KUMAR G J
2.	2303730412122002	AKSHAYA V
3.	2303730412121003	ARIVAZHAGAN L
4.	2303730412121005	BHARATHI B
5.	2303730412122006	BHUVANESWARI P

Group 2:

S. No	Register No	Name of the Candidate
1.	2303730412122007	BOOMIKA B
2.	2303730412121008	CHANDRU P
3.	2303730412122009	DEEPIKA R
4.	2303730412122010	DEEPIKA SRI T
5.	2303730412121011	DHANUSH A

Group 3:

S. No	Register No	Name of the Candidate
1.	2303730412122012	DHARIKA M
2.	2303730412122013	DHAVAMANI K
3.	2303730412122014	DHEVADHARSHINI S
4.	2303730412122015	DHIVYA S
5.	2303730412122016	DIVYA S

Group 4:

S. No	Register No	Name of the Candidate
1.	2303730412122017	DURGA DEVI R
2.	2303730412122018	ELAKKIYA OVIYA T
3.	2303730412122019	GAYATHIRI A
4.	2303730412122020	GOBIKA SRI M
5.	2303730412122021	HARINI S

Group 5:

S. No	Register No	Name of the Candidate
1.	2303730412121022	HEMARAJ M
2.	2303730412122023	HEMAVATHI S
3.	2303730412121024	ILAYABHARATHI S
4.	2303730412122025	INDRADEVI P
5.	2303730412121026	JAASIM A J

Group 6:

S. No	Register No	Name of the Candidate
1.	2303730412121027	JEEVAKUMAR R
2.	2303730412122028	JENIFERSWEETY R
3.	2303730412121029	KABIL T
4.	2303730412121030	KAMESHPRABHU M
5.	2303730412122032	KOWSALYA R

Group 7:

S. No	Register No	Name of the Candidate
1.	2303730412122033	KRUBANANDHINI S R
2.	2303730412121035	LOGESH A
3.	2303730412122036	MADHANIK S R
4.	2303730412122037	MALARVIZHI K
5.	2303730412122038	MALLIGA VARSHINI

Group 8:

S. No	Register No	Name of the Candidate
1.	2303730412122039	MATHUMITHA P
2.	2303730412122040	MEKALA A
3.	2303730412122041	MOHANA PRIYA P
4.	2303730412122042	MOHANADHARSHINI T
5.	2303730412121043	MUKUNDHAN M P

Group 9:

No	Register No	Name of the Candidate
1.	2303730412122044	NATHIYA C
2.	2303730412122045	NIVETHA R
3.	2303730412122046	POMMINAYAKI K M
4.	2303730412121047	PRAVEEN KUMAR S
5.	2303730412121048	RAGULPRASATH R

Group 10:

S. No	Register No	Name of the Candidate
1.	2303730412121049	SACHIN N
2.	2303730412122050	SARUMATHI S
3.	2303730412121051	SATHASIVAM A
4.	2303730412121052	SATHISHKUMAR V
5.	2303730412122053	SIVAMBIKA D

Group 11:

S. No	Register No	Name of the Candidate
1.	2303730412122054	SOWMIYA S
2.	2303730412122055	SRUTHI G
3.	2303730412122057	SWETHA K T
4.	2303730412122058	SWETHALATHA V
5.	2303730412121059	THANGAVEL C

Group 12

S. No	Register No	Name of the Candidate
1.	2303730412122060	VANITHA G
2.	2303730412122061	VASUKI S
3.	303730412121062	VIGNESH M
4.	303730412122063	YOGESHWARI R



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM403 – Bio Signals and Systems
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Dr.G.S.Satheeshkumar, ASP/BME
4. Date & Hour : 13.03.2025 & 1st Hour
5. Topic of the class : Properties of DTFT
6. Title of Innovative teaching learning process : Innovative teaching – Group Discussion
7. Objective :
 1. student learn to use the DTFT properties to analyze and manipulate signals in practical scenarios.
 2. Student uses the DTFT to analyze the frequency content of various discrete-time signals, such as **sinusoids, impulses, and complex exponentials.**



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process 2024 – 25 Even Semester



Reflective Critique

Students understand how these properties can be utilized for **signal manipulation** and **system analysis** in signal processing tasks such as **filtering**, **modulation**, and **signal reconstruction**.

Challenges

Students feel confident in their understanding of the **basic properties** of the DTFT, such as linearity, time-shifting, and frequency-shifting, and they can apply these properties to solve practical problems in signal processing.

STUDENT NAME LIST

S. No	Register No	Name of the Candidate
1.	2303730412121001	AJAY KUMAR G J
2.	2303730412122002	AKSHAYA V
3.	2303730412121003	ARIVAZHAGAN L
4.	2303730412121005	BHARATHI B
5.	2303730412122006	BHUVANESWARI P
6.	2303730412122007	BOOMIKA B
7.	2303730412121008	CHANDRU P
8.	2303730412122009	DEEPIKA R
9.	2303730412122010	DEEPIKA SRI T
10.	2303730412121011	DHANUSH A

S. No	Register No	Name of the Candidate
1.	2303730412122012	DHARIKA M
2.	2303730412122013	DHAVAMANI K
3.	2303730412122014	DHEVADHARSHINI S
4.	2303730412122015	DHIVYA S
5.	2303730412122016	DIVYA S
6.	2303730412122017	DURGA DEVI R
7.	2303730412122018	ELAKKIYA OVIYA T
8.	2303730412122019	GAYATHIRI A
9.	2303730412122020	GOBIKA SRI M
10.	2303730412122021	HARINI S

S. No	Register No	Name of the Candidate
1.	2303730412121022	HEMARAJ M
2.	2303730412122023	HEMAVATHI S
3.	2303730412121024	ILAYABHARATHI S
4.	2303730412122025	INDRADEVI P
5.	2303730412121026	JAASIM A J
6.	2303730412121027	JEEVAKUMAR R
7.	2303730412122028	JENIFERSWEETY R
8.	2303730412121029	KABIL T
9.	2303730412121030	KAMESHPRABHU M
10.	2303730412122032	KOWSALYA R

S. No	Register No	Name of the Candidate
1.	2303730412122033	KRUBANANDHINI S R
2.	2303730412121035	LOGESH A
3.	2303730412122036	MADHANIKA S R
4.	2303730412122037	MALARVIZHI K
5.	2303730412122038	MALLIGA VARSHINI U
6.	2303730412122039	MATHUMITHA P
7.	2303730412122040	MEKALA A
8.	2303730412122041	MOHANA PRIYA P
9.	2303730412122042	MOHANADHARSHINI T
10.	2303730412121043	MUKUNDHAN M P

S. No	Register No	Name of the Candidate
1.	2303730412122044	NATHIYA C
2.	2303730412122045	NIVETHA R
3.	2303730412122046	POMMINAYAKI K M
4.	2303730412121047	PRAVEEN KUMAR S
5.	2303730412121048	RAGULPRASATH R
6.	2303730412121049	SACHIN N
7.	2303730412122050	SARUMATHI S
8.	2303730412121051	SATHASIVAM A
9.	2303730412121052	SATHISHKUMAR V
10.	2303730412122053	SIVAMBIKA D

S. No	Register No	Name of the Candidate
1.	2303730412122054	SOWMIYA S
2.	2303730412122055	SRUTHI G
3.	2303730412122057	SWETHA K T
4.	2303730412122058	SWETHALATHA V
5.	2303730412121059	THANGAVEL C
6.	2303730412122060	VANITHA G
7.	2303730412122061	VASUKI S
8.	303730412121062	VIGNESH M
9.	303730412122063	YOGESHWARI R



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23BM403 – Bio Signals and Systems
2. Class / Year / Branch : II Year / IV Semester / BME
3. Name of course coordinator : Dr.G.S.Satheeshkumar, ASP/BME
4. Date & Hour : 19.03.2025 & 3rd Hour
5. Topic of the class : Convolution Sum
6. Title of Innovative teaching learning process : Innovative teaching – Participative Learning
7. Objective :
 1. student gains an understanding of how convolution in discrete time reflects the behavior of an LTI system in terms of **linearity** and **time-invariance**.
 2. Understanding **zero-padding** and its impact on the convolution process.



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638051, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester



Reflective Critique

Student has mastered the use of convolution for analyzing the output of **Linear Time-Invariant (LTI) systems**. They understand how the system's behavior is fully determined by its impulse response $h[n]$, and how convolution allows them to compute the output for any given input $x[n]$.

Challenges

Student could calculate the convolution sum, they found it challenging to **interpret the result** in practical terms, especially for complex signals or systems. Understanding how the result corresponds to the **system's output** and how to visualize the output in the time domain was an area that required further practice.

PARTICIPATIVE NAME LIST

Group 1:

S. No	Register No	Name of the Candidate
1.	2303730412121001	AJAY KUMAR G J
2.	2303730412122002	AKSHAYA V
3.	2303730412121003	ARIVAZHAGAN L
4.	2303730412121005	BHARATHI B
5.	2303730412122006	BHUVANESWARI P

Group 2:

S. No	Register No	Name of the Candidate
1.	2303730412122007	BOOMIKA B
2.	2303730412121008	CHANDRU P
3.	2303730412122009	DEEPIKA R
4.	2303730412122010	DEEPIKA SRI T
5.	2303730412121011	DHANUSH A

Group 3:

S. No	Register No	Name of the Candidate
1.	2303730412122012	DHARIKA M
2.	2303730412122013	DHAVAMANI K
3.	2303730412122014	DHEVADHARSHINI S
4.	2303730412122015	DHIVYA S
5.	2303730412122016	DIVYA S

Group 4:

S. No	Register No	Name of the Candidate
1.	2303730412122017	DURGA DEVI R
2.	2303730412122018	ELAKKIYA OVIYA T
3.	2303730412122019	GAYATHIRI A
4.	2303730412122020	GOBIKA SRIM
5.	2303730412122021	HARINI S

Group 5:

S. No	Register No	Name of the Candidate
1.	2303730412121022	HEMARAJ M
2.	2303730412122023	HEMAVATHI S
3.	2303730412121024	ILAYABHARATHI S
4.	2303730412122025	INDRADEVI P
5.	2303730412121026	JAASIM A J

Group 6:

S. No	Register No	Name of the Candidate
1.	2303730412121027	JEEVAKUMAR R
2.	2303730412122028	JENIFERSWEETY R
3.	2303730412121029	KABIL T
4.	2303730412121030	KAMESHPRABHU M
5.	2303730412122032	KOWSALYA R

Group 7:

S. No	Register No	Name of the Candidate
1.	2303730412122033	KRUBANANDHINI S R
2.	2303730412121035	LOGESH A
3.	2303730412122036	MADHANIK S R
4.	2303730412122037	MALARVIZHI K
5.	2303730412122038	MALLIGA VARSHINI

Group 8:

S. No	Register No	Name of the Candidate
1.	2303730412122039	MATHUMITHA P
2.	2303730412122040	MEKALA A
3.	2303730412122041	MOHANA PRIYA P
4.	2303730412122042	MOHANADHARSHINI T
5.	2303730412121043	MUKUNDHAN M P

Group 9:

S. No	Register No	Name of the Candidate
1.	2303730412122044	NATHIYA C
2.	2303730412122045	NIVETHA R
3.	2303730412122046	POMMINAYAKI K M
4.	2303730412121047	PRAVEEN KUMAR S
5.	2303730412121048	RAGULPRASATH R

Group 10:

S. No	Register No	Name of the Candidate
1.	2303730412121049	SACHIN N
2.	2303730412122050	SARUMATHI S
3.	2303730412121051	SATHASIVAM A
4.	2303730412121052	SATHISHKUMAR V
5.	2303730412122053	SIVAMBIKA D

Group 11:

S. No	Register No	Name of the Candidate
1.	2303730412122054	SOWMIYA S
2.	2303730412122055	SRUTHI G
3.	2303730412122057	SWETHA K T
4.	2303730412122058	SWETHALATHA V
5.	2303730412121059	THANGAVEL C

Group 12

S. No	Register No	Name of the Candidate
1.	2303730412122060	VANITHA G
2.	2303730412122061	VASUKI S
3.	303730412121062	VIGNESH M
4.	303730412122063	YOGESHWARI R



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University- Chennai, &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

INNOVATIVE TEACHING

Name of the Course Coordinator : Dr.A.Sathishkumar, Prof/BME
Name of the subject with code : 23ES306 - Fundamentals of Electrical Engineering
Year/Semester/Class : II/III/BME

S.No.	UNIT	TOPIC	METHODOLOGY ADOPTED
1.	I	Reciprocity theorem	Practical based learning
2.	II	Construction and Principle of operation: Three Phase Induction motor	Peer group learning
3.	III	Application of Servo motor	Group Discussion


Signature of the Course Coordinator


HoD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Practices

Name of the subject with code : 23ES306 – Fundamentals of Electrical Engineering
Course Coordinator : Dr.A.SATHISHKUMAR,Prof/BME
Academic Year : 2024-25 Odd Semester
Year/Semester : II / III
Branch : B.E.Bio Medical Engineering

INDEX

S.No.	Content
1	Lesson plan with innovative practices and content beyond syllabus highlighted
2	Innovative teaching process evidence
3	Log book copies
4	Content beyond the syllabus
5	Innovative assignment question and sample papers



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

1. Name of the subject with course code : 23ES306 – FUNDAMENTALS OF ELECTRICAL ENGINEERING
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course co-ordinator : Dr.A.SATHISHKUMAR
4. Date & Hour : 05.09.2024 & 1st Hour
(Map with concern subject log book)
5. Topic of the Class : Reciprocity theorem
6. Title of the Innovative teaching learning process : Practical based learning
7. Objective The main objective of this quiz session is to learn about the transformer protection schemes for the faults occurring in the transformers.
8. Students name list- Batch wise:

BATCH I			BATCH II		
S.No.	Register No.	Name	S.No.	Register No.	Name
1	ES23BM01	AJAY KUMAR G J	7	ES23BM08	CHANDRU P
2	ES23BM02	AKSHAYA V	8	ES23BM09	DEEPIKA R
3	ES23BM03	ARIVAZHAGAN L	9	ES23BM10	DEEPIKA SRI T
4	ES23BM05	BHARATHI B	10	ES23BM11	DHANUSH A
5	ES23BM06	BHUVANESWARI P	11	ES23BM12	DHARIKA M
6	ES23BM07	BOOMIKA B	12	ES23BM13	DHAVAMANI K
BATCH III			BATCH IV		
S.No.	Register No.	Name	S.No.	Register No.	Name
13	ES23BM14	DHEVADHARSHINI S	19	ES23BM20	GOBIKA SRI M
14	ES23BM15	DHIVYA S	20	ES23BM21	HARINI S
15	ES23BM16	DIVYA S	21	ES23BM22	HEMARAJ M
16	ES23BM17	DURGA DEVI R	22	ES23BM23	HEMAVATHI S
17	ES23BM18	ELAKKIYA OVIYA T	23	ES23BM24	ILAYABHARATHI S
18	ES23BM19	GAYATHIRI A	24	ES23BM25	INDRADEVI P

BATCH V			BATCH VI		
S.No.	Register No.	Name	S.No.	Register No.	Name
25	ES23BM26	JAASIM A J	31	ES23BM33	KRUBANANDHINI S R
26	ES23BM27	JEEVAKUMAR R	32	ES23BM35	LOGESH A
27	ES23BM28	JENIFERSWEETY R	33	ES23BM36	MADHANIKA S R
28	ES23BM29	KABIL T	34	ES23BM37	MALARVIZHI K
29	ES23BM30	KAMESHPRABHU M	35	ES23BM38	MALLIGA VARSHINI U
30	ES23BM32	KOWSALYA R	36	ES23BM39	MATHUMITHA P
BATCH VII			BATCH VII		
S.No.	Register No.	Name	S.No.	Register No.	Name
37	ES23BM40	MEKALA A	43	ES23BM46	POMMINAYAKI K M
38	ES23BM41	MOHANA PRIYA P	44	ES23BM47	PRAVEEN KUMAR S
39	ES23BM42	MOHANADHARSHINI T	45	ES23BM48	RAGULPRASATH R
40	ES23BM43	MUKUNDHAN M P	46	ES23BM49	SACHIN N
41	ES23BM44	NATHIYA C	47	ES23BM50	SARUMATHI S
42	ES23BM45	NIVETHA R	48	ES23BM51	SATHASIVAM A
BATCH VIII			BATCH IX		
S.No.	Register No.	Name	S.No.	Register No.	Name
49	ES23BM52	SATHISHKUMAR V	55	ES23BM59	THANGAVEL C
50	ES23BM53	SIVAMBIKA D	56	ES23BM60	VANITHA G
51	ES23BM54	SOWMIYA S	57	ES23BM61	VASUKI S
52	ES23BM55	SRUTHI G	58	ES23BM62	VIGNESH M
53	ES23BM57	SWETHA K T	59	ES23BM63	YOGESHWARI R
54	ES23BM58	SWETHALATHA V			



ERODE SENGUNTHAR



ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,

Accredited by National Board of Accreditation (NBA), New Delhi &

National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI -638 057, TAMILNADU, INDIA

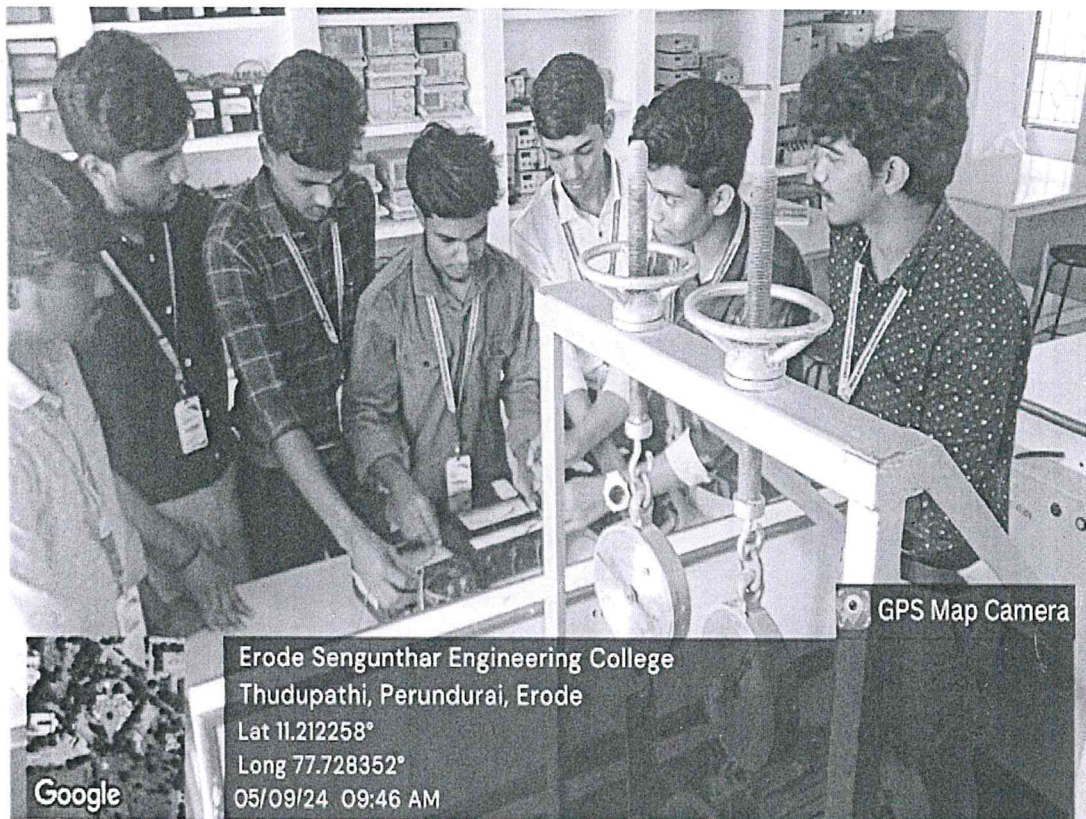
INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiatives)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

9. Geo-tagged Photo:



A. S.
Course Coordinator

[Signature]
HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

1. Name of the subject with course code : 23ES306 – FUNDAMENTALS OF ELECTRICAL ENGINEERING
2. Class/Year/Branch : II Year / III Semester /BME
3. Name of course co-ordinator : Dr.A.SATHISHKUMAR
4. Date & Hour : 28.09.2024&4th Hour
5. (Map with concern subject log book)
6. Topic of the Class : Construction and Principle of operation: Three Phase Induction motor
7. Title of the Innovative teaching learning process: Peer Group Learning
8. Objective

The main objective of this peer group learning is to learn about the environmental consequences of transmission line corona, including its contribution to air pollution through ozone and nitrogen oxide emissions.

9. Students name list- Batch wise:

BATCH I			BATCH II		
S.No.	Register No.	Name	S.No.	Register No.	Name
1	ES23BM01	AJAY KUMAR G J	11	ES23BM12	DHARIKA M
2	ES23BM02	AKSHAYA V	12	ES23BM13	DHAVAMANI K
3	ES23BM03	ARIVAZHAGAN L	13	ES23BM14	DHEVADHARSHINI S
4	ES23BM05	BHARATHI B	14	ES23BM15	DHIVYA S
5	ES23BM06	BHUVANESWARI P	15	ES23BM16	DIVYA S
6	ES23BM07	BOOMIKA B	16	ES23BM17	DURGA DEVI R
7	ES23BM08	CHANDRU P	17	ES23BM18	ELAKKIYA OVIYA T
8	ES23BM09	DEEPIKA R	18	ES23BM19	GAYATHIRI A
9	ES23BM10	DEEPIKA SRI T	19	ES23BM20	GOBIKA SRI M
10	ES23BM11	DHANUSH A	20	ES23BM21	HARINI S

BATCH III			BATCH IV		
S.No.	Register No.	Name	S.No.	Register No.	Name
21	ES23BM22	HEMARAJ M	31	ES23BM33	KRUBANANDHINI S R
22	ES23BM23	HEMAVATHI S	32	ES23BM35	LOGESH A
23	ES23BM24	ILAYABHARATHI S	33	ES23BM36	MADHANIKAS R
24	ES23BM25	INDRADEVI P	34	ES23BM37	MALARVIZHI K
25	ES23BM26	JAASIM A J	35	ES23BM38	MALLIGA VARSHINI U
26	ES23BM27	JEEVAKUMAR R	36	ES23BM39	MATHUMITHA P
27	ES23BM28	JENIFERSWEETY R	37	ES23BM40	MEKALA A
28	ES23BM29	KABIL T	38	ES23BM41	MOHANA PRIYA P
29	ES23BM30	KAMESHPRABHU M	39	ES23BM42	MOHANADHARSHINI T
30	ES23BM32	KOWSALYA R	40	ES23BM43	MUKUNDHAN M P
BATCH V			BATCH VI		
S.No.	Register No.	Name	S.No.	Register No.	Name
41	ES23BM44	NATHIYA C	51	ES23BM54	SOWMIYA S
42	ES23BM45	NIVETHA R	52	ES23BM55	SRUTHI G
43	ES23BM46	POMMINAYAKI K M	53	ES23BM57	SWETHA K T
44	ES23BM47	PRAVEEN KUMAR S	54	ES23BM58	SWETHALATHA V
45	ES23BM48	RAGULPRASATH R	55	ES23BM59	THANGAVEL C
46	ES23BM49	SACHIN N	56	ES23BM60	VANITHA G
47	ES23BM50	SARUMATHI S	57	ES23BM61	VASUKI S
48	ES23BM51	SATHASIVAM A	58	ES23BM62	VIGNESH M
49	ES23BM52	SATHISHKUMAR V	59	ES23BM63	YOGESHWARI R
50	ES23BM53	SIVAMBIKA D			



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.

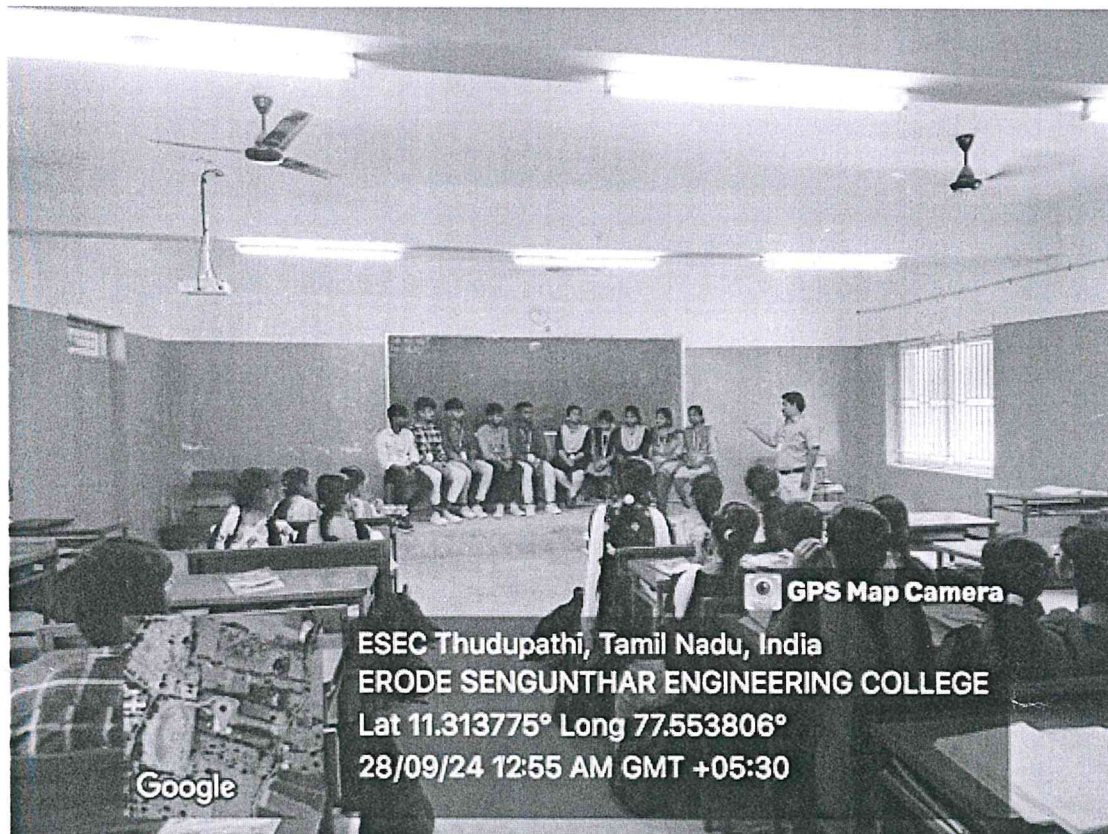


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

1. Geo-tagged Photo:




Course Coordinator


HOD/BME



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

1. Name of the subject with course code : 23ES306 – FUNDAMENTALS OF ELECTRICAL ENGINEERING
2. Class / Year / Branch : II Year / III Semester / BME
3. Name of course co-ordinator : Dr.A.SATHISHKUMAR
4. Date & Hour : 02.11.2024&4thHour

(Map with concern subject log book)

5. Topic of the Class : Application of Servo Motor
6. Title of the Innovative teaching learning process: Group Discussion
7. Objective

The main objective of this Group discussion is to learn about the effects of switching surges on power system equipment and reliability, including their potential to cause insulation breakdown and equipment damage.

8. Students name list- Batch wise:

BATCH I			BATCH II		
S.No.	Register No.	Name	S.No.	Register No.	Name
1	ES23BM01	AJAY KUMAR G J	5	ES23BM06	BHUVANESWARI P
2	ES23BM02	AKSHAYA V	6	ES23BM07	BOOMIKA B
3	ES23BM03	ARIVAZHAGAN L	7	ES23BM08	CHANDRU P
4	ES23BM05	BHARATHI B	8	ES23BM09	DEEPIKA R
BATCH III			BATCH IV		
S.No.	Register No.	Name	S.No.	Register No.	Name
9	ES23BM10	DEEPIKA SRI T	13	ES23BM14	DHEVADHARSHINI S
10	ES23BM11	DHANUSH A	14	ES23BM15	DHIVYA S
11	ES23BM12	DHARIKA M	15	ES23BM16	DIVYA S
12	ES23BM13	DHAVAMANI K	16	ES23BM17	DURGA DEVI R

BATCH V			BATCH VI		
S.No.	Register No.	Name	S.No.	Register No.	Name
17	ES23BM18	ELAKKIYA OVIYA T	21	ES23BM22	HEMARAJ M
18	ES23BM19	GAYATHIRI A	22	ES23BM23	HEMAVATHI S
19	ES23BM20	GOBIKA SRI M	23	ES23BM24	ILAYABHARATHI S
20	ES23BM21	HARINI S	24	ES23BM25	INDRADEVI P
BATCH VII			BATCH VIII		
S.No.	Register No.	Name	S.No.	Register No.	Name
25	ES23BM26	JAASIM A J	29	ES23BM30	KAMESHPRABHU M
26	ES23BM27	JEEVAKUMAR R	30	ES23BM32	KOWSALYA R
27	ES23BM28	JENIFERSWEETY R	31	ES23BM33	KRUBANANDHINI S R
28	ES23BM29	KABIL T	32	ES23BM35	LOGESH A
BATCH IX			BATCH X		
S.No.	Register No.	Name	S.No.	Register No.	Name
33	ES23BM36	MADHANIKA S R	37	ES23BM40	MEKALA A
34	ES23BM37	MALARVIZHI K	38	ES23BM41	MOHANA PRIYA P
35	ES23BM38	MALLIGA VARSHINI U	39	ES23BM42	MOHANADHARSHINI T
36	ES23BM39	MATHUMITHA P	40	ES23BM43	MUKUNDHAN M P
BATCH XI			BATCH XII		
S.No.	Register No.	Name	S.No.	Register No.	Name
41	ES23BM44	NATHIYA C	45	ES23BM48	RAGULPRASATH R
42	ES23BM45	NIVETHA R	46	ES23BM49	SACHIN N
43	ES23BM46	POMMINAYAKI K M	47	ES23BM50	SARUMATHI S
44	ES23BM47	PRAVEEN KUMAR S	48	ES23BM51	SATHASIVAM A
BATCH XIII			BATCH XIV		
S.No.	Register No.	Name	S.No.	Register No.	Name
49	ES23BM52	SATHISHKUMAR V	55	ES23BM59	THANGAVEL C
50	ES23BM53	SIVAMBIKA D	56	ES23BM60	VANITHA G
51	ES23BM54	SOWMIYA S	57	ES23BM61	VASUKI S
52	ES23BM55	SRUTHI G	58	ES23BM62	VIGNESH M
53	ES23BM57	SWETHA K T	59	ES23BM63	YOGESHWARI R
54	ES23BM58	SWETHALATHA V			



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,

Accredited by National Board of Accreditation (NBA), New Delhi &

National Assessment and Accreditation Council (NAAC), Bangalore with

PERUNDURAI -638 057, TAMILNADU, INDIA



INSTITUTION'S
INNOVATION
COUNCIL
Ministry of HRD, Government of India

DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024-25 ODD SEMESTER

9. Geo-tagged Photo:




Course Coordinator


HoD/BME





ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University Chennai & National
Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI-638051, TAMILNADU, INDIA.

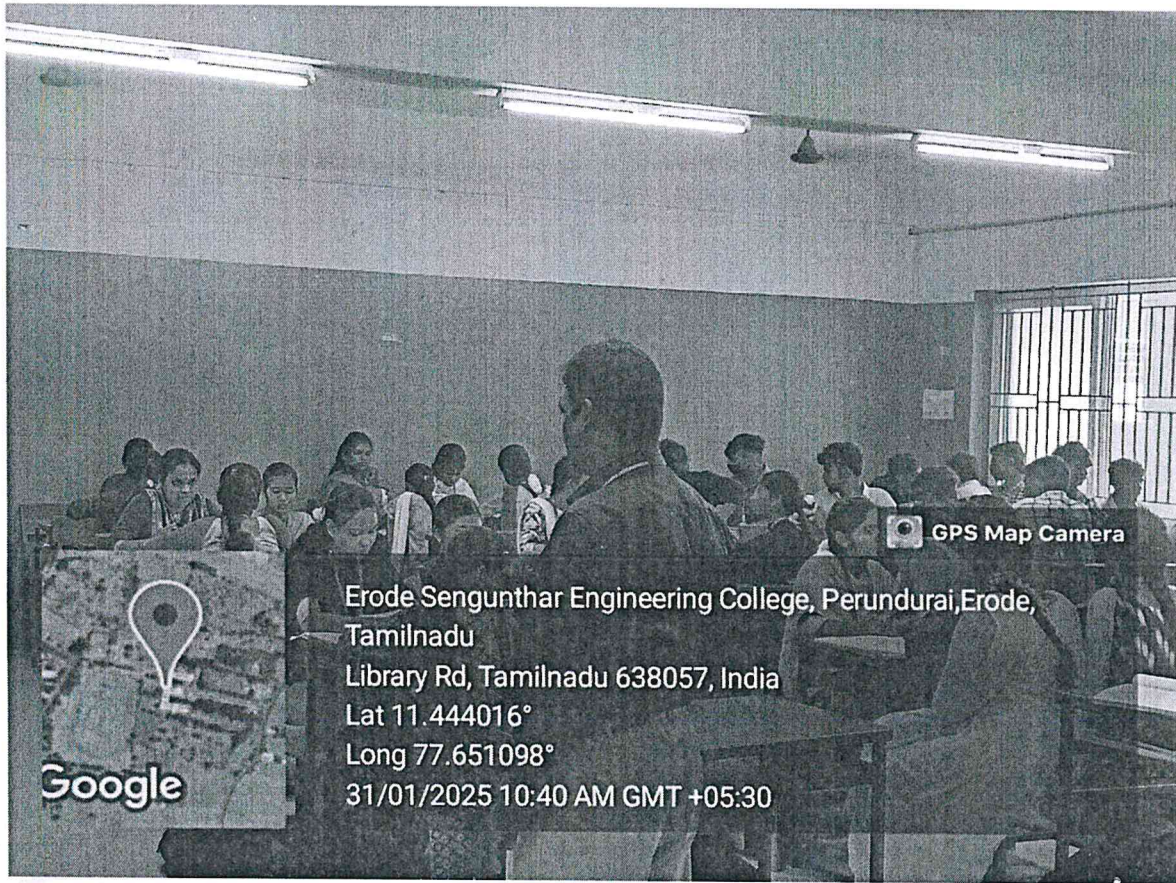


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23ES404 Analog and Digital Electronics
2. Class / Year / Branch : II Year / IV Semester / Biomedical
Engineering
3. Name of course coordinator : Dr.A.Sathishkumar, Prof/BME
4. Date & Hour : 30/01/2025 & 2nd Hour
5. Topic of the class : Ideal characteristics.
6. Title of Innovative teaching learning process : Innovative teaching – Group discussion
7. Objective : Learn the circuit configuration and introduce
practical applications of linear integrated
circuits. To understand the concepts,
basic operation, steady state operation of efficient
switched- mode power conversion techniques



Erode Sengunthar Engineering College, Perundurai, Erode,
Tamilnadu

Library Rd, Tamilnadu 638057, India

Lat 11.444016°

Long 77.651098°

31/01/2025 10:40 AM GMT +05:30

GPS Map Camera

Google

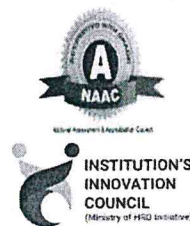


ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.

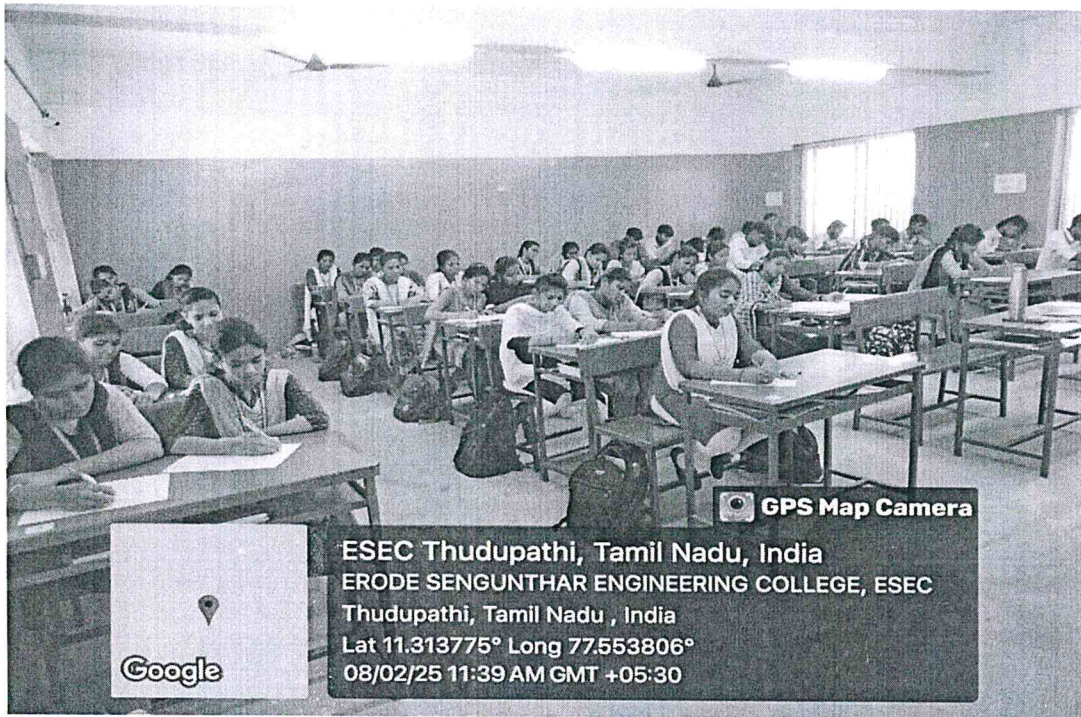


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23ES404 Analog and Digital Electronics
2. Class / Year / Branch : II Year /IV Semester / Biomedical
Engineering
3. Name of course coordinator : Dr.A.Sathishkumar, Prof/BME
4. Date & Hour : 08.02.2025 & 3rd Hour
5. Topic of the class : Analog switches
6. Title of Innovative teaching learning process : Innovative teaching – Mind Mapping
7. Objective : To design analog circuits and systems that perform
signal processing functions, and signal
generation using the devices including Op-
Amps, amplifiers, multipliers and comparators.



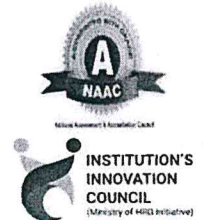
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &

National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.

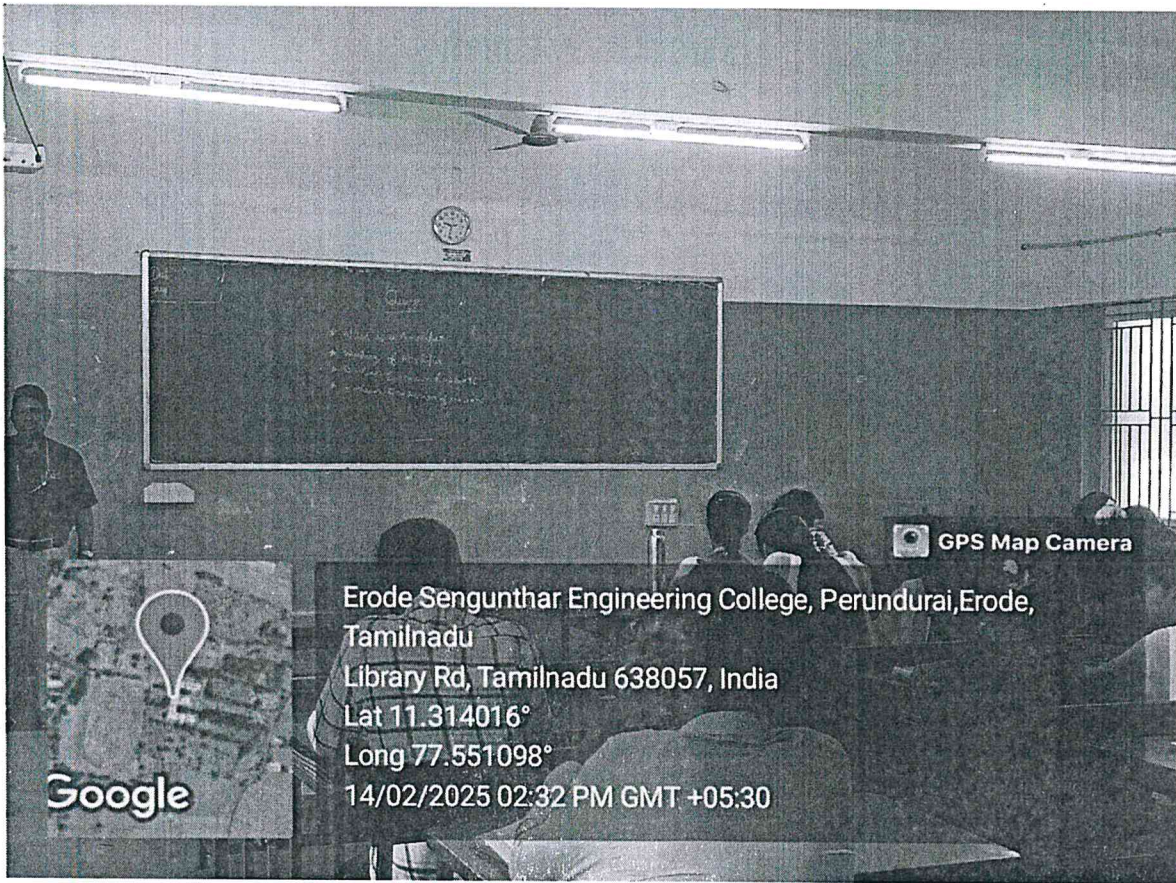


DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23ES404 Analog and Digital Electronics
2. Class / Year / Branch : II Year / IV Semester / Biomedical Engineering
3. Name of course coordinator : Dr.A.Sathishkumar, Prof/BME
4. Date & Hour : 14.02.2025 & 5th Hour
5. Topic of the class : Alphanumeric codes
6. Title of Innovative teaching learning process : Innovative teaching – Quiz
7. Objective : To understand An alphanumeric code is a series of numbers, letters, symbols and punctuation which is used to encode product information and characteristics.



Erode Sengunthar Engineering College, Perundurai, Erode,
Tamilnadu
Library Rd, Tamilnadu 638057, India
Lat 11.314016°
Long 77.551098°
14/02/2025 02:32 PM GMT +05:30



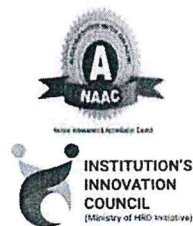
ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &

National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.



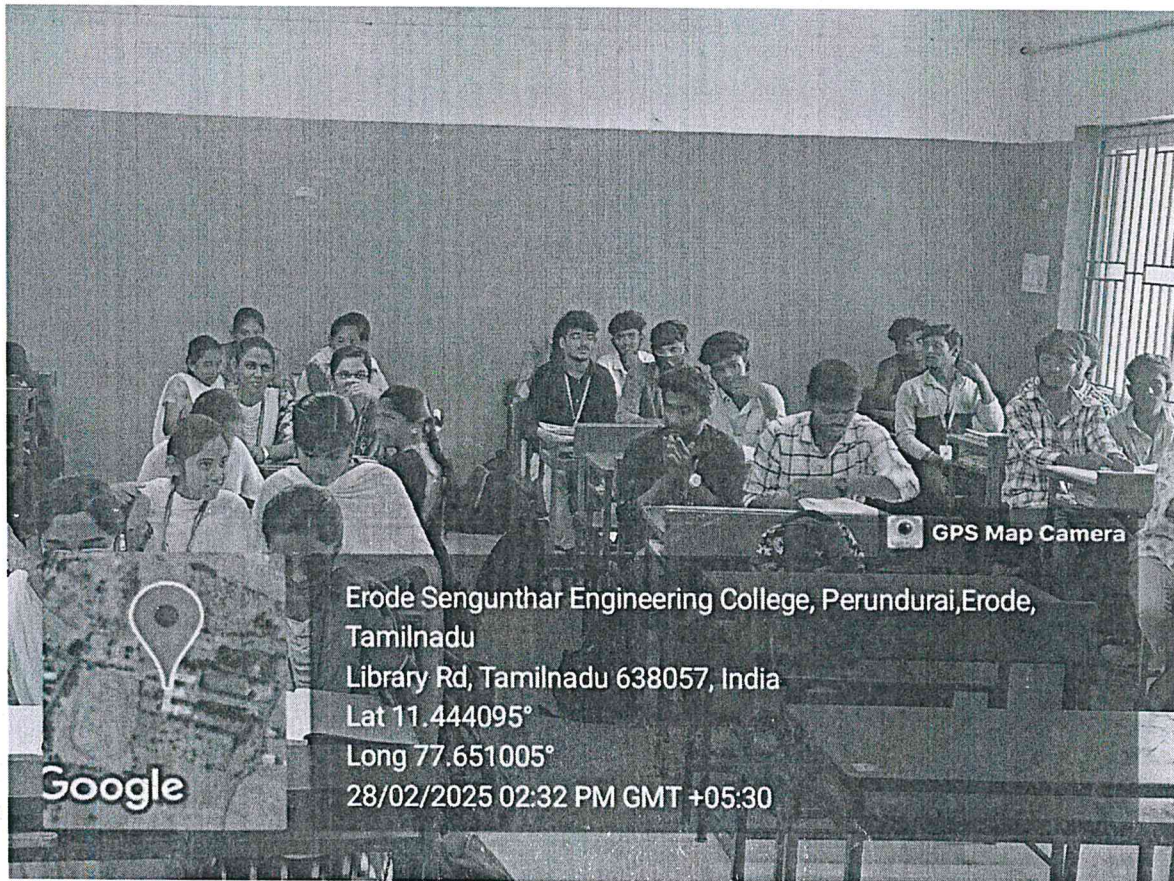
DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23ES404 Analog and Digital Electronics
2. Class / Year / Branch : II Year / IV Semester / Biomedical Engineering
3. Name of course coordinator : Dr.A.Sathishkumar, Prof/BME
4. Date & Hour : 28.02.2025 & 5th Hour
5. Topic of the class : Half and Full Adders
6. Title of Innovative teaching learning process : Innovative teaching – Flipped class
7. Objective : Understand the basic operation binary

addition. Design and implement a half adder circuit using logic gates.



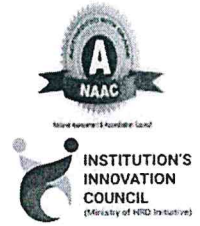


ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University Chennai &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI-638057, TAMILNADU, INDIA.



DEPARTMENT OF BIOMEDICAL ENGINEERING

Innovative Teaching Process

2024 – 25 Even Semester

1. Name of subjects with course code : 23ES404 Analog and Digital Electronics
2. Class / Year / Branch : II Year / IV Semester / Biomedical Engineering
3. Name of course coordinator : Dr.A.Sathishkumar, Prof/BME
4. Date & Hour : 15.03.2025 & 3rd Hour
5. Topic of the class : Circuit Implementation
6. Title of Innovative teaching learning process : Innovative teaching – Model based learning
7. Objective : To Understanding of fundamental circuit

elements and laws: This includes resistors, capacitors, inductors, voltage sources, current sources, Ohm's law, Kirchhoff's laws. Students learn methods like nodal analysis, mesh analysis, superposition, Thevenin's theorem, Norton's theorem.



Erode Sengunthar Engineering College, Perundurai, Erode,
Tamilnadu

Library Rd, Tamilnadu 638057, India

Lat 11.4440967°

Long 77.6510160°

15/03/2025 11:51 AM GMT +05:30

GPS Map Camera