



E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

Old Nagore Road, Nagapattinam, Tamilnadu-611 002
Affiliated to Anna University | Approved by AICTE | Accredited by -
NBA & NAAC 'A++' Grade | Recognised by UGC 2(f) & 12(B) | An ISO
9001:2015 Certified Institution

E-SPREAD



NEWS LETTER

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



ZEPRA

VOL - 18
DEC - 2023



E-SPREAD

VOL-18



I feel proud to hear that our EEE department is releasing their department News Letter "E-SPREAD". it is a prudent approach. I wish them all success.

Shri. S. Senthil Kumar
SECRETARY



I appreciate the department of EEE for the effort taken by them to launch their department News Letter. Let this be the starting of the Big picture to be drawn in the future.

Dr.S.Ramabalan
PRINCIPAL

HISTORY OF THE DEPARTMENT

"E.G.S. Pillay Engineering College is a pioneering non-grant Engineering College in the state, established by G.S. Pillay & Sons Charitable & Education Trust, Nagapattinam, in 1995 with the sanction of the Government of Tamil Nadu, approval from the All India Council for Technical Education, New Delhi, and affiliation to Bharathidasan University, Tiruchirappalli. Courses were affiliated to Anna University, Chennai, from 2002 onwards, and degrees have been awarded by Anna University as per government orders. Since 2007, courses have been affiliated with Anna University of Technology, Tiruchirappalli.



E-SPREAD

VOL-18

The Electrical & Electronics Engineering program was introduced in the academic year 2000-2001 with an initial intake of 40 students, increased to 60 in 2001-2002. The department boasts modern lab facilities equipped with necessary equipment and software meeting ATTCE and Anna University norms, including Measurement and Control System Lab, Basic Electrical and Electronics Engineering Lab, Electrical Lab, Electrical Machine Lab, and Electronics Lab.

The department prides itself on a fine blend of renowned and experienced dynamic faculty members. Since its inception, the department has made sincere efforts in student development through training and industrial visits. Eight batches of electrical engineering students have graduated from the college, with approximately 80% of them successfully placed in various organizations through both on and off-campus placements.

The department also established an association named ZEPRA (Zealous Electric Rasings Association). In addition to the curriculum, students of the EEE department have achieved prizes in co-curricular and extracurricular activities."



I CONGRATULATE THE STUDENTS OF THE EEE DEPARTMENT FOR THE HARD WORK IN SUCCESSFULLY CONDUCTING THE NATIONAL LEVEL SYMPOSIUM I ALSO APPRECIATE THE STUDENTS FOR THE RELEASE OF DEPARTMENTAL NEWSLETTER "E-SPREAD" AND MAGAZINE "E-BREEZE". I WISH THE MEMBERS OF ZEPRA FOR THE SUCCESSFUL PROSPEROUS FUTURE.

Dr. T. Suresh Padmanabhan.

HOD/EEE



VISION AND MISSION OF THE INSTITUTION

VISION OF THE INSTITUTE

Envisioned to transform our institution into a "Global Centre of Academic Excellence"

MISSION OF THE INSTITUTE

1. To provide world class education to the students and to bring out their inherent talents
2. To establish state-of-the-art facilities and resources required to achieve excellence in teaching-learning, and supplementary processes
3. To recruit competent faculty and staff and to provide opportunity to upgrade their knowledge and skills
4. To have regular interaction with the Industries in the area of R&D, and offer consultancy, training and testing services
5. To establish centers of excellence in the emerging areas of research
6. To offer continuing education, and non-formal vocational education programmes that are beneficial to the society



VISION AND MISSION OF THE DEPARTMENT

VISION OF THE DEPARTMENT

The department is envisioned to produce globally competent electrical and electronics engineers

MISSION OF THE DEPARTMENT

M1: To impart the contemporary knowledge in the field of electrical and electronics engineering with high human values

M2: To offer state-of-the-art facilities for conducive learning and conducting research

M3: To prepare the students for professional career and higher education by imparting self-learning and interpersonal skills



Program Educational Objectives (PEOs):

PEO 1

Graduates will excel as engineering professionals and leaders in electrical engineering or becoming an entrepreneur or pursuing higher education.

PEO 2

Graduates will demonstrate core competence to adapt themselves to the constantly evolving technologies and stay in line with industry advancements.

PEO 3

Graduates will collaborate in multidisciplinary fields both as an individual and as a team member with a strong sense of professionalism and ethics.

Program Specific Outcomes (PSOs):

After successful completion of the programme, Graduates will be able to

PSO 1

Design, test and analyse electrical machines and utility systems

PSO 2

Design, develop and test analog and digital electronic circuits and systems

PSO 3

Develop, simulate and analyse the electrical and electronics systems using modern tools



Program Outcomes (POs):

After successful completion of the programme, Graduates will be able to

Program Outcomes

Engineering knowledge: Apply the knowledge of mathematics, science, engineering

1 fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, research literature, and analyze complex engineering

2 problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and

3 design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research

4 methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern

5 engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess

6 societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability: Understand the impact of the professional engineering

7 solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and

8 norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in

9 diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the

10 engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the

11 engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in

12 independent and lifelong learning in the broadest context of technological change.



E-SPREAD

VOL-18

Faculty Information

S.No	Name	Degree	Designation
1.	Dr. Mohan . V	M.E.,Ph.D.,	Professor
2.	Dr.Suresh Padmanabhan. T	M.E.,Ph.D.,	Professor
3.	Dr.Vinothkumar .M	M.E.,Ph.D.	Associate Professor
4.	Dr. Suresh Babu. P.J	M.E., Ph.D.	Assistant Professor
5.	Dr. Sivamani. S	M.E., Ph.D.	Assistant Professor
6.	Mrs. Latha. S	M.E.,(Ph.D.)	Assistant Professor
7.	Mr.Krishnaram. K	M.Tech, (Ph.D.)	Assistant Professor
8.	Mr. Nandakumar. K	M.E.,(Ph.D.)	Assistant Professor
9.	Mr. Amalore Naveen Antony. B	M.E.,(Ph.D.)	Assistant Professor
10.	Mr Yokeswaran. V	M. Tech.,	Assistant Professor
11.	Mr Senthilkumar. D	M.E.,	Assistant Professor
12.	Mrs.Jayasri. J	M.E.,	Assistant Professor
13.	Mr.Gokul Raj. K	M.E., (Ph.D.)	Assistant Professor
14.	Mr.Jhagannath. K	M.E., (Ph.D.)	Assistant Professor
15.	Mrs.Mithuna. C	M.E.,	Assistant Professor
16.	Mr.Ramanan.R	M.E.,	Assistant Professor
17.	Ms.Keerthika . A	M.E.,	Assistant Professor



FACULTY INTERACTION/ FACULTY DEVELOPMENT/ TRAINING ACTIVITIES/ STTPS

S.NO	NAME OF THE STAFF	PROGRAM ATTENDED	DATE
1	Mrs.Jayasri. J	power converters -An Embedded system-based approach	21-26 May 2023
2	Dr.Thamizharasan . S	5G Network and Beyond	21-26 May 2023
3	Dr.Ganesan@Subramanian . G	Electric vehicle drive system	21-26 May 2023
4	Mr.Anandaraj. R	5G Network and Beyond	21-26 May 2023
5	Mrs.Jayasri. J	Research, innovation &Techno-Entrepreneurship(RITE-2023)	21-26 May 2023

NPTEL Course Successfully completed student's details

S. No	Reg. No.	Name	Course name	No. of credits	Marks secured (%)
1	E20EER006	Dharaniya.V	Natural Resource Management	3	55%
2	8208E21EER048	Saranya.S	Power Plant Engineering	2	66%



E-SPREAD

VOL-18



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SARANYA S

for successfully completing the course

Power Plant Engineering

with a consolidated score of **66** %

Online Assignments	20.5/25	Proctored Exam	45/75
--------------------	---------	----------------	-------

Total number of candidates certified in this course: **423**

Prof. Kaushik Ghosh,
Professor (Chemistry)
Coordinator CEC

Jul-Sep 2023

(8 week course)

Prof. Ranjana Pathania,
Professor (BSBE)
Coordinator (NPTEL)



Indian Institute of Technology Roorkee



Roll No: NPTEL23ME133S45470046

To verify the certificate



No. of credits recommended: 2 or 3

STUDENT PARTICIPATION IN EVENTS

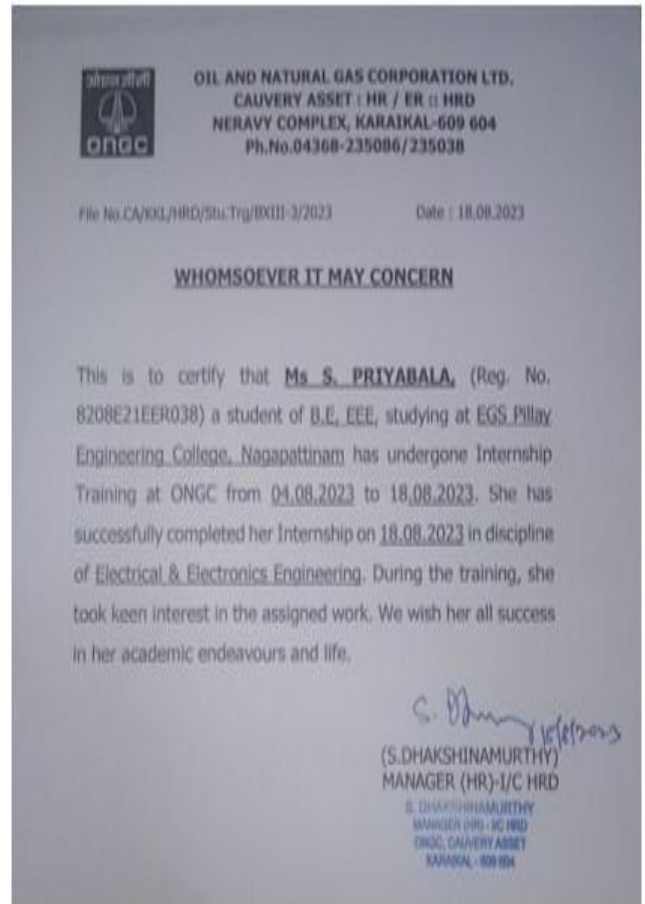
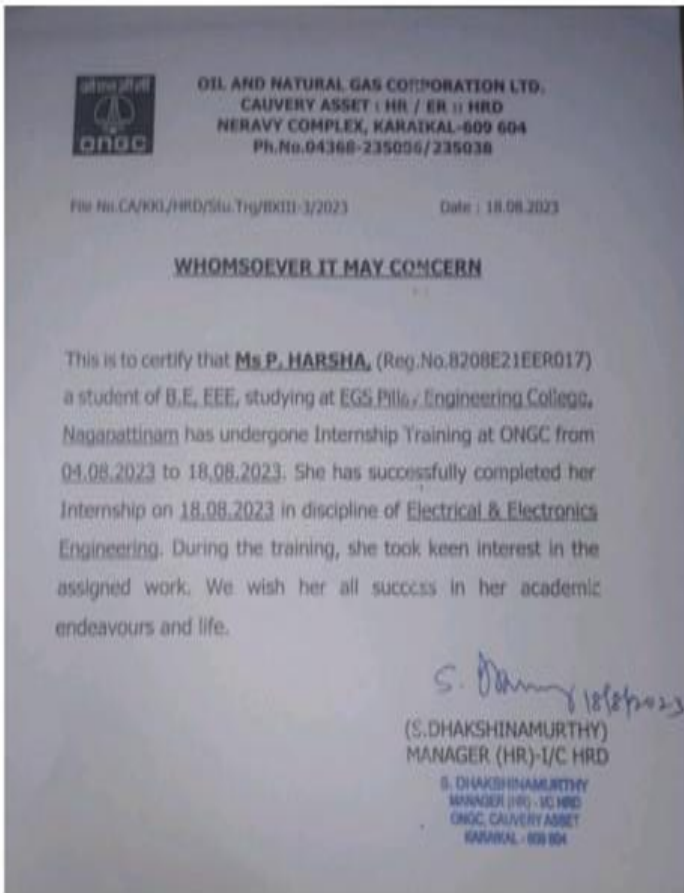
S.NO	NAME OF THE STUDENT	YEAR	EVENT	EVENT PLACE	DATE
1.	B.S.Lavanya	II	Competition on PCB design	National Institute of technology Puducherry	01.03.2024 & 02.03.2024
2.	Avinash Baskaran	II	Short term course on AI & ML	National Institute of technology Puducherry	26.02.2024 to 01.03.2024



E-SPREAD

VOL-18

3.	Abitha Ganesh	II	Short term course on AI &ML	National Institute of tehnologyPuducherry	26.02.2024 to 01.03.2024
4.	J.Shobana	II	Short term course on AI &ML	National Institute of tehnologyPuducherry	26.02.2024 to 01.03.2024
5.	Srinithi Senthilkumar	II	Short term course on AI &ML	National Institute of technologyPuducherry	26.02.2024 to 01.03.2024
6.	K.Gowri manohari	II	Short term course on AI &ML	National Institute of technologyPuducherry	26.02.2024 to 01.03.2024
7.	N.Bharanitharan	II	Workshop on prompt engineering	National skill development corporation	18.02.2024
8.	K.Arthi	III	NPTEL Course	Indian Institute of technology Roorkee	January – March 2024
9.	K.Ajithkumar	III	NPTEL Course	Indian Institute of technology Kharagpur	January – March 2024
10.	M.Devadharshini	III	NPTEL Course	Indian Institute of technology Kharagpur	January – March 2024
11.	P.Harsha	III	NPTEL Course	Indian Institute of technology Kharagpur	January – March 2024
12.	A.Priyadharshini	III	NPTEL Course	Indian Institute of technology Kharagpur	January – March 2024
13.	S.Saranya	III	NPTEL Course	Indian Institute of technology Roorkee	July-Sept 2023
14.	priyabala	III	NPTEL Course	Indian Institute of technology Kharagpur	January – March 2024
15.	V.Dharaniya	IV	NPTEL Course	Indian Institute of technology Guwahati	July-Oct 2023
16.	S.Senthamizhan	III	Workshop	Learn Delta	17.06.2023
17.	S.Senthamizhan	III	Online course	Infosys springboard	8.06.2023
18.	J.Farmanullah	III	Workshop	Nikistian Media Pvt Ltd	15.06.2023





E-SPREAD

VOL-18

ISRO SCIENCE EXHIBITION 04th – 06th Oct 2023

Space expo demonstration model of ISRO :

- Launch Vehicles & Satellite models and latest technologies
- Sessions on success Stories of “Chandrayaan”, “Mangalyaan” & “Aditya L-1” Missions
- Humanoid Robot components
- Smart Space Robot & SSR demo Model
- Space Sensors & Actuators
- Interaction with Senior Scientists & Engineers from ISRO
- VIKAS engine & cryogenic engines
- Guidance for Science students on how to join ISRO

This exhibition promises to be a fascinating journey into the world of science and technology, offering a unique opportunity to witness the future of space exploration and connect with the minds behind these ground-breaking developments.

EGS PILLAY
GROUP OF INSTITUTIONS, NAGAPATTINAM.

INDIAN SPACE RESEARCH ORGANISATION

CELEBRATING
WORLD SPACE WEEK 2023

DRAWING & SPEECH COMPETITION
04th - 06th OCTOBER 2023

WIN ATTRACTIVE PRIZES

Competition Theme
"Space Science & Technology"

SCAN & POST
Your Drawings & Recorded Speech Videos in your Facebook/Instagram ID & Tag our below Social Media Page.

Last Date to Post & Tag : 3rd October - 2023

Co - Sponsored by
SBI NAGAPATTINAM

For Queries 88077 28684, 98655 60442

@egspillay_group_of_institution **EGS Pillay Group of Institutions** **www.egspec.org**





ISRO SCIENCE EXHIBITION DEPARTMENT STUDENTS INVOLVEMENT

S.L NO.	REGISTER NUMBER	NAME	YEAR
1.	8208E22EER012	DINESH P	Second year
2.	8208E22EER008	BARANITHARAN N	Second year
3.	8208E22EER039	RAJARAMAN S	Second year
4.	8208E21EER001	AAKASH. S	Third year
5.	8208E21EER007	ARTHI. K	Third year
6.	8208E21EER017	HARSHA. P	Third year
7.	8208E21EER022	JASMINE.R	Third year
8.	8208E21EER038	PRIYABALA S	Third year
9.	8208E21EER059	VIJAY.T	Third year
10.	E20EER008	GOWTHAMAN M	Final year
11.	E20EER012	IMMANUVEL EZHIL RAJ	Final year
12.	E20EER016	KAVIYARASAN M	Final year
13.	E20EER026	PARASURAMAN P	Final year
14.	E20EER047	YOKESWARAN K	Final year
15.	E20EEL306	GOVINDHARAJAN M	Final year



LIST OF STAFF PUBLICATION

S.No	Title of paper	Name of journal	Name of the author/s	Volume, Issue & article no	ISSN number	Year of publication	Is it listed in UGC Care list/Scopus/Web of Science/other, mention	Impact factor	H index	doi	citation
1	Development of grey wolf optimization based modified fast terminal sliding mode controller for three phase interleaved boost converter fed PV system	Scientific Reports	K. Krishnaram, T. Suresh Padmanabhan, Faisal Alsaiif & S. Senthilkumar	vol.14, issue.1, Article number: 9256	ISSN 2045-2322 (online)	2024	SCI	4.6	315	https://doi.org/10.1038/s41598-024-59900-z	2
2	Performance optimization of interleaved boost converter with ANN supported adaptable stepped-scaled P&O based MPPT for solar powered applications	Scientific Reports	K. Krishnaram, T. Suresh Padmanabhan, Faisal Alsaiif & S. Senthilkumar	vol.14, issue.1, Article number: 8115	ISSN 2045-2322 (online)	2024	SCI	4.6	315	https://doi.org/10.1038/s41598-024-58852-8	3



E-SPREAD

VOL-18

3	A quad DC source switched three-phase multilevel DC-link inverter topology	Scientific Reports	S. Sivamani, S. P. Mangaiyarkaras, R. Gandhi Raj & S. Senthilkumar	vol.14, issue.1, Report 14, article no.2065	0948-7921	2024	SCI	4.44.	282	https://doi.org/10.1038/s41598-024-52605-3	0
4	An Optimized Deep Learning Approach for Predicting the Electric Motor Temperature Using IOT Sensors	Electric Power Components and Systems	Mayapandi Mokka Suresh Padmanabhan Thankappan	Vol.52, no.01,	15325016 , 15325008	2023	Scopus.	2.03	58	https://www.tandfonline.com/doi/full/10.1080/15325008.2023.2227194	0
5	A Water Cycle Approach for Maximum Power Point Tracking through an Interleaved Boost Converter	Electric Power Components and Systems	Krishnaram. K. Suresh Padmanabhan, T	Vol.51, issue.20	15325016 , 15325008	2023	Scopus.	2.03	58	https://doi.org/10.1080/15325008.2023.2210572	3
6	Step up fuzzy controller dc-dc switching converter with single switch and multi-outputs based on Luo topology	International Journal of Creative Research Thoughts (IJCRT)	Dr. V Mohan, A. Anith kumar	Vol.11, issue:6,	2320-2882	2023	Google Scholar	7.91	-	-	0

EDITORIAL BOARD



MR. YOKESWARAN
CHIEF EDITOR
ASSISTANT PROFESSOR



C. KUZHANTHAIVEL
CHIEF EDITOR
FINAL YEAR / EEE



A. AKASH
ASSOCIATE EDITOR
PRE-FINAL YEAR / EEE

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

ACCREDITED BY NAAC WITH GRADE 'A++'

OLD NAGORE ROAD, THETHI, NAGAPATTINAM-611002



ENGINEERING COURSES UG COURSES



B.E.Civil Engineering
B.E.Mechanical Enigeering
B.E.Electrical & Electronics Engineering
B.E.Electrical & Communication Engineering
B.E.Computer Science & Engineering
B.Tech Information Technology
B.E – Bio-Medical Engineering
B.Tech – Computer Science & Business Systems
B.Tech – Artificial Intelligence and Data Science

PG COURSES



M.B.A.Master of business Administration
M.C.A..Master of Computer Application
M.E.Manufacturing Engineering
M.E..Computer Science Engineering
M.E.Power Electronics & Drives
M.E.Communication System
M.E.Environmental Engineering