JERUSALEM COLLEGE OF ENGINEERING

(An Autonomous Institution affiliated to Anna University, Chennai)

VELACHERY MAIN ROAD, NARAYANAPURAM, PALLIKARANAI, CHENNAI – 100

NEWSLETTER

JANUARY 2023 - JULY 2023

Editorial Board

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Ms. S. Sivakanni

Chairperson's message

Principal's message

Vol. No. 21 July 2022 – December 2022

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(Approved by AICTE, affiliated to Anna University and accredited by NBA & NAAC)
Velachery Main Road, Narayanapuram, Pallikaranai, Chennai-600100.

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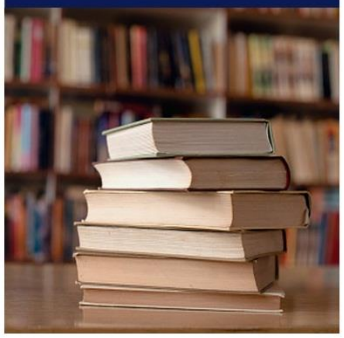

CEO's Message

It gives me great pleasure to learn that Jerusalem College of Engineering publishes the College Newsletter to capture the events during January 2022 to June 2022. The College is known for its remarkable achievements in academics, research and sports. The Newsletter acts as an envoy to carr their updates in its pages. Bearing the scars of COVID-19, the College has tried to come back to normalcy. I am also glad that the place of higher learning has entered the 28th year of valuable service to the state of Tamil Nadu. I am confident that all the budding engineers of the Institution would be able to achieve their aspirationsand be placed in the companies of their choice with the practical & technicalguidance of the committed and whole-hearted faculties.

I urge all the students to optimize the facilities and services available on campus to shine in studies and to acquire sufficient knowledge required for the industry. I also desire them to participate actively in extracurricular activities and club activities. I wish that the faculties would concentrate on research work and increase their publications in the days to come. I hope that this Newsletter will prove to be an impetus to both faculties and students to out do their performance in their profession and academics. I congratulate the Editorial Board for bringing out this Newsletter.

Prof Dr M Mala
Chief Executive Officer

Principal's Message

I am much pleased that our College brings out this Newsletter that records the activities and achievements of our Institution during January 2022 and June 2023. Presenting the achievements of all the Departments and Clubs, the Newsletter provides inspirati -on to others to showcase their skills and talents in curricular, co-curricular and extra - curricular activities. The efficient service of the faculties to educate, encourage and engross our students & to bring out their innate skills and talents by providing opportunities and to explore new avenues. Their aspiration to realize their dreams and passions is admirable.

I desire that the students would be focused more on increasing their domain knowledge, upgrading their skills, expanding their career opportunities; similar -ly, the faculties would be more determined to explore various methodologies to teach and train the emerging minds. I hope that Physical Education & Club activities would strengthen their interpersonal and leadership skills and inculc -ate a sense of community in their minds. I am certain that with the backing of the Management, our Institution will reach many a milestone in the ensuing years by achieving new heights in academics, research and sports. I congratu -late the Editorial Board for bringing out this Newsletter Best Wishes.

PROFILE OF THE INSTITUTION

Jerusalem College of Engineering, Chennai established in 1995, is a part of Jerusalem Educational Trust. Jerusalem College of Engineering was established in the year 1995 under the umbrella of Jerusalem Education Trust to impart quality engineering education. Over the period of 23 years it has made a mark of itself and got established as an institution which offers excellent engineering education. It is one of the very rare Institutes which is situated in close proximity to premier educational institutes and also the IT Hub of Chennai. The Institute offers 7 Under-graduate and 6 post-graduate course in Engineering, Technology and Management. The Institute has very good infrastructural facilities and laboratories with state-of-the art equipment. The faculty of the college are a nice blend of both academic and industrial experience. The alumni of the college holding key positions in various national/international industries and academic institutions have brought laurels to the institution. The Institute has been consistently getting University Ranks at both the UG and PG level. The Institute is accredited by NAAC and NBA.

VISION

Jerusalem College of Engineering is committed in emerging as an international institution of excellence in imparting the finest quality engineering, technology and management education rooted in ethical and societal values through various academic programmes, multi-disciplinary research, consultancy and entrepreneurship activities, and hence in contributing towards social transformation and nation building.

MISSION

- Generating abundant resources and making conducive policies, the management led by the Chairperson strives towards promoting globally competitive academic programmes augmented with value added courses, in-plant training, co-curricular activities and ambience that support intellectual growth and skill acquisition.

- Promoting collaborative trans-border research programmes, continuing education in synergy with academia, industries and research organizations leading to real time solutions and lifelong learning.

- Transforming young men and women into competent professionals and entrepreneurs motivated by a passion for professional excellence, driven by human values and proactively engage in the betterment of the society through innovative practices and academic excellence.

- Facilitating effective interaction among faculty and students, and fostering network of alumni, industries, institutions and other stakeholders for successful career gain and placement. Motivate faculty – students' interaction for maximal knowledge synthesis for their successful career gain and placement.

Quality Policy

"Qualitative Education and a sense of high discipline are promises".

We at the Jerusalem College of Engineering make to posterity and accordingly, we shall adopt and adhere to Quality policies, constantly monitor accountability and assure all stakeholders that we shall keep our promise.

Environment Policy

Jerusalem College of Engineering is committed to energy savings and a sustainable environment by:

i. Setting targets for improvements in energy savings and classroom utilization to minimize its use of energy and scarce resources through good practice, prudent maintenance, and use of energy efficient resources.
ii. Continually improving and maintaining the environment both within the college and, where appropriate externally.
iii. Prevention of pollution and minimization of air, water pollution and solid waste generation.
iv. Conservation of resources like water and power.
v. Training of all employees on environmental awareness and environmental management.
vi. Reducing the use of paper by critically appraising the need for use and by double-sided copying and use of electronic mail as far as practicable.
vii. Including environmental issues in curriculum delivery where appropriate.
viii. Linking with other organizations in the local community in dialogue and partnership to encourage and contribute to good environmental practice.
ix. Encouraging the users of the college to seek environmentally acceptable economics in use of transport.
x. Harnessing nature with green trees to beautify the surroundings.

DEPARTMENTAL

VISION

Department of Information Technology strives to provide quality education, academic excellence based on ethical and societal values, exposing students to all concepts, so as to promote global competitiveness in higher education, multi-disciplinary research and entrepreneurship.

MISSION

- To attain academic excellence through innovative practices in teaching and research methodologies.
- To produce globally competent information technologists and entrepreneurs.
- To motivate students to pursue higher education interlaced with communication skills leading to lifelong learning and societal transformations.
- To provide excellence in multi-disciplinary research and development activities rooted in ethical and moral values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To ensure graduates will be proficient in utilizing the fundamental knowledge of basic sciences, mathematics and Information Technology for the applications relevant to various streams of Engineering and Technology.

PEO2: To enrich graduates with the core competencies necessary for applying knowledge of computers and telecommunications equipment to store, retrieve, transmit, manipulate and analyze data in the context of business enterprise.

PEO3: To enable graduates to think logically, pursue lifelong learning and will have the capacity to understand technical issues related to computing systems and to design optimal solutions.

PEO4: To enable graduates to develop hardware and software systems by understanding the importance of social, business and environmental needs in the human context.

PEO5: To enable graduates to gain employment in organizations and establish themselves as professionals by applying their technical skills to solve real world problems and meet the diversified needs of industry, academia and research.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and 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.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the 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.

PO11: Project management and finance: Demonstrate knowledge and understanding of the 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.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO-1: Proficiency to effectively integrate IT-based solutions for contemporary cross-functional applications.

PSO-2: Ability to analyze, design, implement and evaluate the information systems with ethics, to meet the local and global requirements for scientific and industry solutions.

DEPARTMENT OF INFORMATION TECHNOLOGY

Industrial Visit to NSIC, Guindy on 15.02.2023

Industrial visit to REGIONAL METEOROLOGICAL CENTRE on 19.04.2023

Proposals / Patent Applied:

Sl. No	Name of the Investigator	Topic	Year applied
1	Dr. K. Sundaramoorthy Mrs. K. Pushpavalli Mr. K. Arun Prasad Mr. D. Sudhagar Mrs. ShanmugaPriya	Develop an innovative method to control traffic signal by using light bar	28/06/2023
2	Dr. K. Sundaramoorthy Mr. Kumar Parop Gopal Ms. K. Pushpavalli Mr. D. Sudhagar Mrs. S. Satheasree	Arduinomated Vehicle Parking System	28/06/2023

3	Mr. D. Sudhagar Ms. S. Satheasree Dr. K. Sundaramoorthy Mr. K. Arun Prasad Dr. M. S. Jeyalakshmi	Paraphrase Generation Model- Paraphraser on T5	28/06/2023
4	Mr. D. Sudhagar Dr. K. Sundaramoorthy Mr. K. Arun Prasad Mrs. K. Pushpavalli Mrs. K. ShanmugaPriya	Smart Shoes for Blind using Arduino and Ultrasonic Sensor	28/06/2023
5	Dr. K. Sundaramoorthy Mr. K. Arun Prasad	Portable Device for early detection of breast cancer using breathe and Machine Learning Techniques	28/06/2023
6	Mrs. K. Pushpavalli	A Novel method of Drone Agriculture Farming using Machine Learning Techniques	28/06/2023

Books Authored by Faculties

Sl. No	Name of the Author	Name of the Book	Publisher
1	Dr. K. Sundaramoorthy Mr. K. Arun Prasad	Introduction to Machine Learning and Artificial Intelligence	Scholars Press Dodo Books Indian Ocean Ltd, and OmniScriptum Publishing S.R.L Publishing group-978-613-8-97562-5

Publications of Papers in Journals

Sl. No	Name of the Author	Title	Name of the Journal	Date
1	Sudhagar D, Arokia Renjit J	An IoT and Fuzzy aware e-Healthcare system using feature optimization tuned T-CNN with high dimensional data	Journal of Intelligent & Fuzzy Systems	9.3.2023
2	Ajai R, AjithKumar C,	INDIVIDUALITY TRAITS PROJECTION	Third International Conference on	23rd & 24th March 2023

	Deepasri V U, Sudhagar D	BY TWEETS VIA MYERS BRIGGS TYPE INDICATOR USING MACHINE LEARNING	Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2023)	
3	Aravindraj M, Arjun R, Ashwin P, Sudhagar D	PARAPHRASE GENERATION MODEL PARAPHRASER-ON-T5 (AI PARAPHRASING TOOL)	Third International Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2023)	23rd & 24th March 2023
4	Guru Nivash V J, Karthikeyan S, Deiveega Dhana Roshini A, Aishwarya S	Arduinomated Vehicle Parking System	Third International Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2023)	23rd & 24th March 2023
5	Parthasarthi.V, Venkatesh, Kumar Parop Gopal	Implementation of Chatbot with E-Commerce Website	Third International Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2023)	23rd & 24th March 2023
6	K. Pushpavalli	FORWARD OBSTACLE COLISSION AVOIDANCE SYSTEM BASED ON FM RADIO WAVES TO AVOID ACCIDENTS	Journal of Pharmaceutical Negative Results	DOI: 10.47750/pnr.2022.13.S07.725

FDPs Attended by Faculties

Sl. No	Name of the Faculty	Title	Date
1	Christy Grace M A	Generative modelling in ML	25.04.23 online webinar
2	Dr. K. Sundarmoorthy	STTP on "Advanced Approaches and Insights on Artificial Intelligence and Deep Learning in Health Care"	27.03.2023 to 31.03.2023
3	Dr. K. Sundarmoorthy	how to do rapid SCI journal publication	18.03.2023
4	Christy Grace M A	how to do rapid SCI journal publication	18.03.2023
5	D. Sudhagar	Energy Literacy Training Course	24.3.2023
6	D. Sudhagar	STTP on "Advanced Approaches and Insights on Artificial Intelligence and Deep Learning in Health Care"	27.03.2023 to 31.03.2023
7	Mrs. K. Pushpavalli	Energy Literacy Training Course	23.3.2023
8	Mrs. K. Pushpavalli	International webinar on Digital Twin	27.3.2023
9	Mrs. K. Pushpavalli	how to do rapid SCI journal publication	18.03.2023
10	Mrs. K. Pushpavalli	STTP on "Advanced Approaches and Insights on Artificial Intelligence and Deep Learning in Health Care"	27.03.2023 to 31.03.2023
11	Mr. K. Arun Prasad	Energy Literacy Training Course	23.3.2023
12	Mr. K. Arun Prasad	International webinar on Digital Twin	27.3.2023
13	Mr. K. Arun Prasad	how to do rapid SCI journal publication	18.03.2023
14	Mr. K. Arun Prasad	STTP on "Advanced Approaches and Insights on	27.03.2023 to 31.03.2023

		Artificial Intelligence and Deep Learning in Health Care”	
15	K. ARUN PRASAD	Impact of Artificial Intelligence Towards the Technological Development-DAMBI DOLLO UNIVERSITY, ETHIOPIA	27-01-2023
16	K. PUSHPAVALLI	Impact of Artificial Intelligence Towards the Technological Development-DAMBI DOLLO UNIVERSITY, ETHIOPIA	27-01-2023
17	K. PUSHPAVALLI	ARTIFICIAL INTELLIGENCE FOR ROBOTICS sponsored by ATAL	Jan 17, 2023, to Jan 27, 2023
18	Mr. K. P. Gopal	Impact of Artificial Intelligence Towards the Technological Development-DAMBI DOLLO UNIVERSITY, ETHIOPIA	27-01-2023
19	K. ARUN PRASAD	ARTIFICIAL INTELLIGENCE FOR ROBOTICS sponsored by ATAL	Jan 17, 2023, to Jan 27, 2023
20	Dr. R. Vinoth	ARTIFICIAL INTELLIGENCE FOR ROBOTICS sponsored by ATAL	Jan 17, 2023, to Jan 27, 2023
21	D. Sudhagar	Workshop on "IPR and Basics of Patent Filing" organized by Career Point University, Kota.	18.1.2023
22	D. Sudhagar	Five days FDP on NBA SAR preparation Tier -1 at Jerusalem College of Engineering	3.01.2023 to 07.01.2023
23	K. ARUN PRASAD	NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION	January 27,2023
24	Mrs S. Sathea Sree	Three days FDP program on " Teaching Methodologies" organized by IIT, Chennai	5/01/2023 - 7/01/2023

25	Mr. K. P. Gopal	Five days FDP on NBA SAR preparation Tier -1 at Jerusalem College of Engineering	5/01/2023 - 7/01/2023
26	K. Pushpavalli	Atal FDP on Bio signal Processing using AI	2.2.23 - 21.2.23 &Agni College of Engineering
27	K. Arun Prasad	Atal FDP on Bio signal Processing using AI	2.2.23-21.2.23 &Agni College of Engineering

Industrial Visits / Educational Tours

Sl. No	Name of the Organisation	Date	Year	No of students
1	ParleG	13/03/23	II & III	59 & 41
2	ParleG	14/03/23	IV	50
3	Industrial Visit to NSIC	15/02/2023	II	59
4	Industrial Visit to NSIC	16/02/2023	III	41
5	REGIONAL METROLOGICAL CENTRE-CHENNAI	19/04/2023	III	41

Details of Internships by Students

Sl. No	Name of the Company	Date
1	OBJECT AUTOMATION Software Solutions Pvt Ltd	02.01.2023 to 28.04.2023
2	Shiash Info Solutions Private Limited	Jan to April 2023

Activities by Students

List of Rank Holders

Sl. No	Name of the Student	Year
1	Mathew H Peter (9.08 GPA)	I
2	Lokanya G (9.318 GPA)	I
3	Nivethithaa S (9.842 GPA)	II
4	Preethi S (9.842 GPA)	III
5	Pavithra S (9.842 GPA)	III
6	Bavani V (9.842 GPA)	III
7	Deepa Shri V U (9.842 GPA)	III

Certificate courses completed by students.

Sl. No	Name of the Student	Year
1	PREETHI.S	III

Parent-Teacher Meet

Sl. No	Name of the Department	Date
1	IT	19.3.2023