

JERUSALEM COLLEGE OF ENGINEERING

(An Autonomous Institution)

(Approved by AICTE, Affiliated to Anna University)

Accredited by NBA and NAAC with 'A' Grade)

Velachery Main Road, Narayanapuram, Pallikaranai, Chennai – 600 100



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NEWSLETTER

JANUARY – JUNE 2024

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VISION OF THE DEPARTMENT

The Department of computer science and engineering is dedicated to be a center of excellence, in producing graduates as ethical engineers, innovative researchers, dynamic entrepreneurs and globally competitive technocrats.

MISSION OF THE DEPARTMENT

- To craft students to be competent professionals with value based education, innovative teaching and practices.
- To enhance student 's soft skill, personality and ethical responsibilities by augmenting in-plant training, value added courses and co curricular activities.
- To facilitate the student as researchers by widening their professional knowledge through continuous learning and innovative projects.
- To produce dynamic entrepreneur through interaction with network of alumni industry and academia and extracurricular activities.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates will apply engineering basics, laboratory and job oriented experiences to devise and unravel engineering problems in computer science engineering domain.

PEO2: Graduates will be multi-faceted researcher and experts in fields like computing, networking, artificial intelligence, software engineering and data science.

PEO3: Graduates will be dynamic entrepreneur and service oriented professional with ethical and social responsibility.

PEO4: Graduates will ingress and endure in core and other prominent organization across the globe and will foster innovation.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO-I: The ability to understand, analyze and to develop the design related to real-time system such as IOT, secured automated systems, machine vision, computer vision and cognitive computing with various complexities, providing orientation towards green computing environment.

PSO-II: The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product.

PSO-III: The ability to innovate, introduce and produce socially relevant products to facilitate transformation of society into a digitally empowered knowledge economy, thereby to chart a successful career with a new dimension to entrepreneurship.

PROGRAM OUTCOMES (POs)

PO1: Engineering knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

PO3: Design/development of solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)

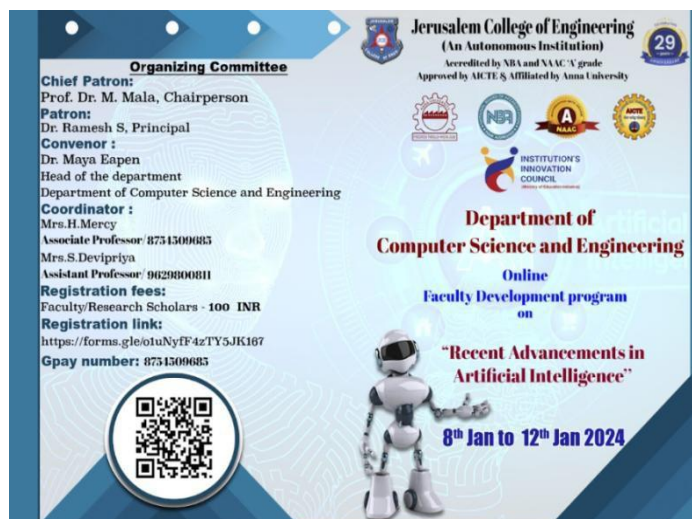
PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

1.SYMPOSIUM / CONFERENCE / WORKSHOPS /SEMINARS/FDP ORGANIZED BY THE DEPARTMENT



FDP on **Recent Advancements in Artificial Intelligence** by Mr. Sivakumar .S.K, Enterprise Architect(IAG),TCS, Mr. Viswanathan, Lead Architect, Unravel Data systems Pvt. LTD., Bangalore , Mr.Davidson Samraj S, Robotic process Automation Engineer, TCS (Alumni), G.Merlin Linda, Assistant Professor, Swarna Bharathi Institue of Science and Technology , Dr. Malathy Jawahar, Senior Principal Scientist, Central Leather Reasearch Institute, Chennai on 08.01.2024 to 12.01.2024 organized by Mrs.S.Deviprya & Mrs.H.Mercy.



5 days FDP on **Recent Advancements in Artificial Intelligence** by Mr. Subrahmani Babu,Associate Vice President, Mphasis, Bangalore on 01.04.2024 to 05.04.2024 organized by Dr.S.Ragavendran, Mrs. S.Gayathri , Mrs. Vanitha Sheba.



In association with Computer Society of India-Student Chapter conducted **CSI Valedictory** on 06.04.2024



Guest Lecture on **Product Management** by Mr.B.Neelakandan, Senior Product Manager AT&T Technologies for the students on 06.02.2024 organized by Mrs. P. Mahalakshmi.



The Department of Computer Science and Engineering in Association with Institution's Innovation Council (IIC) has organized 3-days **Industrial visit on CIIC** (Crescent Innovation Incubation Council) BSA Crescent Institute of Science and Technology on 14.02.24 for the students II year CSE.



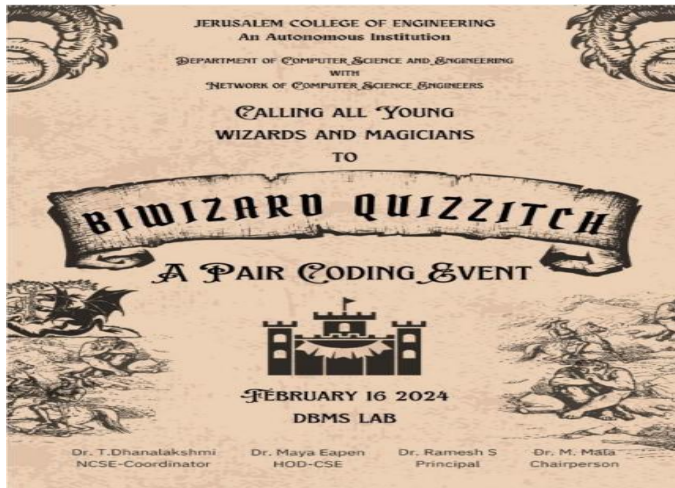
Industrial Visit to IIT Madras, Chennai on 28.02.2024 with III Year students.



The NCSE association has conducted series of **events** for the year 2024. This is the fourth event of those events through online mode on 6.03.2024 as the deadline for the submission of the digital posters. The participants included both II year and III year students from our CSE Department.



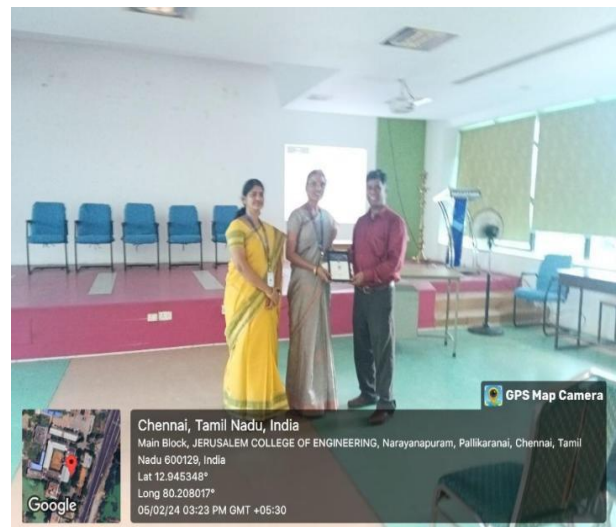
The NCSE association has conducted series of **events** for the year 2024. This is the second event conducted on 17.02.2024 in DBMS lab. The participants included both II & III year students from our CSE Department.



The first event of **NCSE association** on 16.02.2024 in our DBMS lab. The whole contest was split into 2 rounds in which II year and III year students as teams of 2 from our CSE Department had participated.



The **NCSE association** has planned series of events for the year 2024. This is the fourth event of those events. We had conducted this event on 11.03.2024 (FN) in our DBMS lab. The participants were from only I year students from S&H Department nearly 96 students participated.



The NCSE association has conducted fifth event on 6.04.2024 (AN) in LH 18 and 19 classrooms. Third year students participated in this Event.

In association with **NCSE** organized a seminar in the topic of Computer Vision on 05.02.2024 by Mr.K.S.Sivakumar, Enterprise Architect, TCS, Chennai for III students organized by Dr.T.Dhanalakshmi and Mrs.S.Gayathri.

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AUGMENTATION CELL AND STUDENT SUPPORT AND CAREER GUIDANCE (SSCG) CELL

Job Opportunities In Global Countries And Higher Education Abroad

Date : 01.03.24
Time : 2:00 pm - 3:30 pm
Venue : Seminar hall (CSE)

Ms. P. Mahalakshmi
Augmentation coordinator, CSE

Resource person
Ms. Soundarya Rajendiran
Counsellor and Coordinator
Videsh consultz , Chennai

MS.R.MALATHY
MEMBER SECRETARY
AUGMENTATION CELL

MR.N.JAVED
HEAD - SSCG
AUGMENTATION CELL

DR.SHEEJA V FRANCIS
DEAN-AUGMENTATION

DR.RAMESH S
PRINCIPAL

DR.M.MALA
CHAIRPERSON

Seminar on **Job Opportunities in global countries and higher education abroad** by Ms. Soundarya Rajendiran Counsellor and Coordinator Videsh consult Chennai for II, III CSE and CSBS students on 1.03.23 organized By Mr. N. Javed.

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Department of Computer Science & Engineering organizes a seminar on

Technical Skills for Salesforce to Supercharge your career

In Association with TechForce

Participants: II CSE, CS&BS
Venue: 4th floor, Seminar Hall

Date: 28.02.24
Time: 12.20 - 3.30 pm

Coordinators
Mr.N.Javed
Ms.C.Needhu
Ms.B.Shenbagavalli
Ms.J.RajeshPushpa

Resource Persons
Mr. Bhalaji
Ms. Bhuvana
Ms. Divya
Mr. Vijay

HOD-CSE
Dr.Maya Eapen

Principal
Dr.Ramesh.S

Chairperson
Dr.Mala

Seminar on **Technical Skills for Salesforce with Techforce Academy** Mr. Balaji, Ms. Bhuvana, Ms. Divya, and Mr. Vijay Techforce Academy Chennai for II CSE students of JCE on 28.02.2024, organized by Mr. Javed, Ms. Needhu, Ms. Shenbagavalli and Ms. Rajesh Pushpa.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes A Webinar on

SOFTWARE INFRASTRUCTURE IN INDUSTRY CLOUD COMPUTING

Resource Person
Mr. Sakthivel Gopi
DevOps Engineer
Falabella India, Bengaluru

12.02.2024
9.00 am to 10.00 am

IV YEAR CSE

Mrs.S.Gayathri
Dr.T.Dhanalakshmi
Coordinators

Dr.Ramesh S
Principal

Dr.M.Mala
Chairperson

Dr.Maya Eapen
HOD-CSE

Webinar on **Software Infrastructure in Industry – Cloud Computing** by Mr. Sakthivel Gopi Devops Engineer Falabell India, Bengaluru for II, III CSE & CSBS students of JCE on 12.02.24 organized By Dr.T.Dhanalakshmi AP/CSE and Mrs.S.Gayathri.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

In Association with
INSTITUTION INNOVATION COUNCIL (IIC)

Organizes
2 Days Workshop
on
ANGULAR MEETUP

RESOURCE PERSON
MR. KAPILDEV THAGAPILLAI
IT ANALYST
TCS, CHENNAI

REGISTRATION LINK:
<https://forms.gle/jATTZkYbtYcY5LjB>

8 & 9 Feb 2024

SEMINAR HALL IV FLOOR

COORDINATOR
Ms. SINDUJA.B

CONVENOR
Dr. MAYA EAPEN - HOD CSE

PRINCIPAL
Dr. RAMESH.S

CHAIRPERSON
Dr. M. MALA

Workshop on **Angular Meetup** by Mr. Kapil Dev Thagapillai IT Analyst TCS Chennai for II CSE students on 08.02.2024 and 09.09.2024 organized by Ms. Sinduja.B.



Workshop on “Data Science And Data Analytics Workshop” by Mr.J.GowriShankar, Data Engineer, Deloitte India Data Engineer Deloitte India on 13.03.2025 and 14.03.2025 organized by Mr.N.Javed Mrs.C.Needhu, Mrs.K.Shenbagavalli

2.Sanctioned Funded Projects

Sl. No	Name of the Investigator	Title	Amount	Year applied
1	Dr. D. Divya	Monitoring and Regulate Anopheles Mosquitoes using AI	9,80,000	2024
2	Mrs. S. Devipriya	Voice Assistant For Visually Challenged	8,20,000	2024

3.Patent Filed

Sl. No	Name of the Investigator	Title	Year applied
1	Ms.C P Jetlin	IoT Based Plants Health Monitoring (Nutrition Control) And Disease Prediction And Control System	24.05.2024

4.Books/ Book Chapters Authored by Faculties

Sl. No	Name of the Author	Name of the Book	Publisher
1	Ms.C.Needhu	Sustainable Development Using Private AI	Taylor & Francis: A Research Study on Concepts & Applications of Artificial Intelligence: Governance in Smart Cities

5.Publications of Papers in Conferences

Sl. No	Name of the Author	Title	Name of the Journal	Date
1	Ms. B.Shenbagavalli	Analysis on quantum reinforcement learning algorithms for prediction of protein sequence	Optical and Quantum Electronics	Feb 2024
2	Dr. Maya Eapen	E-voting system using cloud-based hybrid blockchain technology	Journal of Safety Science and Resilience	Feb 2024
3	Dr. Maya Eapen	Advancing Agriculture with CNN for Timely Leaf Disease Detection and Enhance Crop Production	International Conference on Sustainable Advanced Computing	March 2024
4	Dr. D.Divya	Three Stage Classification Framework with Ranking Scheme for Distracted Driver Detection using Heuristic-Assisted Strategy	Knowledge-Based Systems	March 2024
5	Ms. K.Shenbagavalli	Detection and classification of Diabetic Retinopathy using Inception V3 and Xception Architectures	International Journal of Nutrition, Pharmacology, Neurological Diseases.	March 2024
6	Ms.S Gayathri, Dr. Maya Eapen	An ensemble Model for Diabetic Prediction and Analysis	12th International Conference on contemporary Engineering and Technology 2024	March 2024
7	Ms. M.Vanitha Sheba	Farm Genius - A machine learning based approach to crop selection for sustainable agriculture	4th International conference on Artificial Intelligence, 5G communication and network technologies, ICA5NT 2024	March 2024
8	Ms. P.Mahalakshmi	Smart voting system using Blockchain Technology	Two days National Conference on Communiation: Sustainable Technology	March 2024
9	Dr.T.Dhanalakshmi	Knowledge Graph Generation for Research Articles.	International Conference on Sustainable Advanced Computing	March 2024

10	DrMaya Eapen, Ms. Jetlin C.P	Cardiomind: Ai-Driven Heart Disease Prediction For Better Health Outcomes	Journal of Clinical Otorhinolaryngology, Head and neck Surgery	April 2024
11	Ms .M. Aishwarya, Dr. D.Divya, Ms .J. Rajesh Pushpa	Ai-Savvy Shopping: Redefining E-Commerce Experiences	Advanced Engineering Science	April 2024
12	Ms.M.Vanitha Sheba	"One-Click Defender Antivirus Software using Behavior-based and Signature-based Detection"	ICSAC 2024	April 2024
13	Ms.H.Mercy Dr.Maya Eapen	Autonomous Soccer Robot with Object Tracking And Color Information	ICSAC 2024	April 2024
14	Ms.H.Mercy Dr.Maya Eapen	Electronic Gadgets -Cockpit	ICCDS 24	April 2024

6.FDPs Attended by Faculties / Any specific FDP's

Sl. No	Name of the Faculty	Title	Name of the Institution	Date
1	Dr.T.Dhanalakshmi Ms.H.Mercy Ms.M.Vanitha Sheba Ms.S.Devipriya Ms.K.Shenbagavalli, Ms.P.Mahalakshmi, Ms.B.Sinduja, Dr.D.Divya, DrMayaEapen, Ms.J.Rajeshpushpa, Ms.Jetlin C P, Mr. N.Javed, M.Aishwarya.	Recent Advancements in Artificial Intelligence	Jerusalem College of Engineering	08.01.2024 - 12.01.2024
2	Ms.Mahalakshmi Ms.B.Sinduja, Dr.D.Divya, Dr Maya Eapen, Ms.JetlinCP, Ms.M.Vanitha Sheba	Emerging Trends in Data Analytics	Saveetha College of Liberal Arts and Science	22.1.24- 26.1.24
3	Dr.D.Divya	Emerging Research Trends in Engineering and Technology	Kings Engineering College	04.1.24- 11.01.24

4	M.VanithaSheba Ms.S.Devipriya Ms.H.Mercy	Emerging Trends in Computer Science	Easwari Engineering College	22.1.24- 27.1.24.
5	Ms. B. Sinduja	Empowering Educators: AI tools for Engineering and Technology (AITET-2024)	Chaitanya Bharathi Institute of Technology	29.01.24- 02.02.24
6	Dr.T.Dhanalakshmi	Cyber Security and SIEM powered	QRadar in association with IBM	22-04-24- 26-04-24
7	Dr.T.Dhanalakshmi, Mrs.Mahalakshmi, Ms.Sinduja.B, Dr.D.Divya, Mr.N. Javed, Ms.C.Needhu, Ms. Mercy Hirudayaraj, Ms. Vanitha Sheba.M, Ms. Jetlin C P , Ms.M.Aishwarya, Ms. J.Rajesh Pushpa	Cyber Sec, Cyber Defense, Digital Forensic	Jerusalem College of Engineering	01.04.24- 05.04.24
8	Dr.D.Divya	Outcome Based Education (Use of AI Tools in Teaching and Learning)	Dr.M.G.R Eductional and Research Institute	22.04.24- 26.04.24
9	Ms.M.Aishwarya, Ms.C. Needhu	Generative AI Models and Application of Machine Learning	Shri Vishnu Engineering College for Womens(A) Bhimavaram	21.5.24- 25.5.24
10	Ms.MahaLakshmi M.VanithSheba, Ms.S.Devipriya, S.Gayathri	, FDP on Unlocking Potential -Emerging trends on computing technologies	Dr.M.G.R Eductional and Research Institute	6.5.24- 10.5.24

7.Certificate Courses Completed by Faculties

Sl. No	Name of the Faculty	Title	Name of the Institution	Date
1	M.Aishwarya	Research Methodolody in natural science	NPTEL	April
2	J.Rajesh Pushpa	Deep learning – IIT Ropar	NPTEL	April
3	J.Rajesh Pushpa	Deep learning	NPTEL	April

8.MoUs

Sl. No	Name of the Institution	Date
1.	Tech Force Academy	28.02.2024

EDITORIAL BOARD

STUDENT COORDINATORS

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Ms.Lavanya Mala A,
Ms.Poornima A,
Ms.Vasumathi Kachi Kidambi

STAFF COORDINATOR

Dr.D.Divya, Associate Professor ,CSE