Igniting Innovation, Inspiring Change

TEDxGCEM

Graduation Day

GCEM Open House

Kannada Rajyothsava

IDIRC Inauguration

Alumni Meet

Messages from Our Visionaries

GCEM AROHAN reflects not just our achievements, but also the spirit, dedication, and growth of our entire community.

It fills me with immense pride to witness the journey GCEM has undertaken over the past year.

As a General Secretary, I have seen our students push boundaries, our faculty lead with passion, and our institution rise to greater heights. This newsletter is celebration of that collective effort - a reminder that, with vision and the team work, we can achieve excellence.
Let us continue this upward journey together.

Warm regards,
Dr. C. Prabhakar
General Secretary, Gopalan Foundation

It is with great pride and pleasure that I pen this message for our college magazine - a vibrant platform that captures the essence of academic life, creativity, and achievement at our institution.

An engineering college is not merely a place of technical education; it is a crucible where ideas are shaped, innovations are born, and leaders of tomorrow are nurtured. Our students, faculty, and staff have continually upheld this vision through their hard work, commitment, and pursuit of excellence.

This magazine is more than a compilation of articles and achievements - it is a mirror of our campus life, showcasing the intellectual spirit, co-curricular engagement, and the diverse talents of our student community. It brings to light the efforts of those who go beyond textbooks to explore, invent, express, and inspire.

I take this opportunity to congratulate the editorial team and all contributors for curating such a meaningful edition. I encourage every reader - student, faculty, or alumni - to draw inspiration from the stories, projects, and ideas shared within these pages. Let this magazine remind us all of our collective journey and renew our commitment to academic excellence, ethical values, and lifelong learning.

Warm regards,
Mrs. Sunita Prabhakar
Director, Gopalan Organics

Messages from Principal

I am very happy to share that Gopalan College of Engineering & Management has brought out its Newsletter for the year 2024-25. A Newsletter is an authentic record of the various activities that are undertaken by the college throughout the year. It is a platform for the students to explore their talent. The Newsletter is not only informative but also has a great educational value. College Newsletter always portrays the thoughts, ideas, dreams, creative writings and aspirations of young minds and it is a platform that provides exposure and freedom to express your views. Gopalan College of Engineering & Management is progressing by leaps and bounds in not only academics but also extra-curricular activities.

I heartily congratulate the Staff, Members of the Editorial Board and students for their tireless efforts and wish them all the best. I appreciate the hard work and efforts in bringing out this magazine.

With good wishes. Stay safe and healthy

Dr. Arun Vikas Singh
Principal, GCEM

From the EDITOR'S Desk

It gives us immense pleasure to present GCEM AROHAN, our platform to celebrate the achievements, ideas, and spirit of GCEM. This edition brings together the milestones of our institution, departments, faculty, and students, alongside creative contributions that showcase our vibrant community.

Every achievement and event you read here reflects our shared passion for learning, innovation, and progress. GCEM AROHAN is not just a newsletter; it's our story of growth and the inspiration to aim higher.

Thank you to everyone who contributed to making this issue possible. Let's keep moving forward, together.

- Editorial Team

Inside This Issue

EDITORIAL TEAM

Dr. Manoj Challa
Professor & HOD
Dept of CSE(AI&ML), GCEM

Prof. Kartheek G C R
Asst. Professor,
Dept of CSE, GCEM

Chethan Kumar S L
7th Semester,
Dept of CSE, GCEM

Abhishek Mannatharaj
5th Semester,
Dept of CSE, GCEM

ACTIVITIES @GCEM

We are proud to announce that our **Department of Aeronautical Engineering has been accredited by** NBA – NATIONAL BOARD OF ACCREDITATION

A MARK OF QUALITY EDUCATION COMMITMENT TO ACADEMIC EXCELLENCE

INDUSTRY-ORIENTED CURRICULUM

INNOVATIVE RESEARCH & SKILL DEVELOPMENT

This achievement reflects our dedication to shaping the future of aerospace by providing world-class education, fostering innovation, and empowering the next generation of aeronautical engineers.
A big thank you to our Management, faculties, students, parents, alumni, and industry partners for their unwavering support in achieving this milestone!

The Department of Aeronautical Engineering is now accredited by the **National Board of Accreditation**. Congratulations to all the honourable members of management, Principal, Teaching, Non-Teaching Staff, Students, Alumni, Parents, and Recruiters.

Proud Moment for GCEM! -

Gopalan College of Engineering and Management (GCEM) has secured **Top 103 Rank** in the **Times Engineering Ranking 2025!** A heartfelt thank you to our dedicated faculty, passionate students, and supportive stakeholders who continue to drive GCEM forward.

Crafting Engineers, Shaping the World

➢ GCEM organized internal Smart India Hackathon on 14th September 2024 at GCEM. This preliminary round aimed to shortlist teams for the final national-level Smart India Hackathon (SIH 2024).

➢ Valmiki Jayanti was celebrated at GCEM on 21st October 2024, The event honoured the contributions of Sage Valmiki, the revered author of the Ramayana.

➢ The Annual Sports Meet 2024 of Gopalan College of Engineering and Management (GCEM) was held from 23rd November to 28th November 2024, marking a week of energetic competitions, teamwork, and athletic excellence.

➢ The Kannada Rajyotsava celebration at Gopalan College of Engineering and Management (GCEM) on 29th November 2024 featured various events to honor the rich cultural heritage and significance of Karnataka.

➢ The Inter Departmental Innovative Research Center was inaugurated on 2nd December 2024, at Gopalan College of Engineering and Management, Bangalore. The Center's primary objective is to foster a vibrant research culture among students and faculty across all departments, transcending disciplinary boundaries. It aims to facilitate interdisciplinary collaboration, leveraging emerging technologies to drive innovative product development.

➢ GCEM - Inter Departmental Innovative Research Centre (IDIRC) & Institutions Innovation Council Unlock the Power of Digital Research. The GCEM Library & Information Centre, in partnership with VTU Consortium E-Resources, successfully conducted a training program on 6th March 2025, **Mr. M.S. Srinivasa from EBSCO** provided expert guidance on accessing valuable digital resources, including e-journals and e-books.

➢ The "Cybersecurity and Digital Hygiene" was organized by the Indian Red Cross Society, GCEM for the first-Year Computer Science Students on 17th April 2025. **Mrs. Manju Mehra, Cybercrime Intervention Officer and Assistant Chief Traffic Warden, Bengaluru City Police** was the chief guest for the event.

ALUMNI MEET

➢ Gopalan College of Engineering and Management (GCEM) hosted the Alumni Meet 2024 on 19th October 2024, bringing together alumni from various branches who actively participated and shared their valuable experiences. This event gave an opportunity to our alumni to interact with the juniors and guide them in various aspects, and to build strong alumni network for the institution.

TEDx GCEM - ECHOES OF EVOLUTION

TEDxGCEM - an independently organized TED event that brings together innovative thinkers, passionate doers, and creative performers from our community to share ideas worth spreading, was organized on 24th May 2025. The event featured a diverse range of speakers who challenged, inspired, and motivated participants to think differently about the world and their place in it. The events theme - Echoes of Evolution is a journey through time where whispers of the past ripple into the present.

LIST OF SPEAKERS:

1. **Sanjana Rathi**, CEO & Founder of CyberDiplomat
2. **Sundeep Pandit**, Author, Life Alchemist, and Founder of Soul In Harmony
3. **Aditi Gupta**, CEO & Founder of TechTip24
4. **MC David Clear**, Founder of Loud Clear and Associates
5. **Manya Goel**, Instagram Influencer
6. **Shinas Ashraf**, Founder and Director of Cream Story

LIST OF PERFORMERS:

1. **IGNITE x BLACKONYX**, Dance Crew
2. **MEDHA M**, Classical Dancer

> "The best way to predict the future is to invent it."
> — Alan Kay

TEDx GCEM

x = independently organized TED event

SPEAKERS

SANJANA RATHI
CEO & Founder of
CyberDiplomat

SUNDEEP PANDIT
Author, Life Alchemist &
Founder - Soul in Harmony

MANYA GOYAL
Instagram Influencer

ADITI GUPTA
CEO & Founder of
TechTip24

M C DAVID CLEAR
Founder of Loud Clear and
Associates

SHINAS ASRAF
Founder and Director of
Cream Story

TEDx GCEM
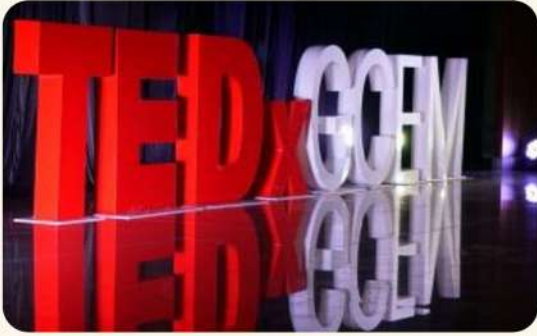x = independently organized TED event

PERFORMERS

MEDHA M
CLASSICAL DANCER

IGNITE x BLACKONYX

✨ Moments from TEDxGCEM ✨

✨ Honoring the minds behind the magic ✨

DEPARTMENT OF AERONAUTICAL ENGINEERING

Activities

- ➤ Department of Aeronautical Engineering organized National Space Day Celebration 2024 in honor of the remarkable success of the Chandrayaan-3 Mission, featured inspiring Poster Presentations and Model Making Competitions, along with a thought-provoking Talk on Human Space Exploration by distinguished chief guest, **Debadatta Mishra**, **CEO (offg.) of the Aerospace and Aviation Sector Skill Council**, **NSDC, GOI**, and **former Scientist-F at ISRO** on 24th Aug 2024.

- ➤ Department of Aeronautical Engineering Celebrated the success of Igniting Minds 2.0 on 15th October 2024 paying a heartfelt tribute to the visionary Dr. A P J Abdul Kalam on his 93rd birth anniversary.

- ➤ Department of Aeronautical Engineering organized Radiance 2.0, an event dedicated celebrating National Science Day on 28th February 2025. Radiance 2.0 featured: Technical Quiz, Debate Competition and Poster Presentation.

➤ Department of Aeronautical Engineering organized a technical talk on "Ansys STK – Modeling and Simulation" on 4th March 2025. **Mr.Danish Abdul Khader**, **Space System Engineer, SS Technologies** was the resource person.

➢ Department of Aeronautical Engineering successfully conducted AEROVATE 2K25 Annual Project Exhibition in association with Gopalan Aerospace on 24th May 2025.

CONNECTING TO INDUSTRY

➢ On 18th July 2024, 4th and 6th semester Aeronautical Engineering students from Gopalan College of Engineering and Management visited Acharya Institute of Technology, Bengaluru. They explored flight simulators, laboratory facilities, and attended insightful presentations on various student projects. Extensive interactions with Acharya professors made the visit enriching, fostering future collaborative research opportunities, particularly in aircraft systems development and joint campus placements.

➢ On 19th July 2024, Dept of Aeronautical Engineering hosted 6th semester Aeronautical Engineering students from Acharya Institute of Technology at Gopalan College of Engineering and Management, Bengaluru. The students had an enriching experience exploring our state-of-the-art facilities in Aerodynamics, Propulsion, Aircraft Structures, and our cutting-edge research laboratories, including the Skill Lab and GRIT Lab. They also gained valuable insights from our student projects.

➢ Department of Aeronautical Engineering organized an industrial visit to the HAL Heritage Centre & Aerospace Museum on 26th February 2025.

➢ Department of Aeronautical Engineering organized an educational visit to the Indian Institute of Science (IISc), Bengaluru, on 1st March 2025, to participate in their annual Open Day.

➢ Department of Aeronautical Engineering successfully completed an industrial visit to the Varahi Underground Power House, Hosangadi on 12th April 2025.

➢ Department of Aeronautical Engineering visited the 8th Bangalore Space Expo, where they explored cutting-edge space technologies, satellite innovations, and advancements in aerospace engineering.
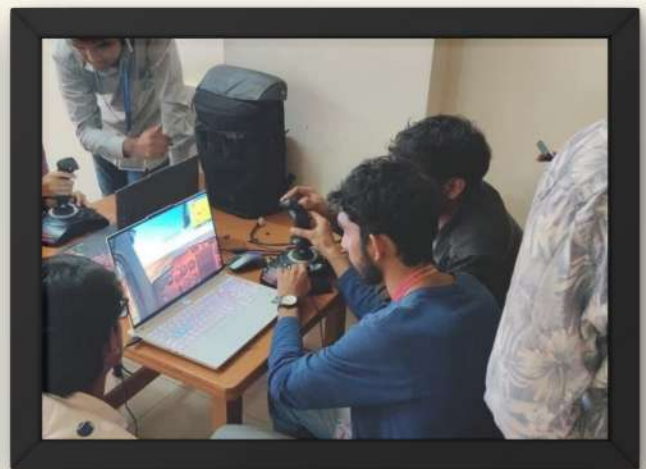
Faculty Achievements

Publications :

➢ Dr. G. Purushotham published a research paper titled "Experimental investigation on the effect of stacking sequence on the mechanical properties of bamboo and carbon fiber reinforced epoxy hybrid composite for aerospace and automobile application" in Academic Journal of Manufacturing Engineering.

Patents:

➢ The patent "Gimbal Inspection Assembly with a Vibration Mitigation Module" filed by Dr. Ramesh G. Dr. Purushotham G., Suprith M. Mr. Saviraj A S is published at IP India.

➢ Dr. Purushotham G, Suprith M. filed a patent on "An integrated electric propulsion system for UAV/drone" at IP India.

➢ Dr. S V Manjunath and team from Aeronautical Engineering department filed a patent "An AI-Driven Cognitive UAV for Autonomous Track Surveilance" at IP India.

➢ Dr. S V Manjunath and team from Aeronautical Engineering department filed a patent "AI-Powered Smart Drone for Precision Areial Delivery" at IP India.

Workshops &FDP

➢ Department of Aeronautical Engineering organized workshop on Flight Simulator by ENVICTUS: AE Students' Club and our dedicated organizers Rithik P and Steven Joel on 13th & 14th Nov 2024.

➢ Department of Aeronautical Engineering organized workshop on Drone Den RC Airplane by **Dr. Shoeb Ahmed Adeel, Technical Director and Head of UAV Division.**

Student Achievements

➢ Mr. Dheeraj S, 3rd sem, Aeronautical Engineering secured the 1st Prize in the Above 18 Adults category, National Level Karate Tournament organized by the Japan Shotokan Karate Academy on 24 November 2024, in Bengaluru.

➢ Karanam Vaishnavi, Revati N Marihal, Abhishek S, Dilip, Anushree 3rd year Aeronautical Engineering students won the Best Innovation and Design Award at the National level Fixed Wing RC Aircraft Competition held on 25th and 26th October 2024 at Jain University.

➢ Gowtham Y V, Kiran Kumari Bhat, Gudalkar Pratish, Shashank P, Shekhar G from Department of Aeronautical Engineering representing Team G371, have made it to the Top 5 at the prestigious VII National Aerospace Conceptual Design Competition(NACDeC-VII), organized by The Aeronautical Society of India. Competing against 45 teams nationwide, our students stood among the final 5 and have won a cash prize of ₹25,000! This achievement reflects the dedication, innovation, and teamwork of our students and faculty.

➢ Team from the Aeronautical Engineering Department has won the Best Project Award of the Year at the 47th series of the Student Projects Programme - State Level Annual Poster Presentation and Exhibition.

➢ Bhadri V Bharadwaj won 3rd prize in Chess competition at Algo-Rhythm.

DEPARTMENT OF BASIC SCIENCE

Activities

➢ Department of Mathematics organized Poster and PPT Presentation competitions on the occasion of the birth anniversary of Sri Srinivasa Ramanujan and National Mathematics Day on 23rd December 2024.

➢ Department of Basic Science organized orientation program for 2nd semester students from 17th to 20th March 2025. Following events are organized in the program-

1. The Game Called Life
2. The Creativity Corner
3. Confidence-Building Bootcamp
4. Cultural Day

The 4-day orientation by Gopalan Skill Academy was a vibrant mix of fun, creativity, cultural exploration and communication-building. It successfully helped students warm up to campus life while equipping them with essential life and soft skills in an engaging and memorable way.

➢ The Department of Chemistry organized guest lecture on "Chemistry of Everyday Gadgets", by **Dr. Preethi G, Associate Professor & HOD, Dept. of Chemistry, MVJ College of Engineering and Technology, Bengaluru** on 24th May 2025.

Faculty Achievements

Ph.D:

➢ Dr. Richa Singh successfully completed Ph.D in Chemistry from Barkatullah University (BU), Bhopal, Madhya Pradesh.

Publications :

➢ Dr. Palle Prathapa Reddy published paper titled "On commutativity of Generalized Periodic Rings" in Journal of Computational Analysis and Applications (JoCAAA).

➢ Dr. Palle Prathapa Reddy published paper titled "A Note on Equivalence Relations on Ternary Semigroups" in Annals of Pure and Applied Mathematics.

➢ Paper titled "Effects of Radiation absorption, Buoyant force and thermal radiation on an Unsteady MHD Jeffrey nanofluid flow past an isothermal inclined plate in the Presence of Joule heating and viscous dissipation" by Dr. Palle Prathapa Reddy is accepted by Theoretical and Mathematical Physics.

➢ Paper titled "Prime Weakly Standard Rings" by Dr. Palle Prathapa Reddy is accepted by Boletim da Sociedade Paranaensede Matematica (BSPM).

➢ Dr. Rajasri Sen Jaiswal published paper titled "Precipitation water at the peak cloud liquid water and surface rainfall" in SPIE International Conference on Remote Sensing, SPIE, Edinburgh Scotland 2024.

➢ Paper titled "A location-centric rain-induced cross-polarization model" by Dr. Rajasri Sen Jaiswal is accepted at International Conference on Remote Sensing of Clouds and Atmosphere.

➢ Dr. Richa Singh published paper titled "Aquatic insect diversity and its impact on the pysical and chemical conditions of Upper Lake during monsoon season" in International Journal of Creative Research Thoughts (IJCRT).

➢ Prof. Vijaya Talapatadur published paper titled "Solvothermal method synthesized SnSnanoplates composites for electrochemical sensing of toxicions Hg^{2+} and Pb^{2+}" in Journal of the Iranian Chemical Society.

Others:

➢ Dr. Rajasri Sen Jaiswal served as an invited speaker at 3rd Global Summit on Advances in Earth Science and Climate Change, Barcelona, Spain, September 2024.

➢ Dr. Rajasri Sen Jaiswal served as a reviewer at international journal "Current World Environment".

Student Achievements

➢ Sahana S and Plabonika Sahu 1st year Aeronautical Engineering students won 1st place in PPT Presentation and poster competitions on the occasion of the birth anniversary of Sri Srinivasa Ramanujan and National Mathematics Day on 23rd Dec 2024.

➢ Carol Sam and M Hanshika 1st year Aeronautical Engineering students won 2nd place in PPT Presentation competitions on the occasion of the birth anniversary of Sri Srinivasa Ramanujan and National Mathematics Day on 23rd Dec 2024

➢ Punith Kumar C and Pavan 1st year CSE(AI&ML) students won 2nd place in Poster Presentation competitions on the occasion of the birth anniversary of Sri Srinivasa Ramanujan and National Mathematics Day on 23rd Dec 2024.

➢ Simran and Sreemukhi won 2nd and 3rd prize respectively in Squid Game competition at Algo-Rhythm.

➢ Zidane Richardson won 1st prize in Chess competition at Algo-Rhythm.

➢ Aspaan Kaur, Battina Roy and Manya won 1st prize in InnoVision mini project exhibition conducted for first semester students on 11th Jan, 2025.

➢ Sai Prakhya, Sanjay Pillai and Tejas R won 2nd prize in InnoVision Mini project exhibition conducted for first semester students on 11th Jan, 2025.

➢ Veeresh M V, Dhanush R and Tejas Arya won 3rd prize in InnoVision mini project exhibition conducted for first semester students on 11th Jan, 2025.

➢ Tejas R, Riya Sakthivelan, Sanjay Pillai and Shivayogi .D.S won 1st prize in InnoVision mini project exhibition conducted for second semester students on 28th June, 2025.

➢ Yeswanth, Nived shaji and Nithesh V won 2nd prize in InnoVision mini project exhibition conducted for second semester students on 28th June, 2025.

➢ R Hemashree, Nanditha .K.N, M Prathima and Aditya Kumar Mahato won 3rd prize in InnoVision mini project exhibition conducted for second semester students on 28th June, 2025.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Activities

➢ The Department of CSE organized Mini Project Exhibition "INNO VISION 2025" for the 3rd Semester students on 23rd December 2024.

➢ The Department of CSE organized Mini Project Exhibition "INNO VISION 2025" for the 1st Semester students on 11th January 2025.

➢ Department of CSE organized Expert Talk on Technical Documentation and White Paper Writing by **Mr. Priyadarshi Mishra, Business R&D Lead at HITACHI Energy Solutions Pvt. Ltd**. on 8th March 2025.

➢ Department of CSE successfully inaugurated the IEEE Student Chapter on 15th March 2025 featuring distinguished chief guests, **Dr. Srinivas Talabattula, Professor, ECE at the IISc and former Chair of the IEEE Photonics Society and IEEE Communication Society, Bangalore Chapter,** and **Dr. Archana Mathur, Professor at Nitte Meenakshi Institute of Technology and Treasurer of the IEEE Computer Society, Bangalore Chapter.**

➢ Department of CSE organized expert talk on Quantum Photons by **Dr. Srinivas Talabattula, Professor, Dept of ECE, IISc** on 15th March 2025.

➢ The Department of CSE successfully completed "ALGO-RHYTHM 2.0" with Overwhelming Participation of 209 team registrations and 460+ students from 40+ colleges actively participating on 27th and 28th March 2025.

Chief Guest & Key note Speaker - We werehonoured to host **Madhavi Shankar, Co-Founder & CEO of Space Basic and a Forbes Asia Under 30 entrepreneur**. Her insights into AI-powered student housing and cafeteria automation lefta lasting impact, inspiring us to drive sustainability and efficiency in educational institutions.

➢ Department of CSE conducted a Parent Teachers Meeting on 12th April 2025.

➢ Department of CSE organized expert talk on "Future proofing your tech career in the age of AI" by **Mr. Abraar Syed, Head of Platform Engineering @ Dobin, Singapore** on 19th April 2025.

➢ Department of CSE organized GCEM HACKS 2K25, a 24-hour hackathon on 25th and 26th April 2025. 20 teams from various colleges from Karnataka participated in the event.

➢ The Department of CSE organized the Final Year Project Exhibition "Aavishkar 2K25" on 17th May 2025.

➢ The Department of CSE organized Mini Project Exhibition "INNO VISION 2025" for the 4th Semester students on 31st May 2025.

➢ Students and Staff of Dept, of CSE celebrated Onam on 17th September 2024.

➢ Department of CSE organized farewell for final year students on 13th June 2025.

➢ Students and Staff of Dept, of CSE celebrated Ethnic Day

➢ The Department of CSE celebrated Dasara on 10th October 2024.

➢ On 7th December 2024, second-year students of the Department of CSE hosted Freshers Day "ADVAYA 2024" to welcome the new batch of CSE and CSE (AL-ML) students.

Club Activities

➢ Techeon club of Department of CSE organized Code Debugging competition on 11th September 2024.

➢ Winfinity club of Department of CSE organized Debarotrium on 18th September 2024.

➢ Department of CSE organized orientation of clubs on 3rd October 2024.

➢ TechEon club of Department of CSE organized a club activity on Git and GitHub on 9th October 2024.

➢ Winfinity club on Department of CSE organized Garbha group dance on 16th October 2024.

➢ Techeon club of Department of CSE organized CODE SWAP 2024 event on 23rd October 2024

➢ Winfinity club of Department of CSE organized Battle of Boards event 30th October 2024.

➢ TechEon club of Department of CSE organized "30 Days of Code" event from 13th November 2024 to 3rd December 2024.

➢ Winfinity club of Department of CSE organized BGMI Tournament on 19th February 2025.

➢ TechEon club of Department of CSE organized a seminar on MONGODB on 5th March 2025.

Alumni Talks

➤ Department of CSE organized an Alumni talk on roadmap.sh on 30th August 2024. by **Ms. Dhathri and Ms. Shruthi, Data Engineer, Global Logic**

➤ Department of CSE organized an Alumni talk on "Mastering BE Honours & Placement Strategies" by **J Prince Kelvin, SAP ABAP Consultant, Hitachi Digital Services** on 14th September 2024.

➤ Department of CSE organized an Alumni talk on Supply Chain Management by **Sneha K M, Business Analyst, Itoizon** and **Sandra V, Cloud Associate, Hitachi Digital Services** on 21st September 2024.

➤ Department of CSE organized an Alumni talk on "Purpose and Progress, understanding our Goals and Actions" by **Shubham Saha, QA Engineer, Charles Hudson Technology Solution Pvt Ltd** on 3rd December 2024.

➤ Department of CSE organized an Alumni talk on "Beyond your DEGREE - Unlocking your real career potential" by **Mr. Nishanth, BI Developer, Rapidd Technologies** on 8th May 2025.

Connecting to Industry

➢ Department of CSE organized Industrial Visit to ISRO Telemetry, Tracking and Command Network (ISTRAC) & Indian Deep Space Network (IDSN) Bengaluru on 5th July 2024.

➢ Department of CSE organized Industrial Visit to ISRO, U R Rao Satellite Centre (URSC) Bengaluru On 23rd July 2024.

➢ Department of CSE organized Industrial Visit to Puthur Infotech Pvt Ltd on 15th November 2024.

➢ Department of CSE organized Industrial Visit to ISRO, U R Rao Satellite Centre (URSC) Bengaluru on 17th March, 2025.

➢ The IDS Applied Blockchain Center (Center of Excellence) successfully inaugurated at the Department of CSE on Monday 23rd June 2025.

Faculty Achievements

Ph.D

➢ Dr. Subrahmanya H M on successfully completing his Ph.D in Computer Science and Engineering from Visvesvaraya Technological University (VTU), Belagavi!

Publications:

➢ Prof. Anupama P V – Anomaly Detection in Cloud Networks using Machine Learning Techniques, International Conference on Advances in Information Technology (ICAIT).

➢ Prof. Kartheek G C R – Cutting Edge Approaches in Object Detection: A Deep Dive into Machine Learning and Deep Learning Techniques, Journal of Information Systems Engineering and Management (Accepted).

➢ Prof. Kartheek G C R – Mental Health Severity Level Classification Using DASS-42 and Machine Learning, International Conference on Computing, Communication and Networking Technologies (ICCCNT).

➢ Prof. Kavitha Bai A S – Explainable Deep Learning for Medical Image Captioning in Chest X-ray Analysis, 2025 International Conference on Knowledge Engineering and Communication Systems (ICKECS).

➢ Prof. Kavitha Bai A S – Early Prediction of Heart Disease in Diabetic Patients using TabNet's Dynamic Attention Mechanism, 2nd IEEE International Conference on Machine Intelligence and Smart Innovation (ICMISI 2025).

➢ Dr. Manoj Challa – Analytical Study of Authentication and Lightweight Security Techniques in 5G-Enabled IoT Networks, Journal of Information Systems Engineering and Management (Q3 Journal).

➢ Dr. Manoj Challa – Botnet Attack Detection in IoT Smart Homes: A Machine Learning Approach, International Conference on Power Engineering and Intelligent Systems (Springer).

➢ Prof. Praveena M – Introduction to Machine Learning Techniques, in Foundation and Frontiers of Machine Learning (Book Chapter - in the book Foundation and Frontiers of Machine Learning).

➢ Dr. Subrahmanya H M – Real-Time Machine Learning Based Malware Detection in Android, International Conference on 6G Communications Networking and Signal Processing (SGCNSP) (Springer).

- ➢ Dr. Subrahmanya H M – HELMNET: Helmet Detection Using YOLOv8, 9th International Conference on Inventive Systems and Control (ICISC 2025).
- ➢ Dr. Swathi Y – Temporal Dynamics of Consumer Engagement in E-Commerce, IEEE International Conference on Computing and Sustainability for Intelligent Future (COMPSIF 2025).
- ➢ Dr. Swathi Y – Deep Forest-based Intrusion Detection System for Edge Intelligence Assisted Smart Homes, IEEE International Conference on Computing, Communication and Learning (COCOLE 2024).
- ➢ Dr. Swathi Y – Topic Modeling and EDA for Analysing User Sentiments using ChatGPT, IEEE International Conference on Signal Processing and Advance Research in Computing (SPARC 2024), September 2024.
- ➢ Dr. Swathi Y – Depression Detection from Social Media Interactions using Machine Learning Approaches, IEEE International Conference on Control Systems and Signal Processing.
- ➢ Dr. Swathi Y – Plant Health Monitoring Using Bubble Identification Technique, 2024 IEEE International Conference on Smart Power Control and Renewable Energy (ICSPCRE 2024).
- ➢ Dr. Swathi Y – LOCOEYE – Detection of Railway Signal Lights and Pedestrians on Tracks Using YOLOv8, 2025 Third International Conference on Networks, Multimedia and Information Technology.
- ➢ Dr. Swathi Y & Prof. Preeti Jain – Textbooks vs. Pre-Made Notes: A Machine Learning Approach to Academic Success Prediction, 9th International Conference on Inventive Systems and Control (ICISC 2025).
- ➢ Prof. Vinay G – Lightweight Surface Structure Estimation using Monocular Vision and Infrared Dot Projection, 2nd International Conference on Information Technology, Electronics and Intelligent Communication Systems (ICITEICS 2025).
- ➢ Prof. Vinay G – Lightweight Machine Learning Model for Fine-Grained Activity Recognition System in Advancing Elderly Healthcare, International Conference on 6G Communications Networking and Signal Processing (SGCNSP) (Springer).

Others:

- ➢ Dr. Manoj Challa – Served as a Resource Person for a 5-day FDP on Advanced AI Tools, Techniques and Applications at GCEM, Bangalore.
- ➢ Dr. Manoj Challa – Served as a Reviewer for Journal of Engineering Research and Sciences, NMITCON – IEEE Conference, IEEE International Conference on Computing and Intelligent Reality Technologies (ICCIRT 2024 - in association with IEEE Madras Section, organized by Karunya University).
- ➢ Dr. Manoj Challa – Served as an Advisory Member for NAAC & NBA at SEA College of Engineering, Bangalore and CBIT, Kolar.

- ➤ Dr. Manoj Challa – Served as an Advisory Board Member for the Department of CSE at SEA College of Engineering and the Department of CSE & AIML at EPCET, Bangalore.
- ➤ Dr. Manoj Challa – Served as a Board of Studies Member at Sasi Institute of Technology and Engineering – Autonomous, Andhra Pradesh and Geetanjali College of Engineering – Autonomous, Andhra Pradesh.
- ➤ Dr. Swathi Y – Attended the VTU NVIDIA Workshop on Deep Learning at NVIDIA, Bangalore.
- ➤ Dr. Swathi - was nominated as the Translator and Reviewer by AICTE for the book titled "Python Programming: Theory and Practical" by Rupesh Nasre, IIT Madras. The telugu translated version of the book is now available on the AICTE e-Kumbh portal.
- ➤ Prof. Kavitha - Served as Resource person in the Technical Seminar on Turing Machines organized by Vemana Institute of Technology on 4th Dec, 2024.

Workshops & FDP

- ➤ Department of CSE organized 6-day FDP on "Advanced AI Tools, Techniques, and Applications" by **Christopher Alexander, Data Scientist at Achiever Solutions, Canada**, **Kowshik Reddy, Senior Assistant Vice President at Wells Fargo, Bangalore**, **Abrar Syed, Head of Engineering at Dobin, Singapore**, **Sagar Datta, Senior Software Engineer Supervisor at Honeywell, Bangalore**, **Prashant Rakheja Senior Software Engineer, SAPLABS** from 2nd to 6th September 2024.

- ➤ Department of CSE organized CSR (Corporate Society Responsibility) sponsored workshop on "Generative AI" on 14th & 15th November 2024 in collaboration with Capgemini and SAP.

➢ Department of CSE organized 6-day online International FDP on "Data Science in Education: Enhancing Research and Curriculum" by **Dr. Gayathri Nagarajan, Data Science Consultant, Germany**, Dr. **Preethi Ananthachari, Asst. Professor, AI and Big data department, Woosong University, Daejeon, South Korea**, Dr. **Santhosh Kumar S, Senior Software Engineer, Eurowings Digital, Germany**, **Dr. Arpit Yadav, Senior AI Scientist, CCE, Bangalore, India**. from 3rd to 8th February 2025.

➢ Department of CSE organized workshop on "dwani.ai" by **Sahana Shetty, Software Developer, SLabs Solutions** on 28th April 2025.

Student Achievements

➢ Ms. Nafisa from CSE Department has been awarded a scholarship of Rs. 1 Lakh from the Akshaya Patra Foundation and also received Rs. 50,000 from IEEE.
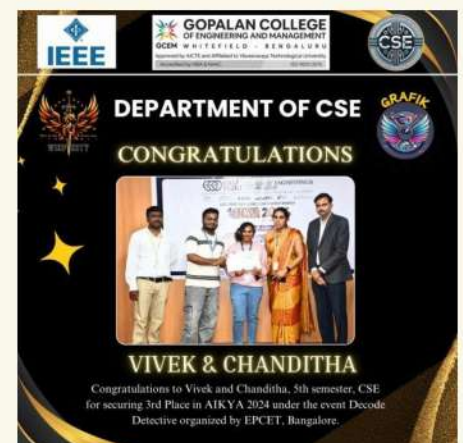
➢ Three final year projects comprising of students Md. Afzal, Yash Vardhan, Suraj, Revanth, Poojith, Nishanth, Prasanna, Roshan, Tarun, Vishnu Teja, Likith, Raghoottam from the CSE department, GCEM have been selected for sponsorship under the 48th Series of the Student Project Program (SPP) by Karnataka State Council for Science & Technology.

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
Indian Institute of Science Campus, Bengaluru – 560 012
Website: www.kscst.org.in, https://kscst.karnataka.gov.in || Email: spp@kscst.org.in || Tel: 080-2334 1652,2334 8848/49/40

48th series of Student Project Programme (SPP): 2024-25

List of Student Project Proposals Approved for Sponsorship

61. GOPALAN COLLEGE OF ENGINEERING AND MANAGEMENT, BENGALURU

SI. No.	PROPOSAL REFERENCE NO.	PROJECT TITLE	COURSE	BRANCH	NAME OF THE GUIDE(S)	NAME OF THE STUDENT(S)	AMOUNT SANCTIONED (Rs.)
611.	48S_BE_5594	LEVERAGING INTERACTION METRICS FOR ANOMALY DETECTION	B.E.	COMPUTER SCIENCE AND ENGINEERING	Dr. MANOJ CHALLA	Mr. MOHAMMAD AFZAL F Mr. YASH VARDHAN RAI Mr. SURAJ Mr. REVANTH REDDY	4,500.00
612.	48S_BE_5600	LOCOEYE - DETECTION OF LOCOMOTIVE SIGNAL LIGHTS AND PEDESTRIANS ON RAILWAY TRACKS USING YOLO V8	B.E.	COMPUTER SCIENCE AND ENGINEERING	Dr. SWATHI Y	Mr. POOJITH L Mr. NISHANTH J N Mr. PRASANNA KUMAR NAYAK Mr. R ROSHAN	3,500.00
613.	48S_BE_5622	HELMNET- A SWIN TRANSFORMER BASED APPROACH FOR MOTORCYCLE HELMET DETECTION USING YOLO V8	B.E.	COMPUTER SCIENCE AND ENGINEERING	Prof. SUBRAHMANYA H M	Mr. TARUN D S Mr. K VISHNU TEJA Mr. N LIKITH PATEL Mr. RAGHOOTTAM K	3,500.00

Congratulations
2025 SCHOLARSHIP WINNERS
FOR RECIEVING IEEE WOMEN IN ENGINEERING SCHOLARSHIP WORTH OF RS.50000/- EACH FUNDED BY QUEST GLOBAL

Vidhyashree 5th sem
Janani B.M 3rd sem

➢ Ms. Vidyashree 6th semester (CSE) and Ms. Janani 4th semester (CSE) have been selected for the IEEE WIE Scholarship, sponsored by Quest Global. Each of them will receive a scholarship of ₹50,000.

➢ Mr. Mohammad Afzal and Mr. Yash Vardhan Rai participated in Technical Poster Presentation contest organized by HKBK College of Engineering and secured 3rd place winning cash prize.

➢ Mr. Mohammad Afzal from 7th semester participated in Technical Poster Presentation contest organized by Vemana Institute of Technology and won 2nd place.

➢ Mr. Vivek and Ms. Chanditha won 3rd place in the Decode Detective event at AIKYA 2024 organized by East Point College of Engineering and Technology.

DEPARTMENT OF CSE
"CONGRATULATIONS"
Mohammad Afzal and Yash Vardhan Rai

For securing 3rd Place and winning the Cash Prize in the Technical Poster Presentation Competition organized by HKBK College of Engineering.
Your hard work, creativity, and dedication have truly paid off. We are proud of your achievement and wish you continued success in all your future endeavors!

DEPARTMENT OF CSE
Congratulations

Afzal

Congratulations, Afzal 7 th sem , on securing 2nd place in the poster-making competition at Vemana Institute of Technology! That's an impressive achievement! Well done!

DEPARTMENT OF CSE
CONGRATULATIONS

VIVEK & CHANDITHA

Congratulations to Vivek and Chanditha, 5th semester, CSE for securing 3rd Place in AIKYA 2024 under the event Decode Detective organized by EPCET, Bangalore.

- ➢ Mr. Abhishek Mannatharaj won 1st prize in Video Editing competition in TECHKRITI 2024 event organized by Vemana Institute of Technology.
- ➢ Mr. Bharath M. M. won 1st prize in Photography competition in TECHKRITI 2024 event organized by Vemana Institute of Technology.
- ➢ Mr. Vinith J, 6th Semester, Dept of CSE, participated in the Kodava Premier League (KPL), an exciting cricket tournament in the IPL format on November 8th, 9th, and 10th at MAN's.

- ➢ Aravind Dakshan D, Jyesht M and Sanjay S R won 2nd prize in GCEM HACKS 2K25, a 24-hour hackathon on 25th and 26th April 2025.
- ➢ 7 teams from the 3rd year CSE have participated in "IEEE Young Professionals Rapid Innovation Challenge: Unleashing AI and ML Technologies for achieving sustainable development goals" on October 25th, 2024 at CMR Institute of Technology. The objective of this event includes Fostering Quick Problem-Solving Skills, Driving Innovation with Limited Resources, Building Confidence in Pitching Ideas.
- ➢ Jyesht M, M Tarun, Tarun Kumar Pathak, Vivek Kashyap participated in The Great Bengaluru Hackathon by NammaYatri.
- ➢ Abhishek Mannatharaj, Abdul Shuaib, Adithya D H, Aravind Dakshan, Chanditha, Chethan G M, Devadhar S. Murthy, Tarun Kumar Pathak, Prince Kumar participated in 24 hours Social Hackathon 2025 held at CMR Institute of Technology.
- ➢ Abhishek Mannatharaj, Abdul Shuaib, Devadhar S. Murthy, Jyesht M, Sakthi Mageshwari, Sanjay S R, Tarun Kumar Pathak, Vivek Kashyap participated in Inceptrix Hackathon 2025 held at Jain University.
- ➢ Abhishek Poovaiah, Aravind Dakshan, , Chethan Kumar S L,Chethan G M, Jyesht M, Sanjay S R, Tarun Kumar Pathak, Prince Kumar participated in Innovate X 3.0 Hackathon held at Presidency University.
- ➢ P Mohan, Pavan S, Prince Kumar, Vivek Kashyap participated in Colossus 2.0 Hackathon held at Dr Ambedkar Institute of Technology.
- ➢ Divyashree C got second place in Relay and throwball competitions held at the Annual Sports meet of GCEM.
- ➢ Divyashree C secured first place in the cluster level throwball competition conducted at Isha Rejuvenation Trophy 2024.

- Deepika B O and Chanditha D received Elite Certificate in NPTEL Course on Foundation of Cloud IOT Edge ML.
- Anushree received course completion certificate in NPTEL Course on Foundation of Cloud IOT Edge ML.
- Chanditha D won 1st Place in CanVista - Poster Designing Competition at Algo-rhythm.
- Abhishek Mannatharaj and Gambheer won 1st Place in Highlight Reel - Video Editing & Photography Competition at Algo-rhythm.
- Abhishek Mannatharaj, Gambheer and Harshith HR won 1st Place in Mystic Trail - Treasure Hunt competition at Algo-rhythm.
- Abhishek Mannatharaj, Abdul Shuaib and Devadhar S Murthy won 1st prize in InnoVision mini project exhibition conducted for third semester students on 23rd Dec, 2024.
- Himani Sadanala, Vinay S and Vinayaka V won 2nd prize in InnoVision mini project exhibition conducted for third semester students on 23rd Dec, 2024.
- P Mohan, Pavan S and Yogesh Shankar won 3rd prize in InnoVision mini project exhibition conducted for third semester students on 23rd Dec, 2024.
- Chiranjeevi, Price Kumar and Vivek Kashyap won 1st prize in InnoVision mini project exhibition conducted for third semester students on 31st May, 2025.
- Sugain, Sunny and Varun ML won 2nd prize in InnoVision mini project exhibition conducted for third semester students on 31st May, 2025.
- Chandana, Maria Anushka and Monalisha Nayak won 3rd prize in InnoVision mini project exhibition conducted for third semester students on 31st May, 2025.
- Abhishek Prasanth, J Revanth, Konduru Likhita and Niraj Rajesh Neelama won 1st prize in Project Exhibition AAVISHKAR 2K25 conducted for final year students on 17th May 2025.
- B S Janani, Sameeksha, Shaziya and Varsha M won 2nd prize in Project Exhibition AAVISHKAR 2K25 conducted for final year students on 17th May 2025.
- Nishanth J N, Poojith L, Prasanna Kumar N and R Roshan won 3rd prize in Project Exhibition AAVISHKAR 2K25 conducted for final year students on 17th May 2025.

Start-up:

➢ Five CSE students Vamsi Krishna, Madan R, Abhishek, Revanth and Nihal D have successfully registered the start-up "NOVAFUZE" under MSME, with GCEM as the official enterprise address. The team has also received the UDYAM Registration Certificate.

➢ Second year student M. Vivek and our Alumni of CSE GCEM - Nithyananda, have successfully registered the start-up "APPIONIX" under MSME, with GCEM as the official enterprise address. The team has also received the UDYAM Registration Certificate.

➢ Final year student startup NovaFuze has been selected to represent the college at Startup Mahakumbh 2025, a national-level event organized by VTU in collaboration with Startup India on 3rd to 5th April 2025.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

➢ Department of ECE organized a Technical talk on Engineering & Engineers by **Dr. Ashok Rao, Former Head, Network project, CEDIT, IISC Bangalore** on 23rd September 2024.

➢ Department of ECE organized a Technical talk on "Multi Carrier and MIMO applications in wireline and wireless 4G to 6G" by **Dr. Ravishankar, Professor, RVCE** on 15th February, 2025.

➢ Department of ECE organized Tech Fest GETOCS V5.0 from 14th to 16th May 2025. Keynote address was delivered by Chief guest – **Dr. Ashok Rao, Former Head, Network Project, CEDT, IISc, Bangalore** and guest of honour was **Mr. Rebentha Dutta, Program Manager, Intel Unnati, Intel Technologies**. Various Technical events like Technical Paper Presentation, Technical Debate, Line Follower, Circuit Debugging, Project Exhibition, Technical Quiz.

Faculty Achievements

Publications :

➢ Dr. S. Anantha Padmanabhan, Dr. Suresh M.S, Dr. Arun Vikas Singh published paper titled "Simulation of 5Kwp Grid Connected Roof Top Solar Power Plant using PVWatts India" in Journal of Electrical Systems.

➢ Dr. S. Anantha Padmanabhan published a paper titled "A condition-based distributed approach for secured privacy preservation of nodes in wireless sensor networks IoT" in International Journal of Reconfigurable and Embedded Systems (IJRES).

➢ Dr. S. Anantha Padmanabhan published book chapter titled "Simulation Analysis of 200KWp GRID Connected Roof Top Solar Power Plant Using PVWatts India" in Futuric trends in Management, Engineering, Arts and Science, Tech press India.

➢ Dr. Deepa .A and Jyothi .D published a paper titled "Prediction of Voltage Generation in Triboelectric Nanogenerator Using Machine Learning Algorithms" in International Journal of Basic and Applied Sciences.

Patents:

➢ The patent titled "AI-enabled wearable health monitoring patch with IoT connectivity and real-time predictive analytics" by Dr. S. Anantha Padmanabhan, Dr. Arun Vikas Singh, Dr. M S Suresh, Dr. Deepa A, Dr. Raja Thejaswini Nandyala, Dr. Krishna Kumar N.J, Mrs. Jyothi D, Mr. Harsha Jeeth M, Mr. Murali Shayan H, Dr. Jayanna Kanchikere, Ms. Meghana J K, Mr. Akhileshwar Reddy Aendapally, Dr. C Anil Kumar, Dr. Pradeep T M is published at IP India.
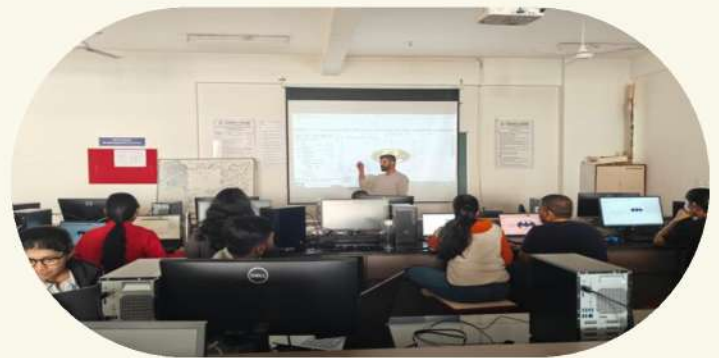
Workshops & FDP:

➤ Department of ECE at GCEM organized a Two days workshop on Intel software installation and its applications to ECE faculties on 3rd & 4th September 2024. **Mr. Vijaykumar , CADMAXX solutions Pvt. Ltd** was the resource person for the workshop.
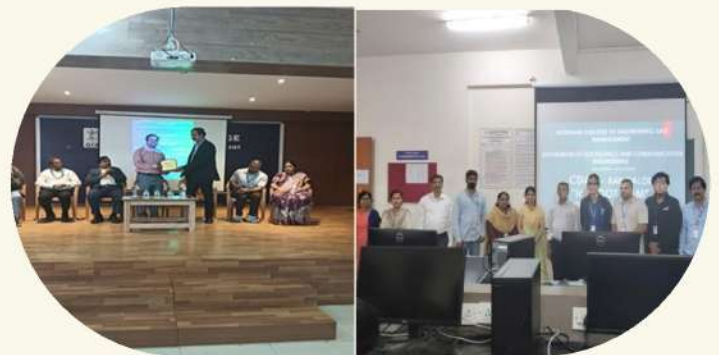

➤ Department of ECE organized a 6 days faculty development and student development program on "AI & ML" by **Mr. Shivaprakash, Intel certified trainer, Intel Technologies Pvt. Ltd, Bangalore** from 30th Sep to 5th October 2024.

➤

Department of ECE organized a 2 days workshop on "Computer Aided Network Analysis Using Multisim" by Dr. Suresh M, Professor, Dept of ECE, GCEM on 16th & 17th November 2024.

Department of ECE at GCEM organized a
➤ Five days faculty development and student development program on "IOT Boot camp" by **Mr. Murugan, Scientist D, CDAC** & **Mr. Suryansh, Project Engineer, CDAC, Bangalore** from 2nd to 6th Dec ember 2024.

➤ Department of ECE at GCEM organized a 7 day Workshop on "Embedded System using ESP32 Microcontroller board" by Mr. Harsha Jeeth M, Assistant Professor, Department of ECE, GCEM from 3rd to 8th February 2025.

➢ Department of ECE organized 5day FDP on MEMS Technology and Its Applications by **Shri. Vijay Kumar Pujari, Ex-Engineer/Scientist-G, ISRO, Immediate Past Chairman, IMAPS-I, Bengaluru** and **Dr. K.J. Vinoyisa distinguished academician and researcher** in the field of Electronics and Communication Engineering from 3rd to 7th March 2025.

Student Achievements

➢ Anusha T L from ECE department cleared GATE exam with a GATE Score of 311.

➢ Supriya PA from ECE department cleared GATE exam with a GATE Score of 272.

➢ Aishwarya Shrinivas Chillal, Manoj N, Priya B, Ankitha Sai Naidu won first place in Robo-Olympics competition organized by East Point College of Engineering and Technology on 10th December 2024.

➢ Manoj N, Anusha T L, Rohitha K won first place in Circuit Debugging contest organized by HKBK College of Engineering on 16th & 17th April 2025.

➢ Bhavana Bipin, J. Jonah Jerome Joseph won second place in National level Project Competition & Ideathon Contest organized by Sambhram Institute of Technology on 4th April 2025.

➢ Anusha T L, Dhanya H V, Inderjeet Singh Sukhmani won second place in National level Project Competition & Ideathon Contest organized by Sambhram Institute of Technology on 4th April 2025.

➢ Jonah Jonah Joseph and Bhavana Bipin won second place in the Ideathon at Sambhram College of Engineering and Technology.

➢ Inderjeet Sukhmani, Anusha T L and Dhanya H L won 2nd Place in the Project Competition at Sambhram College of Engineering and Technology.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Activities:

➤ Information Science & Engineering (ISE) department organized an inauguration Ceremony of ARISE–ISE Department Student Club.

➤ Information Science & Engineering (ISE) department organized a Pictionary contest and speed code test .

➤ Information Science & Engineering (ISE) department organized a campaign allowing everyone to familiarize with LinkedIn and also make their own accounts.

➤ Information Science & Engineering (ISE) department organized an Information campaign allowing everyone to familiarize themselves with companies like Accenture and Sales force.

➤ Information Science & Engineering (ISE)department organized Onam Celebration

➢ Information Science & Engineering (ISE) department organized Dusshera Celebration

➢ Information Science & Engineering (ISE) department organized an inauguration Ceremony of Pages & Pathways - Department Library

➢ Information Science & Engineering (ISE) department organized an Aptitude Test on 20th February 2025.

➢ Information Science & Engineering (ISE) department organized the releasing of department magazine "ARISE Chronicles" by **Mr. Deepak Kiran Kumar, Director, Morgan Stanley, Bengaluru** on 8th April 2025.

➢ Information Science & Engineering (ISE) department organized a Women's Day Celebration on 14th March 2025 with **Mrs. S.V. Janani Balamurugan, Psychotherapist, Bengaluru.**

Connecting to Industry:

➢ Department of Information Science and Engineering students successfully completed an Industrial Visit to U R Rao Satellite Centre, Bangalore on 21st March 2025.

Alumni Talks

➢ Department of Information Science and Engineering students successfully conducted an Alumni Talk with **Shruthi Mahalakshmi** and **Dhatri Reddy**

Industrial Talks:

➢ Department of Information Science and Engineering students successfully conducted an Industrial Talk with **Mr. Pavin Pannerselvam, Software Technical Lead, Riverbed Technology, Bengaluru** on 5th October 2024

Workshops & FDP:

➢ Department of ISE organized Advanced Java Hands-on Training Workshop on 12th & 13th March 2025.

Student Achievements

➢ Hari Kumar Reddy B & Kishore V won 1st Place in BGMI competition at Algo-Rhythm organized by CSE Department, GCEM.

➢ Hari Kumar Reddy B & Kishore V won 1st Place in BGMI Tournament organized by CSE Dept club TechEon.

➢ Aleena Harold Peter won 3rd Place in Carrom competition at Gopalan Annual Sports Meet 2024.

➢ Aleena Harold Peter and Dhanushiya won 1st Place in Quizzard at Algo-Rhythm. Aleena Harold Peter participated in the Gaming (NFS) competition at Sargam 2024.

➢ Vansh Gupta secured 13th Place in the National Space Day Hackathon. He Aslo participated in the Vikas Saptah Quiz. Vansh Gupta secured 8th Place in Yantra Quest: National Technology Day Quiz.

➢ Dhanushiya S, Likith D T, Prathiksha D, Priyanka Suresh, Sri Vaisnavi, Vansh Gupta participated in the RBI@ Nationwide Online Quiz.

➢ Priyanka Suresh, Srinivas S & Dhanushiya S participated in the Unleashing AI & ML Technologies Hackathon at CMRIT.

➢ Sagar R, Pavankumar G A & Partha Sarthy P secured Top 24th Place out of 250+ participants in the Urban Vision Hackathon at IISC All India Hackathon.

➢ Priya M, Tejas & Divyashree C participated in the IIC Ideathon at NHCE.

➢ Manoj V, Keerthan R and S.A. Sahil won 1st prize in InnoVision mini project exhibition conducted on 23rd December, 2024.

➢ Kishore V, Vedant and Narun won 2nd prize in InnoVision mini project exhibition conducted on 23rd December, 2024.

➢ Parthasarathy, Sai Prasad and Shivakumar won 3rd prize in InnoVision mini project exhibition conducted on 23rd December, 2024.

DEPARTMENT OF MECHANICAL ENGINEERING

Faculty Achievements

Publications :

➢ Paper titled "Fault Diagnosis of Shaft Misalignment for Rotating Machinery using Artificial Neural Network" by Prof. Lokesh M is accepted by Journal of Mines, Metals and Fuels.

➢ Prof. Rajesh T R presented a paper titled "Fabrication and Characterization of stir-cast Al C355.0 Reinforced with hematite particulates at different weight percentages using copper chills, both with and without water circulation" at 1st International Conference on Innovation Materials, Payloads, Aerospace and computing Technologies-2025(IMPACT-25).

➢ Prof. Rajesh T R published a paper titled "Composite Fabrication by Stir-Cast for Al C355.0 With Particulates Hematite Reinforcements at Different Weight Percentages in Copper Chills with and Without Water Circulation for Mechanical and Fatigue Performance" in Journal of Polymer & Composites (Web of Science Indexed Journal) (Q2 SCOPUS- Indexed Journal).

➢ Dr. Shivashankara presented a paper titled "Low-Velocity Impact Characterization of Wood Particle Filled Jute and Glass Hybrid Epoxy Composites" at International conference on Sustainable technology 2025.

➢ Dr. Shivashankara and Prof. M. Lokesh published a paper titled "Fault Diagnosis of Shaft Misalignment for Rotating Machinery using Artificial Neural Network" in Journal of Mines, Metals and Fuels.

Patents :

➢ Dr. K.Natarajan filed a patent "A Novel Sustainable Solid Waste Management System" at IP India.

➢ Dr. Vel murugan P filed a patent "Smart Inhaler with Real Time Inhalation Pattern Analysis and Method There of" at IP India.

> "Research is creating new knowledge. Innovation is turning that knowledge into impact."

GRADUATION DAY 2025@GCEM

A Day to Remember! - A momentous occasion filled with pride, joy, and unforgettable memories! On June 14, Gopalan College of Engineering and Management celebrated its Graduation Day 2025, honoring the hard work, perseverance, and achievements of our brilliant graduates.

The event was graced by esteemed chief guests **Dr. P. Radha Krishna, Distinguished Scientist & Former Director LRDE, DRDO, Bangalore**, presided by Dr. C. Prabhakar, General Secretary, Gopalan Foundations, Mrs. Sunitha Prabhakar, Director, Gopalan Organics, Dr. Arun Vikas Singh, Principal, GCEM, HoD's of all departments, our proud faculty, supportive families, and, most importantly, our graduating batch – ready to step into the next chapter of theirlives. With hearts full of gratitude and minds full of dreams, our students bid farewell to theircollege journey and embraced the future with confidence and hope. To the Class of 2025 – you made it! Here's to new beginnings, lifelong learning, and making a difference in the world.

Graduating Batch of 2021-25 – Dept. of Aeronautical Engineering

Graduating Batch of 2021-25 – Dept. of Computer Science Engineering

Graduating Batch of 2021-25 – Dept. of Electronics & Communication Engineering

Graduating Batch of 2021-25 – Dept. of Civil Engineering

Graduating Batch of 2021-25 – Dept. of Mechanical Engineering

OPEN DAY 2025

The Open House 2025, held on 31st May 2025 at Gopalan Amphitheatre, successfully showcased the Gopalan Group of Institutions to 127 prospective students and parents, including 88 registered attendees and 39 walk-ins. The event featured stream-specific counseling sessions (Engineering, Commerce, Architecture), faculty interactions and student Q&As, a well-received campus tour, and on-the-spot admission support. Over 40 student volunteers ensured smooth operations. Impressively, 90% of attendees rated the event as "Very Satisfactory," with particular praise for the campus tour and faculty interactions.
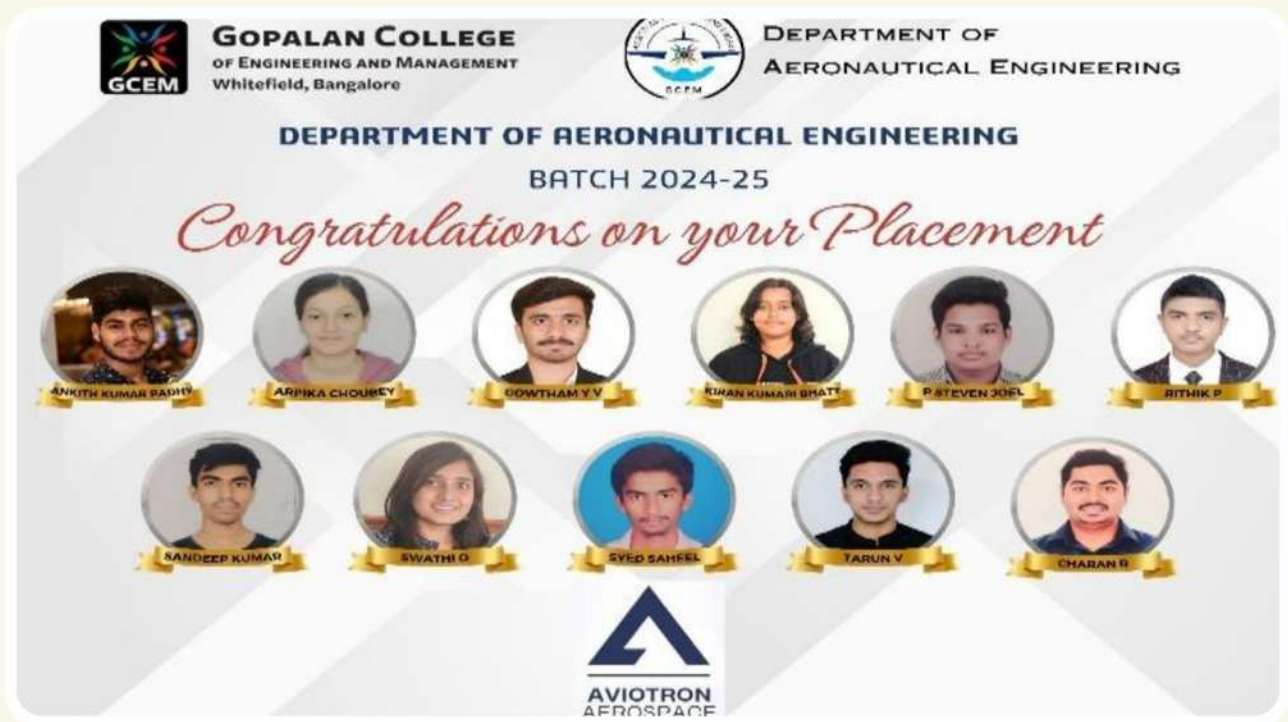
PLACEMENTS

➢ Dept of Training and Placements Invited Robert Gordon University, UK to GCEM on 22nd October 2024 for the academic collaboration and 5th semester students of CSE received certificates from the representatives of RGU, UK.

➢ 5 students from Dept of AE - Harisha, Pavithra, Shekar, Karthik and Shashank have been placed as Graduate Engineer Trainees in the Design & Quality teams at Gopalan Aerospace India Pvt. Ltd. with a great salary package!

➢ Eleven students from Dept of AE - Ankith, Arpika, Gowtham, Kiran, Steven, Rithik, Sandeep, Swathi, Saheel, Tarun and Charan have been successfully placed at Aviotron Aerospace!

➢ Rakshitha N and Nafisha B, our students of Dept of CSE got placed in Infosys.

➢ Shaziya our student of Dept of CSE got placed in X-Ciencia Technologies India Pvt Ltd.

➢ 12 students of Dept of CSE - Janani, Varsha, Vidyashree, Likitha, Disha, Nafisha, Nishanth, Shaziya, Sameeksha, Varsha M, Tarun and Harshavardhan received training and placement offer from QSpiders.

ALUMNI CORNER
TESTIMONIALS

My journey at Gopalan College of Engineering and Management was nothing short of transformative. The dedicated faculty, engaging curriculum, and opportunities for practical learning not only enhanced my technical skills but also shaped my confidence, leadership, and teamwork. Along the way, I built friendships and memories that I will cherish forever.

Farzan Roshan (2020 Batch, CSE)
Assistant Manager (Data Engineering and AI),
EXL, Bangalore.

Swathi K S (2014 Batch, ECE)
Software Development Engineer
Capgemini India Pvt. Ltd Bengaluru

I would like to take this opportunity to thank and recollect those days at GCEM. The time at GCEM was an absolute memorable experience in terms of learning, thoughts, fun and, importantly, character building. Grateful for the opportunity provided to participate in the cultural events, encouraging students to attend workshops, internships and seminars conducted on different topics, it did create a space for creative thinking to transform into a confident individual. It is indeed a place to explore oneself with the help of the management, teaching faculty, supporting staff and my dear friends. Thank you for all the efforts put in to make lives of students enriching.

My four-year journey at Gopalan College of Engineering and Management, culminating in a Mechanical Engineering degree in 2016, was both rigorous and rewarding. The curriculum was thoughtfully designed to bridge academic theory with real-world application, and the faculty consistently demonstrated deep expertise and genuine commitment to student success. Beyond academics, GCEM fostered a culture of innovation, discipline, and collaboration—qualities that have been instrumental in shaping my professional identity. The exposure to industry-relevant projects, technical workshops, and leadership opportunities provided a solid foundation for my career. I look back on my time at GCEM with pride and gratitude.

Rohit Kumar
(2012 Batch, Mechanical),
Senior Recruiting Operations Analyst
Accenture, Bangalore.

Edge AI – Bringing Intelligence Closer to Reality

In an era where speed, privacy, and connectivity are everything, Edge AI is emerging as a game-changing technology that combines the power of Artificial Intelligence (AI) with the flexibility of edge computing.

Instead of sending data to distant cloud servers for processing, Edge AI enables devices to analyze and make decisions locally—right at the "edge" of the network, where the data is actually generated. This is especially important for time-critical tasks like self-driving cars, facial recognition in public spaces, or monitoring patient vitals in hospitals.

For example, a drone surveying farmland can detect diseased crops in real time without needing internet access. Or a smart helmet in a factory can monitor worker fatigue and send alerts instantly. All of this happens on-device, ensuring low latency, better data security, and energy efficiency.

Key tools and platforms like Google Coral, NVIDIA Jetson Nano, Raspberry Pi with AI accelerators, and TinyML make it possible to build smart solutions at low cost.
This is a great opportunity for students to explore projects like:
Real-time object detection for the blind
- Voice-controlled IoT systems
- AI-based fire detection cameras

Edge AI is also reshaping industries like healthcare, transportation, agriculture, defense, and even consumer electronics. From wearables to robots, the goal is simple: Make machines not just reactive—but intelligent.

ARAVIND DAKSHAN D
1GD22CS008, 7th sem

NOT A MEMBER, A LEADER IN THE MAKING
(How College Clubs Shape Future Leaders)

When I first entered college, I thought leadership was something only a few people were born with, like a natural skill. But I quickly realized that's not true. Leadership is something you learn, experience, and develop over time. College clubs play a significant role in that journey.

While classrooms build our knowledge, college clubs and student organizations build something just as important: leadership skills.Whether it's a photography club capturing campus memories, a tech society hosting hackathons, or a cultural committee planning fests , every club is a miniature world.

Initially, many of us join clubs just to make friends, pass time, or try something new. Honestly, when I first joined one, it wasn't for leadership or skill-building it was just to try something new and maybe make new friends. But slowly, that "just-for-fun" choice turned into one of the most important learning experiences of my college life.

Being in a club teaches you things no lecture hall ever will. You learn how to manage time when you're juggling assignments and planning events. You learn to speak up, even when you're nervous. You learn to lead when no one else steps forward, and more importantly, you learn to listen when others need to be heard.

It's not always smooth. Sometimes events flop. Sometimes people don't agree. Sometimes nothing goes according to plan. But guess what? That's where the real growth happens.
Working in a team where everyone has different opinions isn't always easy, but it's real. That's what truly prepares you for the outside world.

Clubs give us the perfect testing ground for skills like problem-solving, teamwork, communication, and resilience. You won't even realize how much you've grown until one day, someone asks you to lead something, and you just... do it.

Personally, being part of a club has made me more confident and willing to speak up. I've learnt to handle pressure, think quickly, and accept failure gracefully. I've made mistakes, learned from them, and improved and that's what real growth looks like.

The best part? Leadership isn't always about holding a title or being in the spotlight. Sometimes, it's about showing up, taking initiative, and growing through effort behind the scenes. That's the kind of leadership college clubs quietly teach us every day.

VIVEK PRAJAPATHI
1GD22CS058, 7th sem

Operation Sindoor: The Transformation of Warfare through the Innovations of the Drone and Missiles

"In the era of algorithmic war, technological independence was the mark of strategic advantage "

The Indian military forces used Operation Sindoor as their primary defense achievement following the Pahalgam terrorist attack on May 7 through May 2025. The operation combined domestic technological development with immediate combat deployment which proved India's progress in contemporary military operations.

During the operation BrahMos supersonic cruise missiles launched from Su-30 MKI planes successfully destroyed 11 Pakistani airbases with precise strikes. The missiles operated at Mach 3 speed with their guidance systems achieving precise strikes and outstanding performance. Indian startups launched two innovative combat systems named JM-1 and ALS-50 which brought AI-controlled kamikaze drones into warfare. The unmanned drones utilized artificial intelligence to perform automatic strikes against radar facilities and bunkers which set new standards for intelligent combat operations. The Indian air defense network during the operation used Akash, Kashteer and S-400 and Barak-8 systems to intercept enemy drones and missiles in 1,300-kilometer airspace.

Through Operation Sindoor India demonstrated technology-based warfare independence implementing Make in India and Atmanirbhar Bharat programs. Operation Sindoor was an important milestone in the Indian history of war. This victory marked the beginning of the transformation of warfare, where AI, drones and domestic technology will be one of the main tactics utilized.

SUMAN E G
1GD22AE020, 7th Sem

CYBERSECURITY IN THE DIGITAL AGE
(How We Can Stay Safe in a World That Never Logs Off)

The Basics: What Is Cybersecurity ?

At its core, cybersecurity is the practice of defending computers, servers, mobile devices, networks, and data from malicious attacks. It encompasses everything from antivirus software and firewalls to complex encryption and international cyber law.

Cybersecurity can be broken down into several key areas:

- Network Security: Safeguards internal networks from unauthorized access.
- Application Security: Ensures that apps are protected from threats during development and beyond.
- Information Security: Protects the integrity and privacy of data, both in storage and in transit.
- Operational Security: Governs how data is handled, including permissions and access.
- Disaster Recovery: Prepares systems to recover quickly after a breach or failure.

Why Cybersecurity Affects Everyone

Every time we sign into an account or enter credit card information, we are trusting that someone has built a secure digital environment. But when those systems fail, the consequences can be devastating-think stolen bank credentials, leaked medical records, or even compromised home security systems.

The cost of cybercrime is skyrocketing. According to industry reports, it's expected to reach $10.5 trillion annually by 2025. Businesses face not just financial loss, but also damage to their reputation and loss of customer trust. For small companies, a single attack can be enough to close their doors permanently.

Cybersecurity is also a matter of national security. Cyberattacks on power grids, hospitals, airports, and voting systems are becoming more common and more sophisticated. These aren't just criminal acts - they're acts of war.

The Most Common Cyber Threats

- Phishing: Fake emails or texts designed to steal personal information.
- Ransomware: Malicious software that locks users out of their systems until a ransom is paid.
- Malware: Programs intended to harm or exploit any programmable device or network.
- DDoS Attacks: Coordinated floods of internet traffic aimed at crashing systems.
- Insider Threats: Employees or contractors who misuse access for malicious purposes.

How We Can Protect Ourselves

For Individuals:

- Use strong, unique passwords for each account.
- Enable two-factor authentication where possible.
- Be cautious of suspicious links or attachments.
- Keep your software updated to patch vulnerabilities.
- Regularly back up important files.

For Organizations:

- Provide employee training on cybersecurity best practices.
- Install enterprise-grade firewalls and monitoring systems.
- Conduct regular risk assessments and security audits.
- Develop and rehearse a cyber incident response plan.

For Governments:

- Invest in national cyber defense programs.
- Create and enforce data protection laws.
- Collaborate internationally to combat cyberterrorism and espionage.
- Launch public awareness campaigns on digital safety.

Looking Ahead: The Future of Cybersecurity

As emerging technologies like AI, machine learning, quantum computing, and the Internet of Things (IoT) become more integrated into daily life, cybersecurity must evolve. Future solutions will need to be smarter, faster, and more adaptive than ever before.

In this constantly connected world, cybersecurity is not just about technology-it's about trust. It's about ensuring that as our digital lives expand, they do so safely.

The internet never sleeps. Neither should our defenses.

DHANUSHREE V M
1GD23IS016, 5th Sem

Gopalan College of Engineering and Management Hosts "ALGO-RHYTHM 2.0" Event Overview

© April 8, 2025   👤 Bhumika Lenka   🗁 news   💬 Comments Off

Bangalore, April 08, 2025: The Department of Computer Science and Engineering at **Gopalan College** of **Engineering and Management (GCEM)** inaugurated its flagship department fest, **"ALGO-RHYTHM 2.0,"** a two-day celebration of technology and culture fest.

Themed as a fusion of innovation and expression, ALGO-RHYTHM 2.0 aims to inspire creativity, collaboration, and excellence among budding engineers and artists alike. The fest features a vibrant mix of technical events, coding challenges, cultural showcases, and interactive sessions, making it a unique platform for holistic development.

Edo institute hosts technology & cultural fest

The Department of Computer Science and Engineering at Gopalan College of Engineering and Management, Hoodi, recently inaugurated their flagship department fest called ALGO-RHYTHM 2.0 which was a two-day celebration of technology and culture. Themed as a fusion of innovation and expression, the event aimed to inspire creativity, collaboration, and excellence among budding engineers and artists alike. The fest also featured a mix of technical events, coding challenges, cultural showcases, and interactive sessions. This year's edition witnessed 204 registrations, including 98 external and 106 internal participants from a diverse set of institutions across the city and beyond.

Gopalan College of Engineering and Management Hosts "ALGO-RHYTHM 2.0" Unveiling New Talents

👤 team   © April 8, 2025

Bangalore, April 08, 2025: The Department of Computer Science and Engineering at **Gopalan College of Engineering and Management (GCEM)** inaugurated its flagship department fest, **"ALGO-RHYTHM 2.0,"** a two-day celebration of technology and culture fest.

Themed as a fusion of innovation and expression, ALGO-RHYTHM 2.0 aims to inspire creativity, collaboration, and excellence among budding engineers and artists alike. The fest features a vibrant mix of technical events, coding challenges, cultural showcases, and interactive sessions, making it a unique platform for holistic development.

Gopalan Group of Institutions

Gopalan National School (North)
Hesaragatta, Bangalore

Gopalan International School
Whitefield, Bangalore

Gopalan National School
Brookefield, Bangalore

Gopalan Twinklers School
Kanakapura Road, Bangalore

Gopalan National School (South)
Kumbalgodu, Bangalore South

Gopalan Pre-University College (North)
Yelahanka, Bangalore

Gopalan Pre-University College
Whitefield, Bangalore

Gopalan College of Commerce
Whitefield, Bangalore

Gopalan School of Architecture and Planning
Whitefield, Bangalore

Gopalan College of Engineering and Management
Whitefield, Bangalore

Gopalan Skill Academy
Whitefield, Bangalore

Gopalan Sports Center
Whitefield, Bangalore

181/1,182/1, Behind SAP Labs, Seetharam Palya, Basavanagar,
Hoodi, Bengaluru, Karnataka 560048.

080-42229748 | gcem@gopalancolleges.com
www.gopalancolleges.com