

## KINGSTON ENGINEERING COLLEGE

# ANNUAL REPORT AY 2018 – 2019





#### VISION OF THE INSTITUTION

To be a pioneer in engineering and management education by providing amicable ambience and being a centre for learning thereby perpetuating versatile professionals in engineering and management suitable for industry, higher education and research.

#### MISION OF THE INSTITUTION

- ❖ Developing, nurturing and building professionals with technical, research and managerial expertise, intellectual proficiency, right attitude and moral ethics.
- ❖ Building infrastructure that earmarks the institution to be the most preferred educational destination and provides the right ambience for creative and innovative teaching learning process.
- \* Enabling learners to broaden their horizon and helping to meet global challenges.



#### **Annual Report 2018-2019**

I feel proud to stand before you to present the Annual Report for the Academic Year 2018-2019.

Kingston Engineering College, approved by AICTE, New Delhi, and affiliated to Anna University, Chennai, we have dedicated ourselves to this pursuit since our inception in 2008. Founded by the Duraimurugan Educational Trust, our mission is to foster education among rural and urban students in and around Vellore, Tamil Nadu.

Our campus provides an idyllic setting for learning and growth. Spread across acres of land, our campus offers a pollution-free environment conducive to academic excellence and holistic development.

Kingston's Chairman Thiru. D. M. Kathir Anand, a man of profound wisdom and unwavering resolve, is a beacon of inspiration to all who have the privilege of working alongside him. With a distinguished background that includes completing his MBA in the USA, he brings a wealth of knowledge and experience to his role, shaping the future of our institution with foresight and passion.

Kingston offers a comprehensive range of undergraduate and postgraduate programs in various engineering disciplines. Our college which started with 4 Undergraduate Programs in 2008 now boasts of 6 Undergraduate Programs and 5 Post Graduate Programs:

#### *Under Graduate Programs*

- Bachelor of Civil Engineering
- Bachelor of Computer Science & Engineering
- Bachelor of Electrical & Electronics Engineering
- Bachelor of Electronics & Communication Engineering
- Bachelor of Information Technology
- Bachelor of Mechanical Engineering

#### Post Graduate Programs

- Master of Business Administration
- Master of Engineering in Applied Electronics
- Master of Engineering in Power System
- Master of Engineering in Computer Science & Engineering
- Master of Engineering in Engineering Design



We have well qualified faculty members and non-teaching staff members on roll as per AICTE norms. Our college has doctorates in various departments and many faculties doing their doctorates in various disciplines.

#### AWARDS AND RECOGNITION OF COLLEGE

Our college has received numerous accolades and recognition from various government and non-governmental organizations.

- No. 1 in Vellore District
- ➤ 100+ Anna University Rank Holders
- ➤ 100% Placement for all eligible students
- Research center for the Department of EEE & Mechanical engineering.
- Accredited by NBA for UG in ECE, CSE, EEE, IT, and Mechanical Engineering
- ➢ Best IEEE Students Chapter Award
- ➤ Affiliated to Anna University
- ➤ 3-Star Rating MHRD IIC Awards
- 2nd in Anna University Zonal Sports Meet
- Received Global Excellence Award in GERA 2019
- Received Centre of Excellence from Ashok Leyland
- Center of Excellence from Eminent Technology Solutions for Providing Industry Expectancy Technical skills to students.
- Certificate of Appreciation from Christian Medical College Blood Bank for Voluntary Blood Donation and Safe Blood through the Camp.
- > Star Certificate from MHRD's Innovation Cell, Govt. of India.
- Certificate of Organization from Rotary Club of Katpadi, Vellore for Established Rotaract Club of Kingston Engineering College.

#### ACADEMIC EXCELLENCE

We extend our heartfelt congratulations to the rank holders of Anna University. Your achievements are a source of pride for the college. The rank holders for the academic year 2017 - 2018 are



- ➤ G. Saravanan of CSE secured 20<sup>th</sup> rank
- R. Nithya of ECE secured 28<sup>th</sup> rank
- ➤ M. Janani of ECE secured 48<sup>th</sup> rank
- ➤ U. Kavithamil of ECE secured 49<sup>th</sup> rank
- ➤ V. Maheswaran of MECH secured 40<sup>th</sup> rank
- ➤ G. Madhan of MECH secured 45<sup>th</sup> rank
- ➤ R. Harish of MECH secured 47<sup>th</sup> rank
- R. Baskaran of MECH secured 49<sup>th</sup> rank
- ➤ S. Ammudhavalli of ME(AE) secured 9<sup>th</sup> rank
- Y. Sarulatha of ME(AE) secured 11<sup>th</sup> rank
- ➤ P. Kiruthika of MBA secured 9<sup>th</sup> rank
- ➤ J. Padmavathy of MBA secured 17<sup>th</sup> rank
- ➤ M. Sindhu of MBA secured 18<sup>th</sup> rank
- ➤ T. Hemavathy of MBA secured 17<sup>th</sup> rank
- N. Aswini of MBA secured 27<sup>th</sup> rank
- ➤ M. Karthika of MBA secured 34<sup>th</sup> rank
- C. R. Vaishnavi Devi of MBA secured 38<sup>th</sup> rank
- ➤ M. Prasanna Vadhana of MBA secured 48<sup>th</sup> rank

For the Academic Year 2018-2019 (ODD SEMESTER), Out of 2694 students, 1605 students cleared the semester examination and obtained overall pass percentage of 59.57 in April/May 2018 Anna University Examination.

For the Academic Year 2018-2019 (EVEN SEMESTER), Out of 1917 students, 1286 students cleared the semester examination and obtained overall pass percentage of 67.08 in November/December 2018 Anna University Examination.

#### FACULTY AWARDS AND ACCOLADES

Dr.N. Shankar Ganesh, Professor/MECH, received grant of Rs.7500 for "Chainless bicycle using kinematic inversions" from Tamil Nadu State Council For Science and Technology (TNSCST) in 2018.



#### STUDENT SCHOLARSHIP

Scholarship is provided for the students by both Government & Management. Out of 1650 students, 1145 students availed by scholarships and freeships provided by the Government and Non-Government agencies, during the academic year 2018 – 2019.

#### RESEARCH AND INNOVATION

Research and innovation are at the core of Kingston Engineering College's mission to foster academic excellence, drive technological advancement, and address real-world challenges. Through a culture of inquiry, collaboration, and creativity, we empower our students and faculty to push the boundaries of knowledge and make meaningful contributions to society. The faculty at Kingston Engineering College are at the forefront of research and innovation, driving advancements in their respective fields and contributing to the body of knowledge in engineering and technology.

- ➤ Dr. V.Mohanavel, AP/MECH, published a paper titled "Experimental investigation on mechanical properties of AA7075 AlN composites" in Materials Testing.
- ➤ Dr. V. Mohanavel, AP/MECH, Dr. M.M. Ravikumar, Principal & Prof/MECH and Mr. S. Mahendiran, AP/MECH published a paper titled "Feasibility and emission study on employing MgO nanoparticle as oxygenated additive in neat biodiesel" in International Journal of Ambient Energy.
- ➤ Dr. V.Mohanavel, AP/MECH, published a paper titled "Impact of nozzle opening pressure on the performance and emission behaviors of CI engine using Yellow Oleander Biodiesel" in International Journal of Ambient Energy.
- ➤ Dr. V. Mohanavel, AP/MECH, Dr. M.M. Ravikumar, Principal & Prof/MECH and Mr. S. Mahendiran published a paper titled "Tribological and mechanical behaviour of composites fabricated via compo casting, stir casting and in situ casting An overview" in Journal of the Balkan Tribological Association.
- ➤ Dr. M.M. Ravikumar, Principal & Prof/MECH published a paper on "An integrated approach for performance evaluation of suppliers in manufacturing industries" in International Journal of Services and Operations Management.



- ➤ Dr. N. Shankar Ganesh, Prof & MECH, Mr.S. Mahendiran, AP/MECH and Mr. D. Manivannan, AP/MECH published a paper on "Development of optimized Energy System" in Energy and Environment.
- ➤ Mrs.R.Thillaikarasi, AP/CSE, published a paper entitled "Attendance System using Open-CV Face recognition" in International Research Journal in Advanced Engineering and Technology.
- ➤ Ms.K.Maithili, AP/CSE, published a paper titled "Waste Water Management for Smart Cities with help of IOT and Pic Controller" in International Research Journal In Advanced Engineering and Technology.
- ➤ Mrs. S.Delhirani, AP/CSE, published a paper titled "Flight Delay predicition using Supervisied Machine Learning" in Caribbean Journal of Science.
- ➤ Dr.Perepi.Rajarajeswari, Asso. Prof/CSE, published a paper titled "Gender with Emotion Recognition using Machine Learning" in IJSR.
- ➤ Mrs.L. Mohanasundari, AP/ECE, published a paper titled "Feature Extraction through Chaotic Metrics for Weld Flaw Classification" in International Journal of Innovative Technology and Exploring Engineering (IJITEE).
- ➤ Dr.V. Mohanavel, AP/ECE, published a paper titled "Influence of ZrB2 on the microstructural characteristics of AA6082/ZrB2 composites" in Materials and Technology.
- ➤ Dr.V. Mohanavel, AP/ECE, published a paper titled "Effect of ZrB2 content on mechanical and microstructural characterization of AA6063 aluminum matrix composites" in International Journal of Materials Today Proceedings.
- ➤ Dr.V. Mohanavel, AP/ECE and Dr. M.M. Ravikumar, Principal & Prof/MECH published a paper titled "Parametric optimization of friction welded 17-4 PH SS alloy using Taguchi techniques" in Progress in Industrial Ecology.
- ➤ Dr. N. Shankar Ganesh, Prof & MECH, published a paper titled "Nuclear energy-driven Kalina cycle system suitable for Indian climatic conditions" in Energy Sources, Part A: .Recovery, Utilization, And Environmental Effects.
- ➤ Mr.L. Ananda Padmanaban, AP/EEE, published a paper titled "Multi objective evolutionary algorithm for designing energy efficient distribution transformers" in Elsevier: Swarm and Evolutionary Computation.



- ➤ Mrs. R. Ruhin kouser, AP/CSE, published a paper titled "Heart Disease Prediction System Using Artificial Neural Network, Radial Basis Function and Case Based Reasoning" in Journal of Computational and Theoretical Nanoscience.
- ➤ Dr. V. Mohanavel, AP/ECE, published a paper titled "IWF based optimization of porous insert configurations for heat transfer enhancement using CFD", in Journal of Applied Fluid Mechanics.
- ➤ Dr.U.V.Arivazhagu, Prof/CSE, published a paper titled "Social Network Routing with caching in delay tolerant wireless sensor networks" in Journal of Computational and Theoretical Nano science.
- ➤ Ms.A.Shalini, AP/CSE, published a paper titled "Application of Rough Set Theory in Data Mining Market Analysis Using Rough Sets Data Explorer" in Journal of Computational and Theoretical Nano science.
- ➤ Ms.A.Shalini, AP/CSE, published a paper titled "Voice Recognition Robot Control Using Android Device" in Journal of Computational and Theoretical Nano science.
- ➤ Ms.Maithili, AP/CSE and Ms.P. Latha, AP/CSE published a paper titled "Analyzing the security mechanisms to prevent Unauthorized access in cloud and Network security" in Journal of Computational and Theoretical Nano science.

# FACULTY DEVELOPMENT PROGRAM/WEBINAR/SEMINAR/GUEST LECTURE /CONFERENCES

All these events play a crucial role in promoting continuous learning, professional development, and knowledge sharing within the academic community, contributing to the overall academic excellence of the engineering college. Totally 98 faculties participated in Faculty Development Program, Webinar, Seminar, Guest Lecture and Conferences conducted by our college and 62 faculties have been provided financial support to participate the same in other institution. Totally 25 non-teaching staffs participated in program on MS-Office & Internet Basics.



#### STUDENT ACHIEVEMENT

Students of our college participated in various Workshops and Guest Lectures during this academic year.

- > Guest Lecture on "Export Business and challenges faced by 1st generation Entrepreneur"
- ➤ Online Workshop on "Intellectual property rights for Students and Faculty Members"
- ➤ Workshop on "Intellectual Property rights"
- ➤ Webinar on "India's First Leadership Talk series "
- One day national workshop on "The nitty-gritty of submitting Research papers to Highimpact factor journals"
- > Two days Workshop on "Intellectual Property Rights, Innovation and Entrepreneurship"
- ➤ Guest Lecture on "Enhancing Managerial Competencies"
- ➤ Guest Lecture on "Forging Future Engineers to Entrepreneurs"
- ➤ Guest Lecture on "Entrepreneurship Development and Intellectual Property Rights"
- ➤ Guest Lecture on "Innovation and Entrepreneurship"
- ➤ Workshop on "Research and Development Awareness Needs and Benefits"
- ➤ Workshop on "Investor Awareness"
- > One day Workshop on "Innovative ideas of Entrepreneurs" Master Mind's Meet -2018

# WORKSHOPS / SEMINARS / CONFERENCES CONDUCTED ON RESEARCH METHODOLOGY, INTELLECTUAL PROPERTY RIGHTS (IPR) AND ENTREPRENEURSHIP

Faculty participation in workshops, seminars, and conferences on Research Methodology, Intellectual Property Rights (IPR), and Entrepreneurship is indeed crucial for fostering both academic and professional development.

- ➤ Online workshop on Intellectual Property Rights for students and faculty members.
- ➤ Workshop on "Intellectual Property rights".
- ➤ Webinar on "India's First Leadership Talk series ".



- ➤ One day national workshop on "The nitty-gritty of submitting Research papers to High-impact factor journals".
- Two days' Workshop on "Innovation and Entrepreneurship Skill Development" Guest Lecture on "Forging Future Engineers to Entrepreneurs".
- ➤ Guest Lecture on "Entrepreneurship Development and Intellectual Property Rights".
- ➤ Faculty development program on "Research and Development Awareness Needs and Benefits".

#### ADD ON CERTIFICATE COURSES

In addition to regular academic courses, each departments provide a variety of value-added courses.

- ➤ The Department of Civil Engineering has conducted three value added courses on Construction Equipment in Major Projects, Theory of Elastic Behaviour & Metal Structures and Remote Sensing & GIS in Transportation Development
- ➤ The Department of Computer Science and Engineering has conducted three certificate courses on Basics of Machine Learning, Multimedia Technology and Web Application Development.
- ➤ The Department of Electrical and Electronics Engineering has conducted three value added courses on Electrical Safety and testing, PCB Design for Electronics Engineer and VHDL.
- ➤ The Department of Electronics and Communication Engineering has conducted three value added courses on Introduction to Internet of things (IoT), Introduction to Robotics Advanced 3G and 4G wireless communication.
- ➤ The Department of Information Technology has conducted three value added courses on Design Patterns currently used in Software Industry, Latest trends in Wireless Networks and its Applications and Advanced concepts in Cloud computing.
- ➤ The Department of Mechanical Engineering has conducted three certificate courses on Lean Manufacturing, Lean Manufacturing and Design for Manufacturing.



- ➤ The Department of Management studies has conducted two value added courses on Time Management Skills and Training for Trainers.
- ➤ The Department of Science and Humanities has conducted two value added courses on "Waste management" Current Entail to the world and Introduction to copy editing.

#### **CELLS AND COMMITTEES**

In our college, the Science Club, English Club, Maths Club, Women Empowerment Cell, and R&D Cell orchestrated a diverse range of activities, each catering to different interests and objectives.

- ➤ Student Guest Lecture "How to Equip yourself as an Engineer?"
- ➤ English Club- Guest Lecture on "English Phonetic Transcription"
- ➤ Guest Lecture "Fundamentals of Crystallography"
- ➤ English Club-guest Lecture on "Intonations in English Articulation"
- > Group discussion on "cyber-crime against women"
- ➤ Seminar On women safety -challenges & solutions
- > Speech Competition: My Body, MY Freedom
- ➤ Guest Lecture on Women Empowerment in India and its importance
- Awareness Programme on Women Health Maintenance
- National Workshop on Nitty-Gritty of submitting Research Papers to High Impact Factor Journals
- > Student Development Program on Intellectual Property Rights, Innovation and Entrepreneurship Skill Development
- ➤ Guest Lecture on Entrepreneurship and Intellectual Property Rights
- > Guest Lecture on Research and Development Awareness Needs and Benefits

#### STUDENTS SKILL DEVELOPMENT

Our college offers various programs in order to enrich their soft skills, technical skills, Language, communication, Life skills (Yoga, physical fitness, health and hygiene) and ICT/computing skills.



- Employability Skill Program on "Connect with Work".
- > A Seminar on "Time Management".
- ➤ Skill Initiative programme on "Communication Skill".
- A Seminar on "Impact of Language Training Strategies".
- Awareness program on "Yoga for Humanity".
- > Seminar on Need for physical Fitness.
- Workshop on Data Structure.
- Problem Solving Using Python.

#### COMMUNITY ENGAGEMENT AND SOCIAL RESPONSIBILITY

At Kingston Engineering College (KEC), we recognize the importance of community engagement and social responsibility as integral components of our mission to foster holistic development and positive societal impact. Through various initiatives and programs, we strive to actively engage with our local community, address societal needs, and promote sustainable development.

- ➤ On 19.01.2019, NSS unit of KEC in association with Christian Medical College, Vellore conducted a "Blood Donation Camp".
- ➤ NSS unit of KEC in association with Scudder Memorial Hospital, Ranipet organised a "General Health Checkup Camp" on 17.09.2018.
- ➤ Youth Red Cross Club of KEC organised a "Mental Health Awareness Program at School" on 10.08.2018.
- ➤ In association with Kanchaloor Primary School organised "Silambam Awareness programme on 6<sup>th</sup> of August, 2018.
- ➤ NSS unit organised a programme on "Awareness on Road Safety" on 5<sup>th</sup> of July 2018.

#### PLACEMENT AND TRAINING ACTIVITIES

The Placement and Training Cell at Kingston Engineering College (KEC) is dedicated to empowering students with the skills, knowledge, and opportunities they need to succeed in



today's competitive job market. Through a range of placement and training activities, we are committed to fostering the professional growth and career success of our students.

- ➤ An Interactive Student Session on an Overview of Industry 4.0 was organised by Kingston Engineering College's Placement and Training Department on 28<sup>th</sup> February 2020.
- A guest lecture on "Higher Studies Opportunities" was organised by KEC's Placement and Training Department on 15<sup>th</sup> February 2019.
- ➤ On 24<sup>th</sup> January 2019, Guest Lecture on "Industry Requirement of Surveying" was conducted by KEC's Department of Placement and Training.
- ➤ On 24<sup>th</sup> December 2018, Placement and Training Department of KEC organised a Guest Lecture on Communication Skills for Corporate Success.
- ➤ A guest lecture on AMCAT Aptitude Training was organised by KEC's Placement and Training Department on 20<sup>th</sup> December 2018.
- ➤ The Placement and Training Department of KEC hosted a guest lecture on "How to Crack IAS?" on 4<sup>th</sup> October 2018.
- ➤ On 25<sup>th</sup> September 2018, Placement and Training department of Kingston Engineering College organised Guest Lecture on the topic Industrial Expectation and Grooming.
- ➤ The Placement and Training Department of KEC organised Guest Lecture on Career grooming for Civil Engineers on 27<sup>th</sup> July 2019.
- ➤ On 6<sup>th</sup> July 2018, Department of Placement and Training of KEC organised a Guest Lecture on "Aptitude Training Program".

#### **LIBRARY**

The library facility at KEC is a vibrant and dynamic space dedicated to fostering academic excellence, research innovation, and lifelong learning. With its extensive resources, modern amenities, and expert staff support, the library plays a central role in enriching the educational experience of our students and empowering them to succeed in their academic and professional endeavors.

- > Reference Books.
- ➤ Back-volumes (Articles-searching through OPAC).



- Rare Book Titles (inter-library Loan- DELNET).
- > Group Discussion Room as well as MULTIMEDIA FACILITY ROOM.
- Materials for GATE, GRE, Competitive Exams, TOFEL Books, TANCET, Handbooks & etc.
- > Department Library established for each department.
- New Arrivals of Book, Journals & Magazines are displayed.
- > Reprography Facility.
- > Project Report Service.
- ➤ Book Exhibition organizing all the academic year.
- > OPAC facility.
- > Books & journals, Members-automated with bar code technology.
- > Question booklet service.
- > E-resources.

#### **ALUMNI CONTRIBUTION**

Alumni bring a wealth of real-world experience from their careers and post-graduation endeavors. Their experiences provide valuable insights and perspectives that can enrich the learning experience for current students.

- The alumni meet was conducted on 02.10.2018. It was a remarkable event that brought together graduates from various batches, spanning several years of our college's history.
- ➤ The alumni generously donated books to enrich the resources available at our college's library.
- Mr. P. Vignesh Prakasam, Project Engineer at EinNel Technologies (Batch 2013-2015 / MECH) was the resource person for the Seminar held on the topic "Composite Technology".
- Mr. Karthik Soundararajan, Azure Senior Coud Engineer, TCS, Chennai (Batch 2008 2012 / CSE department) was the resource person for the Guest Lecture on "Microsoft Azure and Cloud Technologies".



Mr. V.R.Vishnu Varthan, Software Analyst, IVTL Infoview Technologies Pvt. Ltd (Batch 2012 – 2016 / IT department) was the resource person for the Workshop on 'Testing Framework'.

#### **CELEBRATION AT KEC**

Celebrations indeed play a crucial role in nurturing a sense of belonging, pride, and unity within the KEC community. Through events like Pongal, Saraswathi Pooja, Diwali, Independence Day, Republic Day, Sports Day, Cultural Day, and Induction Day, KEC not only celebrates its cultural diversity but also reinforces its core values and fosters a supportive and inclusive environment for students, faculty, and staff.

#### STUDENT PROGRESSION

The journey of students at Kingston Engineering College (KEC) extends beyond graduation as they embark on diverse career paths, pursue higher education, and make meaningful contributions to society. Through a combination of academic excellence, holistic development, and industry exposure, our students are well-prepared to succeed in their chosen endeavors post-graduation. Most of our students cleared GRE, TOEFL, TANCET and IELTS. Mr.S. Ajith Kumar cleared the Civilian Recruitment Examination and got eligible for the post of Fireman. Notable number of students have secured coveted positions in multinational corporations (MNCs), leveraging their education and skills to thrive in the corporate world. Around 375 students got placed in reputed companies all over India.

#### **SPORTS**

Kingston Engineering College showcased its exceptional talent and competitive spirit as around 27 teams participated in a diverse array of state-level competitions, representing the college across various disciplines. Demonstrating unwavering dedication and skill, these teams clinched an impressive total of around 22 medals and awards, underscoring the college's commitment to excellence and achievement. And also, they brought honours to our college by competing in a variety of intra- and intercollegiate tournaments.



#### **CONCLUSION**

Kingston College remains committed to providing quality education and expanding its academic offerings to meet the needs of our students and community. We are proud of our achievements and excited about the opportunities that lie ahead. Thank you to our students, faculty, staff, supporters, and community partners for your continued dedication and support.