K.S.R. COLLEGE OF ENGINEERING: TIRUCHENGODE - 637215

ANNUAL REPORT (2022-23)

I deem it my splendid privilege to highlight the achievements and a brief report of K.S.R. College of Engineering (Autonomous), Tiruchengode.

This institution was established in the year 2001, by the visionary Founder, Theivathiru Lion Dr. K.S. Rangasamy, and his son Shri. R. Srinivasan, the Chairman cum Managing Trustee.

The institution offers 27 programs, including 10 undergraduates, 9 Postgraduate, and 8 Ph.D. research programs, namely Automobile, Civil, Computer Science, Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Technology, Mechanical Engineering, and Physics.

This institution has been approved by the University Grants Commission (UGC) and All India Council for Technical Education (AICTE), New Delhi.

Furthermore, the Institutions has received accreditation from the "National Assessment and Accreditation Council (NAAC)" of A++ Grade with a score of 3.69 which is highest among all Autonomous institutions across Tamil Nadu. At this juncture, I thank, Management, HoDs, Faculty, Staff, Students and all Well-Wishers for their contributions and motivation during the NAAC Inspection to achieve A++ Grade and 3.69 Score.

Also, Four of the departments namely, Computer Science and Engineering (CSE), Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE) and Mechanical Engineering (ME) were accredited by National Board of Accreditation (NBA) with a score of more than 700.

The Institution has achieved Four Star (****) Rating in Institute Innovation Council (IIC).

Additionally, ISO 9001:2015 quality standards are maintained in all activities of the institution.

The achievements of the Institution:

- The institution follows the Graduate Attributes of Washing Accord (WA).
- > The institution's promotes research culture, continuous learning, and contributing to advancements in knowledge.
- ➤ Effective utilization and incorporation of Bloom's Taxonomy, enhancing the depth and quality of education.
- Implementation of Outcome Based Education, emphasizing the attainment of specific learning outcomes.
- > Adoption of the Choice Based Credit System, providing flexibility and a personalized learning experience.
- ➤ Platinum rating in AICTE CII (Confederation of Indian Industry), reflecting excellence in industry collaboration.
- ➤ Recognition with the Edu Icon Award, highlighting excellence and leadership in education.
- ➤ A high rating (AAA) in AICTE Career 360 Ranking, showcasing overall excellence.
- Recognition in the MHW Ranking, indicating prominence in the field of education.
- Categorized as a Band Promising Institution by the Ministry of Education, Govt. of India, in the ARIIA Ranking 2021.
- > "Jal Shakti Abhiyan" award from AICTE.
- ➤ Bhumi Campus Award, reflecting commitment to environmental sustainability.
- CSR GHRDC Outstanding Engineering College Award, showcasing excellence in engineering education.
- ➤ Recognition in various magazine rankings, including The Week Top Engineering College Award and Outlook's Best Institution Award, highlighting overall excellence.
- ➤ The institution has a substantial built-up area of 52,892 sq.mt, providing ample space for academic and co-curricular activities.
- ➤ Each department has its exclusive blocks, ensuring specialized and dedicated spaces for various disciplines.

- ➤ The air-conditioned digital and central library spans 1214 sq.mt and is well-equipped with 79,082 books, 30,285 titles, 10,188 e-Journals, 5,800 e-books, and 430 printed journals.
- State-of-the-art computer centers and laboratories equipped with modern technology to facilitate effective learning in information technology and related disciplines.
- Internet facilities with a bandwidth of 280 Mbps on 1:1 connectivity.
- ➤ A spacious playground providing students with a recreational area for sports and physical activities.
- Separate modern gym facilities for men and women, promoting health and wellness among the student community.
- Swimming pool facilities students, contributing to their physical fitness and well-being.

DEPARTMENT HIGHLIGHTS

1. Automobile Engineering

- ➤ The Automobile Engineering department was established in the year 2009, offers UG (B.E.-Automobile) and Ph.D Programme approved by Anna University, Chennai.
- ➤ The department have well experienced faculty members with average experience 15 yrs, out of which 50% are Ph.D holders and research supervisors.
- Four patents were granted and published.
- ➤ The department faculty members and students are involved in product development and as of now 4 products were developed.
- Faculty publish research articles in high impact factor journals, so far 50research articles are published in various International journals.
- The department has 7 MOU's with reputed Automobile Industries.
- students are encouraged to participate in national/International events like programs organized by Royal Enfield "Rider Mela" at Goa.
- Faculty have received awards from Nature Science Foundation.

2. Civil Engineering

- ➤ The Civil Engineering Department was established in the year 2002 and offers programmes B.E. Civil Engineering, M.E. Structural Engineering and M.E. –Construction Engineeringand Management.
- Number of Ph.D., scholars completed is 29 and pursuing is 33
- Department h-index is 15, i10-index is 24
- Papers published in high impact factor Journals are 265
- Patents granted is 10 and filed is 34
- 05 MoUs were signed and in functional
- ➤ Total grants of Rs. 54.95,558 were received from various funding agencies
- Rs.14,94,283 has been received to organize FDP,STTP, Seminar and Conferences
- ➤ AICTE provided the department with two MODROB grants for Rs. 25,00,000
- ThedepartmenthascompletedconsultancyworksaboutRs.1crorefromDistrict RuralDevelopmentAgency(DRDA),PublicWorksDepartment,Municipalities, SouthernRailway and Privateagencies

3. Computer Science and Engineering

- ➤ 24*7 Internet facilities with speed of 280 Mbps.
- ➤ Dr.K. Venkatesh Guru and J.Nirmala Gandhi had published book named "Fundamental of Python Programming" in Scientific International publishing house.
- Nithya N S had published a book named "Health care Informatics: Emerging Trends, Challenges and Analysis medical Imaging" in Willey.
- ➤ R. Arulkumar, V.Shanmugavalli, P. Palanisamy, M. Namasivayam had published a book named "Machine Learning Techniques" in Kiara Publications.
- Dr.K.Kumaresan had published a book named "Introduction to IoTs and its Applications" in Deccan international Acadamic Publishers, India.

- K. Kumaresan had published a book named "Improving Ecommerce Performance by Dynamically Predicting the Purchased Items Using FUP Incremental Algorithm" in Smart Trends in Computing and Communications.
- Organized Online six day faculty development training Programme on "Artificial Intelligence and Machine learning"
- R.Keerthana and M.Namashivayam undergone industrial training conducted by "Wipro" for "PRP" Program
- M.K.Nivodhini undergone industrial training conducted by Wipro on "Big Data".
- R.BanuPriyaand and V.Shanmugavalli had completed training conducted by VVDN and got certified.
- MoUsigned with prestigious organizations One yes InfoTech Solutions, Red owlInfoTech Private Limited and Celonis.
- > Five research scholars had completed Ph.D under this research centre
- ➤ 60% of our students got placed in many prestigious organizations.
- ➤ Rs. 2.72 lakhs generated through consultancy project

4. Electrical and Electronics Engineering

- Department of EEE accredited by NBA for three times
- Faculty with Ph.D. Qualification is 09
- Department is recognized as a research centre by Anna University, Chennai
- Number of Recognized Supervisor: 06
- No. of Scholars Pursuing Ph.D: 29
- No. of Scholars Completed Ph.D :30
- Department h-index : 20,i10-index : 46
- Papers Published in referred SCI Journal and International Conferences is 352
- Reviewers / Editorial Board Member for International Journals : 10
- Patents Granted/ Published: 10 / 08
- Copyrights Received : 07
- Faculty members and students actively involve and complete NPTEL Examination conducted by SWAYAM: 03 Gold & 06 Silver

- O5 MoU's with leading Industries to provide recent industrial exposure to students
- ➤ The 80% of students were placed in the reputed companies like CTS, Sagent, Data Pattern, Axis Bank, SL Lumax, Aspire Systems, etc
- ➤ The department has received about 64 lakhs from funding agencies like AICTE, ICSSR, DST, TNSCST
- ➤ The department has received 27.5 lakhs from Saudi Arabia for the international collaborative project
- ➤ The department has organized an IEEE conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI 2023): 225 Papers were presented

5. Electronics and Communications Engineering

- Department of ECE accredited by NBA for Four times
- ➤ The 80% of students were placed in the reputed companies like CTS, Mindtree, Happiest Mind, ITC Software Solutions, Data Pattern, Aspire Systems, Sanora Sewtec, RITS, I-Bacus Tech., etc
- ➤ 04 Elite + Gold & 29 Elite + Silver grades are received by our faculty members and students in NPTEL Examination conducted by SWAYAM.
- ▶ 16 Patents were Granted and 14 patents were Published
- Copyrights Received:04
- ▶ 45 % of the faculty members are with Ph.D qualification
- ➤ 80% of the faculty members are having more than 5 years of experience in the department
- Papers Published in referred SCI Journal and International Conferences is 72

6. Information Technology

➤ 5 MoU with leading Industries to provide recent industrial exposure to students & Faculty Internship

- Dr.G. Singaravel Top 10 Professor of the Year in India. International
 Brilliance Award 2022 Hypedge Group of Companies, Goa
- 12 Patent Published and 1 IPR Granted, 5 Book Published with ISBN in online
- 6 Ph.D Holder in Department, 18 Ph.D Scholar Completed and 21 Ph.D Pursuing through the Research Centre
- FarithaBanu Placed in VIBS Integrating Business and Solutions with Package of 10 LPA, 2023

7. Mechanical Engineering

- Department of ME accredited by NBA Tier-I
- Department is recognized as a research centre by Anna University, Chennai
- No. of Scholars Completed Ph.D :28, No. of Scholars Pursuing Ph.D : 11
- Department h-index : 28, i10-index : 57
- Papers Published in referred SCI Journal and International Conferences are 108
- Patents Granted/ Published: 07/05, Copyrights Received: 03, Product Developed: 13
- ➤ The department has received about Rs.35,25,000 from funding agencies like AICTE, ICMR, DST, TNSCST, etc
- ➤ The 80 % of students were placed in the reputed companies like Wipro, Brakes India, Ashok Lay land, WEG Industries, SL Lumax, Flow Serve, etc
- Total fund generated through Consultancy is Rs.15,68,520
- ➤ The department have International Collaboration with Dongguk University, South Korea

8. Safety and Fire Engineering

- ➤ The Department of Safety and Fire Engineering was established in the year 2020 with an intake of 60 students.
- ➤ The Department of Safety and Fire Engineering has signed MOU with National Institute of Technology, Tiruchirappalli

- By encouraging students for advanced study and research and to improve the safety standards of the society and the nation.
- ➤ 46 out of 50 students of final year Safety and Fire Engineering went for Intern to MNC Companies - ZF-Rane, Berger Paints, and Britannia Industries Private Limited.

9. Management Studies

- Industry connect by signing MoU with nine companies
- Industry elective is offered to the students
- Visited seven industries by the students.
- Conducted four Placement training programmes by experts
- Organized two National level programmes.
- Industry oriented value added course on "Digital Marketing" and "NCFM" is given to the students
- > Industry projects project by the students.
- Weekly intra department programmes for skill development.

10. Master of Computer Application

- Department h-index is 9 and i10-index is 9
- ➤ Google Scholar Citations is 490
- > IPR Patent Granted is 02
- ➤ IPR Patent Filed is 07
- ➤ NPTEL Course Certifications is05
- No. Recognized Supervisors is 02
- National Conferences Organized is06
- MOU Signed with Red Fowl Infotech Pvt.Ltd,Oneyes Infotech Solutions, Cakon Online service.
- ➤ Ph.D. Completed is 04 and Ph.D. Pursuing is 03
- Organising International /National Symbosiumyearly
- Placement highest Package in Altimetric (7.2lakh/Annum), One yes(8Lakh/Annum)
- Awards received
- > JAL SAKTHI ABIYAN AWARD(AICTE)
- ➤ GHRDC
- ➤ Placement 86%, Maximum package 7.2 Lakh per Annum

- One Scholar completed PhD in the academic year
- > Filled two patents in the department
- Faculty members published papers in the Scopus journals
- Industry connect by signing MoU with nine companies

Since 2016, we are a partner institution with PALS-IITM (An Alumni series of IIT-Madras). They are conducting programmes for management, faculty and students to maintain a standard in engineering Education. FDP, workshops and industry visits are arranged to the faculty members to learn the expectations of the industry. The students are given opportunity in residential workshop at IIT-Madras, industrial and RuTAG-IITM projects and internship's at IIT-Madras through PALS.

The ICT academy and our Institution has academic partnership for the sustainable development of our Institution, faculty and students. We also train students to take part in the India's important visions such as Skill India, Digital India, Start-up India and Make in India.

The Institute offers PMKVY – Technical Institute Courses for the students to emerge as a successful entrepreneur. As a positive step in the Institution Industry Interaction, our college is a life member of ICT Academy of Tamil Nadu.

K.S.R. College of Engineering has always giving priority to the students for the well-being of their future. Students are offered training on a regular basis in the areas like Aptitude, Soft Skills, Technical training etc., Students skill Enrichment programmes like special lectures/workshops/seminars with external experts are conducted at regular intervals. As a part of Co-Curricular activities, our students have won many certificates and prizes by participating in National level Project Competitions, Technical Symposiums, National & International Conferences.

450 students were participated in paper presentation, conferences, workshops and seminars in various Institutions and 153 students won the Prizes in various events in this Academic year. Our faculty have produced 100% results in 329 subjects. These Faculty members will be honored with cash prize and certificate. 20 students have achieved 100% attendance throughout the four years of their degree programme and each of them will receive cash prize and certificate.

Apart from Curriculum, the students were involved themselves in participating in extra-curricular activities such as NSS, NCC, YRC, RRC, Sports and Music club.

In Sports the achievements are:

- 1. Anna University inter zone athletics men overal championship at kongunadu college, Thottiyam
- 2. Anna University zone athletics men over all championship & women overall Runner
- 3. Anna University zone winner& inter zone kho kho Bronze medal, Two number South zone selected 1. Gogil I year CSE. 2. Naveen Prasanth I year MBA. at Calicut University, Karal
- 4. South zone selected for athletics events two numbers Vinith 1/ME (ISE) 800mts, 1500mts and Manikandan 1/Mech 20km walk, at Tamilnadu sports University
- 5. All India selected 1.manikandan I year mech. 20km walk at Tamil Nadu sports University
- 6. Anna University zone volleyball runner
- 7. Anna University zone badminton bronze medal
- 8. Anna University zone cricket men bronze medal
- 9. Anna University zone basketball bronze medal
- 10. State kongunadu trophy kabaddi men Runner
- 11. Anna University zone 12 Erode sports and games overall third place

In NCC the Achievements are:

- 1. Four NCC cadets attended National Integration Camp NCC Camp held at Jhansi
- 2. Two NCC cadets attended a twelve army attachment camp
- 3. Five NCC cadets participate in a twelve Army attachment camp held at chennai
- 4. Five NCC cadets particiapate, To commomorate 75 raising of NCC in India, the unity flame run from kanyakumari to New Delhi.
- 5. To implement Punith Sagar Abiyan, Cleaning programme on River bank and removed plastic for recycling process

In NSS and YRC the Achievement:

- 1. Conducted 3 blood donation camps and given 300 units of blood to Govt. Hospital at Tiruchengode
- 2. Conducted Mass Cleaning Programme in the KSRCE Campus
- 3. Organized Special camp at the adopted village and render various social services
- 4. Organized Awareness programmes on Drug Addict and Covid 19

Through Music club, the International Music competition was organized. Participation in these activities not only adds a dynamic dimension to their overall educational experience but also contributes positively to the institution and the community. They fetch many honors to this Institution through their Social activities.

During this year itself 2173 Alumni visited our college. 10 Alumni programmes have been conducted. 263 Alumni are pursuing higher studies in India, 138 Alumni are Pursuing Higher Studies at Abroad and 211 Alumni have become Entrepreneurs. The college has a strong alumni base of over 38,000 and most of them occupying coveted positions in Corporate, Industries and Institutions across the world.

CAREER DEVELOPMENT CENTRE:

The energetic Career Development Centre under the leadership of Mr. S. Gopinath, Director Career Development Centre, Mr. N. Karthikeyan, Deputy Director - Corporate Relations, Dr. C. Muhuntarajan, Deputy Director Training, acting as an association between institute and industry, to conduct campus interviews for our students. It has built up an impressive placement record, both in terms of number of students placed as well as number of companies visiting the campus. The placement activities of the current year too began with Hexaware and Codingmart Technologies.

To meet the industry requirements, we are regularly providing the industry training by establishing the Centre of Excellence. We have Virtusa's Centre of Excellence on DotNet& Software Testing, Aspire Systems CoE on Java and DotNet, L&T CoE, MaximlCoE, Macbro Technologies CoE, CelonisCoE, RITS Consulting CoE, Palo Alto CoE and UiPath CoE. L&T Constructions and Autodesk's Centre of Excellence for Automobile, Civil and Mechanical Engineering. Through these CoEs internships, Placements for the Pre Final and final year students are provided.

Digital way of learning using Video tutorials, E-Learning-Materials, Train the Trainer model with the support of Industries, Mentoring the students with the support of Industry-Experts are provided for the benefit of students and Faculty members. We are also motivating the students on Self-Learning, Deep-Learning and Life-Long Learning abilities.

Totally 15 of our faculty members have been trained and certified by Virtusa, Aspire Systems, Wipro Technologies, Maximl, Kumaran Systems, Soft Square and VVDN Technologies on different skills.

We are conducting the Project Readiness Programme (PRP) for our final year students with the support of Wipro Technologies. Our Faculty, Mrs. M.K. Nivodhini of the CSE-Department, has attended the training programme and successfully completed the Advanced Wipro Certified Faculty Certification. Four of our faculty Members, Mrs. P.Vasuki, Mrs. V.Shanmugavalli and Dr. R. Banupriya, Department of CSE, and Mrs. S. Suganya, Department of IT, have been certified by Virtusa. Dr. Geethanjali Krishnan, soft skills trainer, has completed the Certified International Trainer and Coach program at the Indian Leadership Academy, Bangalore.

An exclusive training is given on aptitude, soft skills, life skills, communication skills and technical skills with the support of internal and external trainers.

- Certification Training Programme by Unnati Foundation was conducted on Communication and Soft Skills for our final year students. 41 students attended the Certification Programme.
- Current Academic year more than 70 companies have visited our campus for Recruitment and more than 227 students have been placed in product based software development, IT, ITES and core organizations. Our prime recruiters are Coding Mart Technologies, Kaar Technologies, Virtusa, Accenture, Hexaware, Data Patterns, Cognizant Technology Solutions, Touchmark, RITS Consulting Services, Enthu Technology, Kone Elevators, Sanmar, Delphi TVS, Titan, Brakes India.
- ➤ Totally 180 students are undergoing Internships at various leading companies like Codingmart Technologies, Lucid Imaging, Southern Railway, National Highway Authority of India, Skillhacc, Kone Elevators, Gishnu Gears, Procas Mechatronics, NeyveliLiginite Corporation, Marcello Tech, Brakes India

It's a momentous occasion as 393 students receive their degrees from Anna University, Chennai today. This diverse group comprises 300 undergraduates and 93 postgraduates, representing a broad spectrum of academic achievements and areas of study.

The recognition and celebration of academic excellence in this convocation add a special touch to the event. Congratulations to the 7 students who will be honored with Gold Medals, as well as the 2 students receiving Silver Medals and Rank Certificates for their outstanding academic accomplishments. These awards signify not only personal achievement but also the dedication and hard work put into their studies.

To conclude, every significant step taken by K.S.R. College of Engineering is a massive leap acceleration in imparting education and getting our students ready for a successful Professionals and Entrepreneurs.