



DEPARTMENT OF MECHANICAL ENGINEERING

MECH CHRONICLES NEWS LETTER



ACADEMIC YEAR 2024-2025

Chairman Message

Mr. R. Srinivasan,
Chairman,
KSR Educational Institutions.



As we stand on the brink of new beginnings and boundless possibilities, I am filled with an immense sense of pride and optimism about what we can achieve together at KSR Educational Institutions. Our founder, Dr. K S Rangasamy, laid a strong foundation rooted in the belief that education is the most powerful tool to transform lives. Carrying forward his legacy, we remain committed to not just educating but empowering young minds to make a meaningful impact in the world.

In today's fast-paced, technology-driven society, the challenges are as dynamic as the opportunities are great. It is imperative for education to transcend traditional learning and encompass the development of holistic, innovative, and critical thinking skills. At KSR, we strive to equip you, our students, with the capabilities to not only adapt to changes but to drive them. We are dedicated to nurturing a generation of leaders, innovators, and thinkers who are ready to take on global challenges with local sensibilities.

Making an Impact is not just a phrase—it's our mission. It's about inspiring each one of you to pursue your passions with determination and a sense of responsibility towards the betterment of society. We encourage you to dream big, push boundaries, and question the status quo. Our campus is a melting pot of ideas where your creativity and ambitions are nurtured, allowing you to flourish in ways you never imagined.

Warm regards,
Mr. R. Srinivasan,
Chairman,
KSR Educational Institutions.

Vice Chairman Message

Mr. K. S. Sachin,
Vice Chairman,
KSR Educational Institutions.



At KSREI, we stand at the intersection of tradition and transformation, committed to shaping a future driven by knowledge, innovation, and values. While our roots are firmly grounded in a legacy of academic excellence, our vision extends beyond boundaries, preparing students to excel in an ever-evolving global landscape.

Our goal is to create a dynamic learning ecosystem that fosters critical thinking, technological prowess, and ethical leadership. We envision KSREI as a hub of intellectual growth, where students are empowered with 21st-century skills while embracing the timeless virtues of integrity, perseverance, and service.

Looking ahead, we aim to integrate cutting-edge advancements in education, strengthen industry collaborations, and expand global opportunities for our students. With a deep commitment to holistic development, we continue to nurture future leaders who will shape society with wisdom and purpose. Together, we build the future—rooted in values, driven by vision.

Warm regards,
Mr. K. S. Sachin,
Vice Chairman,
KSR Educational Institutions.

Dean Message

Dr. M. Venkatesan,
Dean,
K.S.R College of Engineering.



As a Dean of KSRCE, I actively play my role to facilitate students to become best academicians, researchers and policy makers. I provide a diverse and inclusive work environment to my colleagues and drive them wherever necessary to play a role in getting utmost national and international agencies support Institution. A collaborative and integrated approach towards teaching, learning and research will be emphasized. I strongly believe that the KSRCE team will overcome the constraints facing to deliver the best Engineering services to the society and reach the desired goals.

With Regards,
Dr. M. Venkatesan,
Dean,
K.S.R College of Engineering.

Principal Message

Dr. P. Meenakshi Devi,
Principal,
K.S.R. College of Engineering.



My heartiest welcome to all the young budding Engineers who have joined in "K.S.R. College of Engineering". With the help of highly qualified and dedicated staff members, we will be moulding the students to the required shape which will make them employable. The composite unit of Students, Parents, and Society is our customer. The K.S.R. College of Engineering will strive hard to provide customer satisfaction. In our college, we give top priority to discipline. A series of tests and examinations will be conducted to achieve good performance in the university examinations. An effective Training and Placement (T&P) cell is formed to provide placement to all our students. Importance will be given to extra-curricular and co-curricular activities also.

Excellent infrastructure facilities and good learning atmosphere is an added advantage of this great Institute. I hope all the students admitted here will enjoy the four years of study. Let us all work hard to produce the most competent scientists, engineers, Entrepreneurs, Managers and researchers through Quality Education.

With Regards,
Dr. P. Meenakshi Devi,
Principal,
K.S.R. College of Engineering.

HoD Message

Dr. A. V. BALAN,
HoD – Mechanical Engineering,
KSRCE.



My heartiest welcome to all the young budding Engineers, I'm excited to witness your growth and achievements. This is a time for discovery, learning, and building skills that will shape your future. Our department is committed to providing you with a supportive, innovative, and enriching environment that will challenge and inspire you. We encourage you to take full advantage of the resources, faculty expertise, and peer collaborations available. Don't hesitate to explore new ideas, ask questions, and engage actively in both academic and extracurricular activities. Remember, success isn't just about grades it's about the knowledge you gain, the challenges you overcome, and the networks you build. We are here to guide and support you in your journey.

With Regards,
Dr. A. V. BALAN,
HoD / Mech,
KSRCE.

K.S.R. COLLEGE OF ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering is one among the 13 departments functioning in K.S.R. College of Engineering. The department was started in the year 2005 with an approved intake of 60 students. The department has state-of-the-art infrastructure facilities, well qualified faculty and staff members. It is a recognized Research Centre of Anna University, Chennai. Post graduate degree courses in Industrial Safety Engineering and CAD/CAM are being offered. The Mechanical department is accredited by National Board of Accreditation (NBA), Tier – I. The department has achieved 3 Gold Medals and 22 University Ranks in the examination conducted by ANNA University. Research articles are being published by faculty members regularly in the form of patents (Granted -10, Filed – 40), Copy Rights (Received -3), International & National journals, International & National conferences. Outreach program, Industrial Guest Lectures, National Level Technical Symposium (THROTTLE), National/International Conferences, Value Added Courses, Training related to Placement, Higher Education, Entrepreneurship and Start-Ups are regularly being organized by the department.

VISION

To develop globally competent–mechanical engineers driving technological advancement through sustainable research and socially responsible innovation

MISSION

- Impart industry-focused, value-based education through innovative teaching methods and practical exposure
- Deliver competitive technical education using cutting-edge infrastructure and modern learning environments
- Promote a culture of innovation, research, and ethical responsibility through collaborative efforts for sustainable progress.

Program Educational Objectives (PEOs)

Core Competency: Graduates will analyse, design, and implement sustainable Engineering solutions in diverse engineering domains addressing the needs of society.

Professionalism: Graduates will exhibit impactful leadership and teamwork across diverse cultural and disciplinary environments, contributing positively to the engineering profession

Career Development: Graduates will engage in continuous learning through higher education and research innovations to adapt to emerging technologies and career advancements.

Program Outcomes

- **PO1 Engineering Knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.
- **PO2 Problem Analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
- **PO3 Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)
- **PO4 Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
- **PO5 Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6).
- **PO6 The Engineer and The World:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
- **PO7 Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
- **PO8 Individual and Collaborative Team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
- **PO9 Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences.
- **PO10 Project Management and Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
- **PO11 Life-Long Learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

Program Specific Outcomes (PSOs)**PSO1: Mechanical System Design and Analysis:**

Apply fundamental principles of mechanics, thermodynamics, and materials science to design, analyze, and optimize mechanical components and systems.

PSO2: Manufacturing and Automation:

Utilize modern manufacturing techniques, automation, and computer-aided tools to develop efficient and sustainable production processes.

EDITORIALBOARD

CHIEF PATRON

Thiru. R. SRINIVASAN
Chairman

PATRONS

Shri K. S. SACHIN, Vice Chairman
Dr. M. VENKATESAN, Principal

CHIEF EDITOR

Prof. Dr. A.V. BALAN, HoD/ MECH

ASSOCIATE EDITOR

Mr. C. M. DINESH, AP/ MECH

STUDENT CO-ORDINATORS

Mr. BHOOSHIT N S, IV MECHANICAL ENGINEERING
Mr. CHIRANJIBI SUBEDI Y, III MECHANICAL ENGINEERING
Mr. LAGAN V, II YEAR MECHANICAL ENGINEERING

Content Page

1. MoU's Signed

2. FACULTY ACHIEVEMENTS

2.1 Faculty Publications

2.2 Book Chapter

2.3 Faculty Patent Publications

3.NPTEL Achievers

3.1 Swami Vivekanand – An Exclusive Global Honor 2024

3.2 Niral Thiruvizha 2.0

3.3 Two-Week Mentorship program at IITM

3.4 Student Project Grant at TNSTC

3.5 Faculties as participants in various programmes

4. DEPARTMENT ACTIVITIES

4.1 Events Organized by the faculty

5. STUDENT ACHIEVEMENTS

5.1 Placement Details

6. STUDENT ACTIVITIES

6.1 Alumni Corner

7. CELEBRATION GLIMPSES

7.1 Pongal Festival

7.2 Farewell Day function

1. MoU's Signed



We had a MoU with **Aerospace Engineers Pvt. Ltd.**, Salem, on 15th May, 2025.

2. FACULTY ACHIEVEMENTS

2.1 Faculty Publications:

S.No Publication Details

Photo

- 1 P. Senthamarai Kannan, Felix Sahayaraj Arokiasamy, M. Tamil Selvan, Divya Divakaran, Indran Suyambulingam, A. V. Balan, H. Jeevan Rao. "Synthesis, Characterization, and Analysis of Bioplasticizers Derived from Thespesia populnea Leaf: Towards Sustainable Biomaterials." Journal of Inorganic and Organometallic Polymers and Materials. --, --, January 2025.



- 2 Balan A V, Gopinath P, Rameshkumar R, Vairavel Madeshwaren. "Optimising geometry of weld beads for high-performance welding of hot rolled carbon steel by taguchi technique." REVISTA MATERIA. 30, --, 2025.



- 3 Dhiravidamani Periyasamy, Jagadeesh Duraisamy, Sami Al Obaid, Venkatesh Rathinavelu. "Aluminium Alloy Nanocomposite Featured with Barium and Silicon Carbide Nanoparticles: Mechanical and Wear Studies." Silicon. 17, 1165-1176, March 2025.



S.No Publication Details

Photo

- 4 Narayana Perumal Sunesh, P. Senthamaraikannan, Divya Divakaran, V. S. Benitha, Indran Suyambulingam, R. Vijay, K. Perumal. "Detailed analysis and characterisation of microcrystalline cellulose derived from Ocimum tenuiflorum leaves." Biomass Conversion and Biorefinery. --, --, February 2025.



- 5 S. Sivakumar, M. Sivakumar, T.Nithyanandam, S. Jegatheswari. "Degradation study of SAE 20W40 lubricating oil in an endurance test fueled with cardanol-diesel biodiesel blend in comparison with base diesel fuel." Journal of Thermal Analysis and Calorimetry. --, --, April 2025.



- 6 M. Sangeetha, M. Kannukkiniyal, R. Manjula Devi, P. Murugesan. "ADAPTIVE PERSONALISED COLLABORATIVE FILTERING BASED RECOMMENDATION SYSTEM USING GRAPH NEURAL NETWORKS." Journal of Environmental Protection and Ecology. 26(1), 190-199, 2025.



- 7 K. Kannakumar, R. Girimurugan, M. Sivakumar, P. Kanakarajan, K. Gopalakrishnan, G. Ramachandran, S. Nanthakumar, Biswadip Basu Mallik. "Evaluating Gamification Tools for Operating Management in Industrial Engineering: A Dual-Model Approach Using Fuzzy AHP and MACBETH." Applications of Fuzzy Logic in Decision Making and Management Science (Book chapter). 29, 219-244, 2025.



- 8 P. Kalyanasundaram, Sivakumar Muthusamy, P. Kanakarajan, N. Saravanan. "Sensors and Data Driven Approaches in Precision Agriculture: A Comprehensive Review." Applications of Fuzzy Logic in Decision Making and Management Science (Book chapter). 29, 275-290, 2025.



2.2 Book Chapter



"Published in February 2025 (ISBN: 978-81-984006-3-5), this book highlights advanced sustainable development strategies and environmental science innovations for researchers and professionals."



Mr. C. M. DINESH., ME.,
(Ph.D)
Assistant Professor

Dr.K.Karunakaran, Dr.G.Karunakaran, Dr.S.Durgalakshmi, Dr.Elumalai P.V

Chapter 10

Autonomous Vehicles and Robotics in Advanced Manufacturing

V.K. Vasanth¹, P. Rajendran², P. Jagadeesh³, P. Prakash⁴¹Assistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode²Associate Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode, rajendran@ksrce.ac.in³Assistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode⁴Assistant Professor, Department of Mechanical Engineering, Vels Institute of Science, Technology and Advanced Studies, Chennai, prakash1033@gmail.com

Autonomous Vehicles and Robotics in Advanced Manufacturing

Authors: V.K. Vasanth, P. Jagadeesh, P. Prakash

Affiliations: KSRCE Tiruchengode, VISTAS Chennai

Focus: AI-driven robotics for Industry 4.0 (pp. TBD).



Mr. P. Jagadeesh., ME., (Ph.D)
Assistant Professor

Exploring Interdisciplinary Innovations in Science and Management, Volume II, 2025

Chapter 19

Integrated Mechatronic Systems for Biomedical Applications: A Multidisciplinary Approach

K. Sasikala^a, Hemalatha RJ^b, P.Jagadeesh^c^aAssociate Professor, Department of Electrical and Electronics Engineering, Vels Institute of Science, Technology & Advanced Studies, Chennai, Tamil Nadu, India, skala.se@vistas.ac.in^bAssociate Professor, Department of Biomedical Engineering, Vels Institute of Science, Technology and Advanced Studies, Chennai, Tamil Nadu, India.^cAssistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tamil Nadu, India^{*}Corresponding Author: hemalatharj.se@velsuniv.ac.in

Integrated Mechatronic Systems for Biomedical Applications

Authors: K. Sasikala, Hemalatha RJ, P. Jagadeesh

Affiliations: VISTAS Chennai (Biomedical/EEE), KSRCE (Mechanical)

Focus: Interdisciplinary medical device innovations.



Mr. P. Jagadeesh., ME., (Ph.D)
Assistant Professor

CONTENTS

Chapter No	Chapter Titles	Page No
1	Sustainable Bioprocessing and Green Biotechnology Annie D. J. Emerson Raja, V. Vijayan, P. Jagadeesh, S. Gargalakshmi	1-23
2	Eco-friendly Sustainable Materials and Recycling Technologies Madhava, M. Vetrivel, J. Venkatesh, C.M. Dinesh, Devi Chokkalingam	24-48
3	Heat transfer and energy efficiency in buildings Rajaji E. Karumuganair, K. Rajkumar, K. Ganesh, M. Chandrasekaran	44-64
4	Smart Grids for Sustainable Energy using Advanced Grid Management S. Sivasubramanian, S. Nirmala Sugirtha Rajini, S. Sakthya Lakshmi	67-97
5	Green computing: energy efficiency in computing systems M. Mylreyye, P. S. Kalyana Chakravarthy	98-118

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vi

"Eco-friendly Sustainable Materials and Recycling Technologies

Authors: Madhava, M. Vetrivel, J. Venkatesh, C.M. Dinesh, Devi Chokkalingam



Mr. J. Venkatesh., ME., (Ph.D)
Assistant Professor

Dr.K.Karunakaran, Dr.G.Karunakaran, Dr.S.Durgalakshmi, Dr.Elumalai P.V

Chapter 10

Autonomous Vehicles and Robotics in Advanced Manufacturing

V.K. Vasanth¹, P. Rajendran², P. Jagadeesh³, P. Prakash⁴¹Assistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode²Associate Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode, rajendran@ksrce.ac.in³Assistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode⁴Assistant Professor, Department of Mechanical Engineering, Vels Institute of Science, Technology and Advanced Studies, Chennai, prakash1033@gmail.com

Autonomous Vehicles and Robotics in Advanced Manufacturing

Authors: V.K. Vasanth, P. Rajendran, P. Jagadeesh, P. Prakash



Mr. P. Rajendran, ME., (Ph.D)
Assistant Professor

Chapter 2

Eco-friendly Sustainable Materials and Recycling Technologies

Madhava¹, M.Vetrivel², J.Venkatesh³, C.M.Dinesh⁴, Devi Chokkalingam⁵¹Assistant Professor & Head, Department of Civil Engineering, Sri Venkateswara Institute of Science and Technology, Kadapa, Andhra Pradesh.²Associate Professor, Department of Commerce, Vels Institute of Science Technology and Advanced Studies, Chennai, Tamil Nadu, vetrivel.sms@vistas.ac.in³Assistant Professor, Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode⁴Assistant Professor, Department of Mechanical Engineering, K.S.R. College of Engineering, Tiruchengode⁵Assistant Professor, Department of Mechanical Engineering, Dr. M.G.R. Educational and Research Institute, Madhavai, Chennai

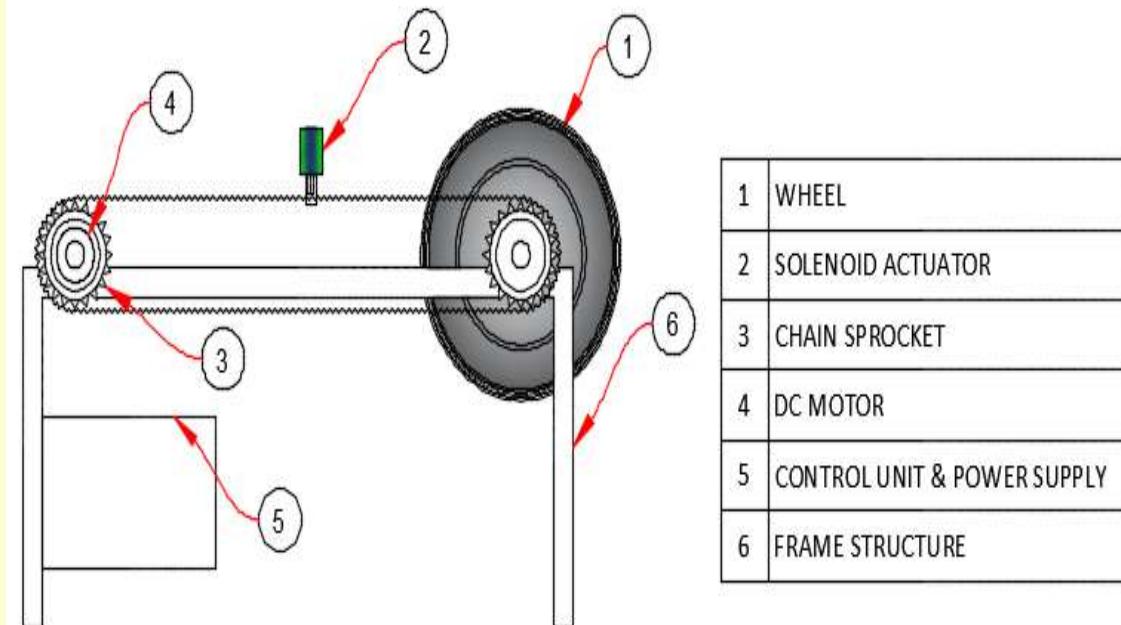
"Eco-friendly Sustainable Materials and Recycling Technologies

Authors: Madhava, M. Vetrivel, J. Venkatesh, C.M. Dinesh, Devi Chokkalingam

Mr. C. M. DINESH., ME.,
(Ph.D)
Assistant Professor

2.3 Faculty Patent Publications

Advanced retrofitted anti-theft chain mechanism for improved security in two-wheelers.



(12) PATENT APPLICATION PUBLICATION:

(10) DMDA

(23) Date of Filing of Application: 30/04/2025

(21) Application No: 202541042044 A

(43) Publication Date: 30/05/2025

(34) Title of the Invention: AIR-OPERATED DUAL-CYLINDER PNEUMATIC PUMP FOR FLUID TRANSFER

(31) International Classification:

(30) International Application No:

(32) International Publication No:

(33) Patent of Addition to Application Number:

(34) Filing Date:

(35) International Classification:

(36) International Application No:

(37) Patent of Addition to Application Number:

(38) Filing Date:

(39) International Classification:

(40) International Application No:

(41) Patent of Addition to Application Number:

(42) Filing Date:

(43) International Classification:

(44) International Application No:

(45) Patent of Addition to Application Number:

(46) Filing Date:

(47) International Classification:

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(49) Patent of Addition to Application Number:

(50) Filing Date:

(51) International Classification:

(52) International Application No:

(53) Patent of Addition to Application Number:

(54) Filing Date:

(55) International Classification:

(56) International Application No:

(57) Patent of Addition to Application Number:

(58) Filing Date:

(59) International Classification:

(60) International Application No:

(61) Patent of Addition to Application Number:

(62) Filing Date:

(63) International Classification:

(64) International Application No:

(65) Patent of Addition to Application Number:

(66) Filing Date:

(67) International Classification:

(68) International Application No:

(69) Patent of Addition to Application Number:

(70) Filing Date:

(71) International Classification:

(72) International Application No:

(73) Patent of Addition to Application Number:

(74) Filing Date:

(75) International Classification:

(76) International Application No:

(77) Patent of Addition to Application Number:

(78) Filing Date:

(79) International Classification:

(80) International Application No:

(81) Patent of Addition to Application Number:

(82) Filing Date:

(83) International Classification:

(84) International Application No:

(85) Patent of Addition to Application Number:

(86) Filing Date:

(87) International Classification:

(88) International Application No:

(89) Patent of Addition to Application Number:

(90) Filing Date:

3. NPTEL Achievers

KSR College of Engineering

NAAC ACCREDITED A++ | NBA ACCREDITED PROGRAMMES
AN AUTONOMOUS INSTITUTION

Congratulations
NPTEL ACHIEVERS

DEPARTMENT OF MECHANICAL ENGINEERING

 Dr. A.V. BALAN 83 Elite+Silver Laser Based Manufacturing	 Mr. C.M. DINESH 77 Elite+Silver Metal Additive Manufacturing	 Mr. S. BALAMURUGAN 75 Elite+Silver Laser Based Manufacturing	 Mr. P. CHAKRAVARTHI 75 Elite+Silver Design Thinking - A Primer
 Mr. P. RAJENDRAN 70 Elite Metal Additive Manufacturing	 Mr. J. VENKATESH 69 Elite Laser Based Manufacturing	 Mr. K. VENKATESHWARAN 68 Elite Automation in manufacturing	 Mr. R. SURENDRAN 68 Elite Developing Soft Skills and Personality
 Mr. R. VASANTHAKUMAR 65 Elite (TOP5%) Advanced Machining Processes	 Dr. M. SIVAKUMAR 62 Elite Design Thinking - A Primer	 Dr. M. SIVAKUMAR 63 Elite Advanced Machining Processes	 Dr. K. CHANDRASEKARAN 57 Completed Introduction to Composite
 Mr. T. KEERTHI VASAN 65 Elite (TOP5%) Advanced Machining Processes	 Dr. P. DHIRAVIDAMANI 54 Completed Advanced Machining Processes	 Mr. K. GOPALAKRISHNAN 53 Completed Advanced Machining Processes	 MR. C. SENTHILKUMAR 53 Completed Advanced Machining Processes
 Dr. P. KANAKARAJAN 65 Elite (TOP5%) Advanced Machining Processes			

With great pleasure, we congratulate the faculty members for their great achievements in NPTEL JULY to SEPTEMBER 2024 examinations.

3.1 Swami Vivekanand – An Exclusive Global Honor 2024



Dr. M. SivaKumar



Dr. P. Kanakarajan

3.2 Niral Thiruvizha 2.0

Project Grand of Rs.10,000/-



Mr. R. Vasantha Kumar



Mr. C. Senthil Kumar



Mr. P. Manikandan

3.3 Two-Week Mentorship program at IITM

A promotional poster for KSR College of Engineering. The top section features the college's logo, name, and accreditation details (NAAC A++ and NBA). It also marks the college's 25th anniversary (2001-2026). The central text reads 'CONGRATULATIONS' in large, colorful letters, followed by 'being selected for the CEEE Programme 2025' and 'TWO WEEKS MENTOR SHIP PROGRAMME AT IIT-MADRAS' in a blue banner. The dates '16th June to 27th June 2025' are listed below. Two circular portraits of the mentors are shown: Dr. P. Rasagopal on the left and Mr. K. Perumal on the right. Their names and titles (Associate Professor and Assistant Professor, Dept. of Mech) are printed below their respective portraits. The bottom of the poster includes the KSR Educational Institutions logo, a list of offered programs (Engineering, Arts and Science, Dentistry, Diploma, ITI, Allied Health Science, Nursing, Pharmacy, Teacher Education, Schools), the college's address (KSR Kalvi Nagar, Tiruchengode, Namakkal - 637216, Tamil Nadu, India), social media handles, and the website www.ksrce.ac.in.

3.4 Student Project Grant at TNSTC



We are thrilled to announce that **Dr. P. Dhiravidamani & Mr. P. Manikandan of Mechanical Engineering**, along with his dedicated team of students, has achieved a remarkable milestone. Their innovative project has been selected for the prestigious Tamil Nadu State Technical Textbook Competition (TNSTC).

This accomplishment reflects the department's commitment to excellence, creativity, and hands-on learning. A special round of applause to **Dr. P. Dhiravidamani & Mr. P. Manikandan** for his exceptional guidance and to the talented students for their hard work and ingenuity.

3.6 Faculties as participants in various programmes:

1) **Dr. P. Senthilkumar**

a. Generative AI and Cyber Security – REVA University, Bengaluru

2) **Dr. A.V. Balan**

a. Five-Day STTP: Scientific Writing & Publishing – Sarala Birla University, Ranchi

b. One Week Online FDP: Innovative Teaching Methodology – D.Y. Patil College of Engineering, Akurdi

- 3) **Dr. P. Dhiravidamani**
 - a. Applications of Business Analytics – Ramaiah Institute of Technology, Bengaluru
- 4) **Dr. T. Sureshkumar**
 - a. Machine Learning and Artificial Intelligence – APSSDC
- 5) **Mr. P. Rajendran**
 - a. One Week Online FDP: Innovative Teaching Methodology – D.Y. Patil College of Engineering, Akurdi
- 6) **Mr. K. Venkateshwaran**
 - a. Applications of Business Analytics – Ramaiah Institute of Technology, Bengaluru
- 7) **Mr. C. Senthilkumar**
 - a. One Week Online FDP: Innovative Teaching Methodology – D.Y. Patil College of Engineering, Akurdi
- 8) **Mr. C.M. Dinesh**
 - a. One Week Online FDP: Innovative Teaching Methodology – D.Y. Patil College of Engineering, Akurdi
- 9) **Mr. J. Venkatesh**
 - a. Generative AI and Cyber Security – REVA University, Bengaluru
- 10) **Mr. P. Jagadeesh**
 - a. Two Week National Level Virtual Workshop: Advanced Research Methodology – SRM Institute of Science & Technology, Chennai
 - b. Machine Learning and Artificial Intelligence – APSSDC
- 11) **Mr. S. Durai**
 - a. Machine Learning and Artificial Intelligence – APSSDC
- 12) **Mr. S.P. Sankar**
 - a. Generative AI and Cyber Security – REVA University, Bengaluru
- 13) **Mr. S.P. Gowtham**
 - a. One Week Online FDP: Innovative Teaching Methodology – D.Y. Patil College of Engineering, Akurdi

4. DEPARTMENT ACTIVITIES

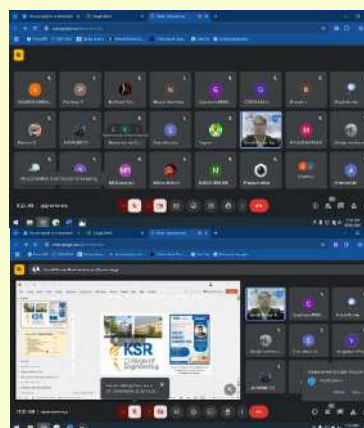
4.1 Events Organized by the faculty:

Opportunities in Artificial Intelligence and Machine Learning



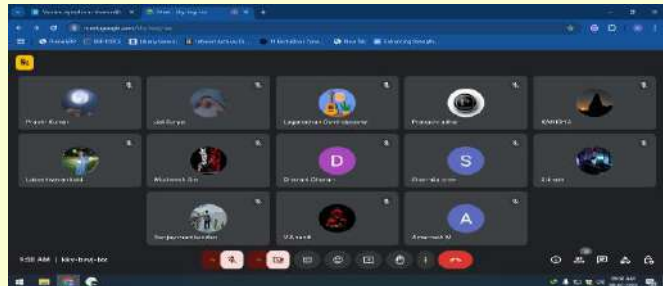
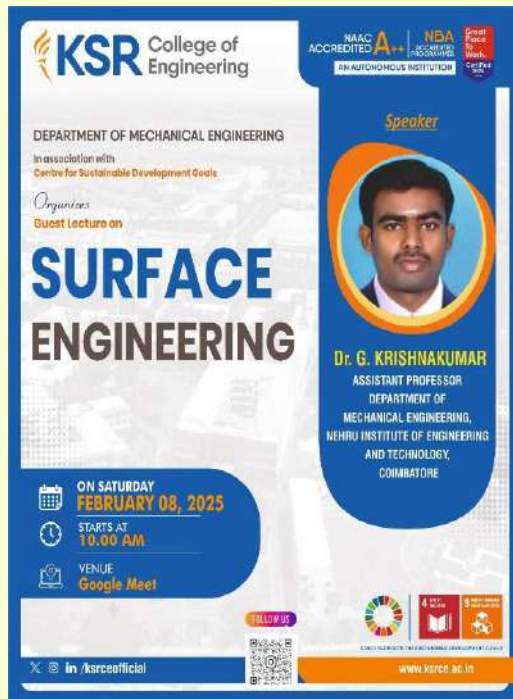
Artificial Intelligence (AI) and Machine Learning (ML) would likely highlight a wide range of career opportunities across various industries, including roles like Data Scientist, Machine Learning Engineer, NLP Engineer, Robotics Engineer, and Research Scientist, with the potential to apply AI/ML solutions in healthcare, finance, transportation, customer service, and more, emphasizing the transformative potential of these technologies to optimize processes and make data-driven decisions.

Green Energy Transition



Mr. Sendil Kumar (Knighthood Sweden) discussed renewable energy trends and career opportunities. Students explored smart grids and hydrogen technologies, on Feb 08, 2025 Via Google Meet and it has to linking to SDGs 7 & 13. The session emphasized practical sustainability solutions and aligned with POs 1,3,5,7.

Surface Engineering



Dr. G. Krishna Kumar (NIT) explored advanced surface modification techniques, including thermal spraying and nano-coatings. The session highlighted applications in aerospace, automotive, and biomedical sectors, emphasizing improved material durability and performance. Hands-on demonstrations showcased cutting-edge characterization methods like SEM and XRD analysis on 08, Feb 2025 through Google Meet.

Biomass-Derived Activated Carbon Decorated Transition Metal Oxide Nanocomposites for Enhanced Hydrogen Production



Dr. Sankar Sekar (Dongguk University) presented novel biomass-activated carbon composites with transition metals, demonstrating enhanced catalytic hydrogen generation. The talk covered sustainable synthesis methods

and efficiency comparisons with conventional catalysts, featuring case studies from Korean research initiatives. For our students on 14, Feb 2025.

Industry – Linked Course (ILC) Completion & Hiring Ceremony

Report of the Program



Industry - Linked Course (ILC) on Material Engineering and Quality Management in associates with Sakthi Auto Components Pvt Ltd. The ILC course is attended by 21 students of final year Mechanical Engineering students for 45 hours and the students **SRIGANTH K V & JAYAVIGNESH M** of the final year Mechanical Engineering got placed in the role of Graduate Engineer Trainee in Sakthi Auto Component s Pvt Ltd. as the outcome of ILC.

5. STUDENTS ACHIEVEMENTS





"Historic Milestone Achieved: Near Space Satellite Successfully Launched from Sivaganga Marking a New Era in India's Space Exploration Endeavors" on 16-Feb 2025



"Futurepreneur 2024: Capturing the Moment of Inspiration as Young Innovators Present Their Groundbreaking Ideas to Industry Experts and Enthusiastic Audience During the Annual Entrepreneurship Challenge"

5.1 Placed Student Details

KSR College of Engineering
 NAAC ACCREDITED A++ | NBA ACCREDITED
 DEPARTMENT OF MECHANICAL ENGINEERING

Congratulations
 on your placement

SRIGANTH K V **M. JAYAVIGNESH**

SAKTHI AUTO **Package 3.2 LPA**

May this beginning lead you towards your desired destination
All the Best!

KSR Educational Institutions
 ENGINEERING | DENTISTRY | ARTS AND SCIENCE | DIPLOMA (IT)
 ALLIED HEALTH SCIENCES | NURSING | PHARMACY | TEACHER EDUCATION | SCHOOLS
 KSR KALVI NAGAR, TIRUCHENGODE, KARNATAKA - 577215, TAMILNADU, INDIA.

in /ksrceofficial | www.ksrce.ac.in

KSR College of Engineering
 NAAC GRADE A++ | NBA ACCREDITED COURSES
 AICTE Approved

CAREER DEVELOPMENT CENTRE
 INDUSTRY - INSTITUTE INTERACTION CELL

INTERNSHIP OFFER

RANJITHA P **BAVITHRA S**
 MECH 2021-2025 EEE 2021-2025

Congratulations
 For being selected in

KONE
 KONE ELEVATORS

May this beginning lead you towards your desired destination.
All the Best!

in /ksrceofficial | www.ksrce.ac.in #weloveksr #ksrce

KSR College of Engineering
 NAAC ACCREDITED A++ | NBA ACCREDITED | 25 YEARS OF EDUCATIONAL LEADERSHIP

INDUSTRY - INSTITUTE INTERACTION CELL
TRAINING & PLACEMENT CELL
 YOUR FUTURE. OUR MISSION.

Congratulations
 ON YOUR PLACEMENT & INTERNSHIP
 2026 & 2027 BATCH

AI - ENGINEER

AKSHAYA B **GOBINATH M** **VAISIKA B** **HARIPRAKASH A** **CHANDRAPRADEEP R** **ADITYA**
 III - CSE KSRCE III - CSE KSRCE III - CSE CS KSRCE II - IT KSRCE II - CSE KSRCE

AI - INTERN

NAMITHA SRI C S **ILAYARAJA K** **KEERTHANA K** **GOKULANANTH S** **AARKEESH M**
 III - CSE CS KSRCE III - CSE CS KSRCE III - CSE KSRCE III - CSE KSRCE III - CSE KSRCE

DINESH KUMAR V **RAKSHANA B** **JAI SHREE J** **M. PRADHISHA** **VIGNESH KANDUVEL P**
 III - EEE KSRCE III - EEE KSRCE III - EEE KSRCE II - MECH KSRCE II - MECH KSRCE

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 ENGINEERING | DENTISTRY | ARTS AND SCIENCE | DIPLOMA (IT)
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in /ksrceofficial | www.ksrce.ac.in

Congratulations on your placement

ANUPRAKASH A **ARAVINDHARANY T** **BALAMURUGAN A** **BAVUMESHAHARI R** **ESWARMOORTHY**
 MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE

NADEEN P **KARIMUKILAN A** **KAVYASRASI V** **PRABHU KUMAR A** **SANTHOSH H**
 MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE

SARAN S **SARAVANAN S** **DEVY S** **NAVEEN S** **GAVINEESH P**
 MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE MECH - KSRCE

REEMAN K **PRABHU KUMAR S** **SOONANAPALAN U** **PRABHU K S** **KATHIRAVAN R**
 EEE - KSRCE EEE - KSRCE EEE - KSRCE EEE - KSRCE EEE - KSRCE

SURYA S **RAHMAN PRASANTH S** **VASESANRAN** **HARIBHAKAR S** **SRINIVAS D**
 EEE - KSRCE EEE - KSRCE EEE - KSRCE EEE - KSRCE EEE - KSRCE

SHARMILA DEVI H **SOONANAPALAN G** **POOJA S** **PRASHN S D** **JAYA VIGNESH M**
 EEE - KSRCE EEE - KSRCE EEE - KSRCE MECH - KSRCE MECH - KSRCE

MOTHERSON **2.76 LPA**

5.2 STUDENT ACTIVITIES

Awards Received by Students in the Events Organized by other Institutes:



**Presentation at PAAVI Engg. college on 8.4.25
Won second prize (cash 2000)**



**Annual Day Prize Winner on 27-02-2025
won 1st prize in Dance competition**



International Conference on - Research Advancements and Innovations in Sustainable Engineering Date - 07/03/2025 on Dr.N. G. P. Institute of Technology, Coimbatore



International Conference on - Research Advancements and Innovations in Sustainable Engineering Date - 07/03/2025 on Dr.N. G. P. Institute of Technology, Coimbatore





International Conference on - Research Advancements and Innovations in Sustainable Engineering Date - 07/03/2025 on Dr.N. G. P. Institute of Technology, Coimbatore



Department of Mechanical Engineering won the Inter college Cricket Match on 02-02-2025



Thiagarajar College Madurai Open level state tournament winner on 04-03-2025



Nandha Engineering College Alumni Kabaddi Match Runner 2025 on 30-01-2025



Department of Mechanical Engineering won the Inter college Kabaddi Match on 05-02-2025

6. Alumni Corner



Alumni Meet

The Department of Mechanical Engineering at KSR College of Engineering (Autonomous) organized a grand alumni reunion, "KSRreConnEct-2K5-24," on June 14, 2025, from 9:30 AM onwards at the KSRCE Campus. The event celebrated the enduring legacy of alumni batches from 2005 to 2024, fostering reconnections and reminiscing about shared memories.

Attendees enjoyed interactive sessions, campus tours, and networking opportunities, reflecting on their academic journeys and professional achievements. The event underscored the strong bond between the institution and its alumni, reinforcing the spirit of camaraderie and institutional pride.

7. CELEBRATION GLIMPSES

7.1 Pongal Festival



"We celebrate our department Pongal Festival Celebrations on January 3, 2025, as we honor this joyous harvest festival with traditional rituals, cultural performances, and community festivities. Experience the vibrant spirit of Thai Pongal through Kolam competitions, pot decorating, and the ceremonial boiling of milk as we give thanks for nature's bounty and welcome prosperity in the new year."

7.2 Farewell Day function



"KSR College of Engineering's Mechanical Engineering Department Hosts Farewell Ceremony for Graduating Students on May 15, 2025 at 2:00 PM"