



KUMARAGURU
COLLEGE OF TECHNOLOGY



Department of Mechanical Engineering

Newsletter

MExpress

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AUGUST 2020

Editors:

Dr. C. Velmurugan
Mr. B. N. Sreeharan

Associate Editors:

Mr. P. Kapil Anandh
Mr. B. Praveen

DEPARTMENTAL ACTIVITIES

GUEST LECTURES DELIVERED / SESSIONS CHAIRED

- Dr. M. Balaji, Associate Professor delivered a lecture on "Basics of Industrial Engineering" in a webinar conducted by Sri Ramakrishna Polytechnic College, Coimbatore on 10.07.2020. He addressed 100 odd participants.
- Mr. B. N. Sreeharan, AP (II), delivered a guest lecture in Five Days Online FDP on "An Overview on Automobile & Mechanical Engineering" conducted by Annapoorna Engineering College, Salem on 03-07-2020. He gave the topic on "Application of Grey Relational Analysis - Multi Response Optimization using MS EXCEL". He shared his knowledge among the faculty members from PAN India.
- Prof. Dr. S. Bhaskar, Associate Professor, addressed 1400 participants from all over India on "Last Time – First Time Approach to groom your Knowledge and Skills" in a webinar conducted by Sri Eshwar College of Engineering, Coimbatore on 23.07.2020.
- Dr. P. S. Samuel Ratna Kumar, Assistant Professor, addressed 300 + participants from all over India and gave a lecture on "Characterization study on Al-Nanocomposites" in the AICTE Sponsored Short Term Training Programme on "Nanotechnology and Functional Materials" conducted by SV College of Engineering, Tirupati on 30.07.2020.

PROGRAMMES ORGANIZED

- Department organized a webinar on "How to create a career of choice after graduation" on 18.07.2020. Mr. B. Saravana Bhavan, INTRALOGISITCS Engineering Manager, PSA Groupe (Peugeot Citroen), CHENNAI. He addressed to 60 students. Dr. C. Velmurugan, HoD and Dr. A. P. Arun, AP (II) coordinated the webinar.
- Dr. V. R. Muruganantham, Associate Professor and Mr. P. D. Devan, Assistant Professor arranged 20 days Virtual Internship from 20.07.2020 to 10.08.2020 (20 days) for students as a part of IIPC at M/s. Roots Industries, Coimbatore.
- Dr. R. Manivel, Professor facilitated placement interview at M/s. Bull Agro Implements, Coimbatore on 29.07.2020.

PAPER PUBLICATIONS

- Dr. V. Manivel Muralidaran, AP (II) published a paper titled "Multi objective Optimization of Cold crack Susceptibility of High Strength Low Alloy Steel 950A using Grey Relational Analysis in the International Journal of Materials Today Proceedings, Vol. 27, No. 3, pp. 2703-2707.
- Dr. S. Balasubramanian, Associate Professor, Mr. M. A. Vinayagamoorathi, AP (II), Mr. R. S. Mohan Kumar, Assistant Professor published a paper on "Experimental Study on impact of temperature variations in CNC Milling, during dry machining and wet machining for Al and Cu material" in the International Journal of Scientific & Engineering Research, Vol. 11, No. 7, pp. 224-229.

DEPARTMENTAL ACTIVITIES

- A paper on "Therapeutic Effects of Purified Polyphenols From Coccinia Grandis – Correlation Between Hypertension And Diabetes Mellitus" authored by Dr. V. Muthukumaran, Professor, Accepted for publication in the International Journal of Advances in Traditional Medicine".
- Dr. K. K. Arun, AP (III) published a paper on "Area Efficient Design of a Redundant Binary Multiplier Using Modified Partial Product Generator and Compressors" in the International Journal of Critical Reviews (JCR), Vol. 7. No. 13, pp 1800-1805.
- He also published another paper on "Tumor Classification and Extraction from Mammogram Images Using Convolutional Neural Network", in the International Journal of Advanced Research in Dynamical and Control Systems, Vol. 12, No. 7, pp 2636-2641.
- Dr. S. Balasubramanian, Associate Professor along with Mr. B. Praveen. B, Mr. M. Prasanth, Mr. L. Krishna Prasad published a paper on "UVC light disinfectant on Biometric system International " in the International Research Journal on Advanced Science Hub, Vol. 7, No. 2, pp. 49-54.
- Dr. K. M. Senthilkumar, Associate Professor, published a paper on "Tumor Classification and Extraction from Mammogram Images Using Convolutional Neural Network", in the International Journal of Advanced Research in Dynamical and Control Systems, Vol. 12, No. 7, pp 2636-2641.
- Dr. R. Manivel, Professor alongwith Mr. T. Babin, Mr. K. Sankar published a paper on "Computations of Flow Parameters of Two Phase Flow in Subsea Jumper Pipe -CFD Approach, in the International Journal on Test Engineering and Management , Vol. 83, pp 13862 – 13864.

PAPER PRESENTED

- Dr. S. Balasubramanian, Associate Professor, Mr. M. A. Vinayagamoorthi, AP (II), Mr. R. S. Mohan Kumar, Assistant Professor, presented a paper titled "Experimental Study on Impact of Temperature Variations in CNC Milling, During Dry Machining and Wet Machining For Al and Cu Material" in the National E-Conference on Innovative trends in Mechanical Engineering (NECITME-2020), in Sinhgad Institute of Technology Lonavala on 06.07.2020.

PAPERS REVIEWED

- Dr. C. Velmurugan, Professor reviewed a paper on "Effect of the Transversal-Spacing of Stirrup-Legs on the Behavior and Strength of Shallow Wide-Concealed RC Beams" for the Journal of Engineering, Design and Technology.
- He is also reviewed a paper on "Uplift Behaviour of Axial Granular Pile Anchor Encased with Geogrid in Cohesionless Soil" for the International Journal of Engineering, Design and Technology.

DEPARTMENTAL ACTIVITIES

- Mr. M. A. Vinayagamoorthi, AP (II) reviewed paper on "Experimental and numerical investigations of optimum process window for friction stir welding using flat faced tool pin" for the Indian Journal of Science & Technology.
- Dr. M. Balaji, Associate Professor, reviewed paper on "Investigations on the effect of surface coatings on the weldment properties on chromium manganese stainless steel gas tungsten arc welded plates" for the International Journal of Technology.
- Mr. P. R. AYYAPPAN, Assistant Professor (SRG) reviewed on "A two-dimensional Luenberger-Gaussian-moving-average filter for battery incremental capacity curve extraction" for the International Journal Applied Energy-Elsevier.
- Dr. S. Balasubramanian, Associate Professor, reviewed paper on "Grasping model of fabric pieces of garment using robotic soft fingers" for Textile Research Journal.
- Mr. R. S. Mohan Kumar, Assistant Professor, reviewed on "Experimental and numerical investigations of optimum process window for friction stir welding using flat faced tool pin" for the Indian Journal of Science & Technology.
- Dr. P. S. Samuel Ratna Kumar reviewed paper on "Effect of Modified Method of Coating on Particle Incorporation and Wear Resistance of nickel - phosphorus - diamond composite coatings", for the Journal "Materials Today: Proceedings-Elsevier".

BOOK PUBLISHED

Dr. A. P. Arun, AP (II) published a book on "Certain Researches on Spur Gear", Lambert Academic Publishing Beau-Bassin, Mauritius.

BOOK CHAPTER PUBLISHED

Mr. R. S. Mohan Kumar, Assistant Professor, Mr. M. A. Vinayagamoorthi, AP (II) published a book chapter "Recent Developments in Engineering Research" in "Scientific Approach on Design and Fabrication of Automated Inbuilt Hydraulic Jack for Light Motor Vehicle" for Science Domain, West Bengal.

Ph. D. Completed

Mr. PR. Ayyappan, AP (SRG) completed his doctoral viva voce on 31.07.2020 and become Dr. PR. Ayyappan. On behalf of the editors, department, faculty members and students of the department, hearty congratulations to him.

PATENT PUBLICATION

Dr. K. K. Arun, AP (III) published a patent "A Novel Technique for Reduction of Software Entropy and to Prevent Information Leakage in Mobile App" on 10.07.2020.

Dr. K. M. Senthilkumar, Associate Professor, published a patent on "Automatic Pathological Voice Quality Assessment using IOT Based Machine Learning Algorithms" on 31.07.2020.

DEPARTMENTAL ACTIVITIES

FDP / COURSES / WORKSHOPS / WEBINARS / TRAINING PROGRAMMES ATTENDED

Dr. A. P. Arun, Assistant Professor (II)

- Participated in a 5 days National level FDP on "Challenges and Opportunities in Recent Emerging Technologies", Sponsored by TEQIP-III and organized by Department of Chemical Engineering, SGGSI&T, Nanded, Maharashtra (India) from 06.07.2020 to 10.07.2020.
- Participated in a 6 days National level STTP on Completed six days AICTE sponsored Online Short Term Training Programme (STTP) on "Smart Manufacturing – Opportunities & Challenges", St. Joseph's College of Engg. from 13.07.2020 to 18.07.2020.
- Participated in a 7 days National level FDP on Attended FDP on NAAC ACCREDITATION, organised by Dnyansagar institute of management & research, Pune from 21.07.2020 to 27.07.2020.

Dr. B. Senthil Kumar, Associate Professor

- Participated in a 2 Hours National level Webinar on Attended Webinar on "Wire Arc Additive Manufacturing (WAAM)" on 30th July 2020.
- Participated in a 2 Hours National level Webinar on Attended Webinar on "Importance of Copyrights" by LEED KCT on 24th July 2020.
- Participated in a 2 Hours National level Webinar on Attended Webinar on "KNOW ABOUT MSME" by LEED KCT on 20th July 2020.
- Participated in a 2 Hours National level Webinar on Attended Webinar on Entrepreneurship "a way forward" on 21st July 2020.

- Participated in a 2 Hours National level Webinar on Attended Webinar on Design Thinking on 22nd July 2020.
- Participated in a 2 Hours National level Webinar on Webinar session - Six Sigma - An overview and practical Training - 10 July 2020.
- Participated in a 2 Hours National level Webinar on Webinar: Introduction to Simulink for System Modeling and Simulation on 22nd July 2020.
- Participated in a 2 Hours National level Webinar on Webinar on "Supervised Learning for Forecasting in Stock Exchange Marketing" on 7th July 2020.

Dr. C. Velmurugan, Professor & HoD

- Completed 4 Weeks International level Coursera online course on Introduction to Thermodynamics Transferring Energy from Here to There from 01.07.2020 to 30.07.2020.
- Completed 5 Weeks International level Coursera online course on Autodesk Fusion 360 Integrated CAD/CAM/CAE from 01.07.2020 to 30.07.2020.
- Completed 4 Weeks International level Coursera online course on Introduction to Artificial Intelligence from 01.07.2020 to 30.07.2020.
- Completed 4 Weeks International level Coursera online course on Creative Problem Solving from 01.07.2020 to 30.07.2020.
- Participated in a 1 hour National level Webinar on Microscopy in Additive Manufacturing: A focus on powder characterization from 10.07.2020 to 10.07.2020.
- Participated in a 1 hour National level Webinar on Roots Virtual Internship Training for Engineering students from 08.07.2020 to 08.07.2020.

DEPARTMENTAL ACTIVITIES

Dr. K. K. Arun, Assistant Professor (III)

- Participated in a one week International level FDP on one week International Symposium [AMME] on "Advanced Manufacturing and Materials Engg " from 07.07.2020 to 12.07.2020.
- Participated in a 5 days National level FDP on Five Day Online FDP on " Innovative Teaching . Learning Methodologies" CIT.TLC from 06.07.2020 to 10.07.2020.
- Participated in a one week National level STC on STC on "Advances in Materials Manufacturing Processes and Properties (AMMPP2020)" Department of Metallurgical and Materials Engineering, Malaviya national institute of Technology, Jaipur from 06.07.2020 to 10.07.2020.
- Completed 4 weeks International level Coursera online course and Completed Coursera online course "Initiating and Planning Projects, University of California, Irvine, 2.3 hours/week, Grade Achieved: 81.50% from 04.07.2020.
- Participated in a one week National level FDP on one week online Faculty Development program on "Emerging Research Areas in Mechanical Engineering" organized by the department of Mechanical Engineering, CMR Technical Campus, Hyderabad with a passing score of 93% from 29.06.2020 to 03.07.2020.
- Participated in a one week National level FDP on A One Week online Faculty Development Program on "Technological Advancements In Mechanical Engineering, TAME.2020" organised by Department of Mechanical Engineering of Balaji Institute of Technology & Science, Laknepally, Narsampet, Warangal dt, Telangana state from 29.06.2020 to 03.07.2020.
- Participated in a one week National level FDP on A one week Faculty Development Program on "Advanced Materials and Manufacturing" organized by Department of Mechanical Engineering, Kakatiya Institute of Technology and Science, Warangal, Telangana - 506015. from 29.06.2020 to 03.07.2020.
- Participated in a one week National level FDP on One Week Online Workshop on "Materials Technology Advancement in Current Scenario MTACS 2020" Sathyabama Institute of Technology, Chennai from 04.07.2020 to 10.07.2020.
- Participated in a 6 days National level FDP on six days FDP on "Recent Innovations and Futuristic Scope for Research in Internal Combustion Engines" St. Joseph's College of Engineering, Chennai - 600 119 from 29.07.2020 to 04.07.2020.
- Completed 4 weeks International level Coursera online course on Budgeting and Scheduling Projects, University of California, Irvine, July 6, 2020, 4 weeks of study, 2.3 hours/week, Grade Achieved: 95.20% from 06.07.2020.
- Participated in a 1 week National level FDP on one week faculty development program on "Recent Innovations in Mechanical Engineering and Scope for Entrepreneurship" organized by Department of Mechanical Engineering, NSAKCET from 29.06.2020 to 05.07.2020.
- Participated in a 3 days National level FDP on Online FDP on "Scientific Communication for Research Paper and Proposal Writing" PSG TECH ,CBE from 01.07.2020 to 03.07.2020.
- Completed 4 weeks International level Coursera online course on Autodesk CAD/CAM/CAE for Mechanical Engineering, Autodesk, for Mechanical Engineering Specialization.

DEPARTMENTAL ACTIVITIES

- Completed following Certificate Courses Certificates
 - Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360,
 - Modeling and Design for Mechanical Engineers with Autodesk Fusion 360,
 - Simulation Analysis for Mechanical Engineers with Autodesk Fusion 360,
 - CAM and Design Manufacturing for Mechanical Engineers with Autodesk Fusion 360, from 08.07.2020.
- Completed 4 weeks International level Coursera online course on Modeling and Design for Mechanical Engineers with Autodesk Fusion 360, Autodesk, Taught by: Autodesk, Grade Achieved: 88.00% from 08.07.2020.
- Completed 4 weeks International level Coursera online course on Collaborative Robot Safety: Design & Deployment, University at Buffalo, The State University of New York, 1 hour/week, Grade Achieved: 81.86% from 09.07.2020.
- Completed 4 weeks International level Coursera online course on Completed Coursera online course Six Sigma and the Organization (Advanced), University System of Georgia, Grade Achieved: 88.00%, from 09.07.2020.
- Completed 4 weeks International level Coursera online course on Internet of Things: Communication Technologies, University of California San Diego, Grade Achieved: 90.00% from 12.07.2020.
- Completed 4 weeks International level Coursera online course on Introduction and Programming with IoT Boards, Pohang University of Science and Technology, 1 hour/week, Grade Achieved: 95.89% from 12.07.2020.
- Completed 5 weeks International level Coursera online course on Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading, Georgia Institute of Technology, 5 to 7 hours per week work for students, Grade Achieved: 66.67%, from 12.07.2020.
- Completed 3 weeks International level Coursera online course on Mechanics of Materials II: Thin Walled Pressure Vessels and Torsion, Georgia Institute of Technology, 5 to 7 hours per week work for students, Grade Achieved: 77.67% from 12.07.2020.
- Completed 4 weeks International level Coursera online course on Response Surfaces, Mixtures, and Model Building, Arizona State University, 4.8 hours/week, Grade Achieved: 98.00% from 13.07.2020.
- Completed 4 weeks International level Coursera online course on Generative Design for Additive Manufacturing, Autodesk, 1.3 hours/week, Grade Achieved: 82.50% from to 14.07.2020.
- Completed 4 weeks International level Coursera online course on Digital Product Management: Modern Fundamentals, University of Virginia, 3.4 hours/week, Grade Achieved: 87.50% from 14.07.2020.
- Completed 4 weeks International level Coursera online course on Six Sigma Principles, University System of Georgia, 1.3 hours/week, Grade Achieved: 89.14% from 17.07.2020.
- Completed 6 weeks International level Coursera online course on MOOC: How to make a MOOC?, Novosibirsk State University, 3.4 hours a week, Grade Achieved: 85.27% from 17.07.2020.
- Completed 3 weeks International level Coursera online course on Six Sigma Advanced Analyze Phase, University System of Georgia, 1.2 hours/week, Grade Achieved: 88.03% from 17.07.2020.

DEPARTMENTAL ACTIVITIES

- Completed 4 weeks International level Coursera online course on Digital Manufacturing & Design Technology, The State University of New York, University at Buffalo.
 - Coursera certifies their successful completion of The State University of New York & University at Buffalo Digital Manufacturing & Design Technology Specialization. Following Course Certificates Completed,
 - Advanced Manufacturing Enterprise,
 - Intelligent Machining,
 - Digital Manufacturing & Design,
 - Roadmap to Success in Digital Manufacturing & Design ,
 - Cyber Security in Manufacturing ,
 - MBSE: Model Based Systems Engineering ,
 - Advanced Manufacturing Process Analysis,
 - Digital Thread: Components,
 - Digital Thread: Implementation from 18.07.2020."
 - Completed 4 weeks International level Coursera online course on Supply Chain Management: A Learning Perspective, Korea Advanced Institute of Science and Technology (KAIST), 14 hours of videos and quizzes, Grade Achieved: 97.75% from 19.07.2020.
 - Completed 4 weeks International level Coursera online course on Experimental Design Basics, Arizona State University, 4.8 hours/week, Grade Achieved: 100.00% from 19.07.2020.
 - Completed 4 weeks International level Certification course on Intro to Acoustics (Part 1), Korea Advanced Institute of Science and Technology(KAIST), 3 hours / week, Grade Achieved: 82.50% from 20.07.2020.
 - Completed 7 weeks International level Coursera online course on Engineering Systems in Motion: Dynamics of Particles and Bodies in 2D Motion, Georgia Institute of Technology, 5 to 7 hours per week work for students, Grade Achieved: 80.95% from 21.07.2020.
 - Participated in a one week National level FDP on Seven Days e.FDP on NAAC Accreditation" in association with EduMentor organized by Dnyansagar Institute of Management & Research, Pune, from 21.07.2020 to 27.07.2020.
 - Participated in a 5 days National level FDP on One Week Online Faculty Development Program on "Recent Advances in Renewable Energy & Energy Efficiency Technologies" organized by Department of Mechanical Engineering (Mechatronics). from 21.07.2020 to 25.07.2020.
 - Participated in a 2 days National level Webinar on Participating in the Two day Workshop on "Intellectual Property Rights [IPR]. Focused on Engineering Applications, St. Joseph's College of Engineering from 21.07.2020 to 22.07.2020.
- Dr. K. M. Senthilkumar, Associate Professor**
- Participated in a 5 days National level FDP on on "Technological Advancements in Mechanical Engineering, TAME.2020" organised by Department of Mechanical Engineering of Balaji Institute of Technology & Science, Laknepally, Narsampet, Warangal dt, Telangana state from 29.06.2020 to 03.07.2020.
 - Participated in a 5 days National level FDP on "Emerging Research Areas in Mechanical Engineering" organized by the department of Mechanical Engineering, CMR Technical Campus, Hyderabad from 29.06.2020 to 03.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 5 days National level FDP on "Imminent Trends in Mechanical Engineering", conducted by Department of Mechanical Engineering, Kommuri Pratap Reddy Institute of Technology, Hyderabad from 29.06.2020 to 03.07.2020.
- Participated in a National level One Week Online Short Term Course on "Supply Chain Management: Challenges and Strategies" Organized at Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India under TEQIP. 3. from 13.07.2020 to 17.07.2020.
- Participated in a 6 days National level FDP "Nanomaterial Synthesis, Process, Characterization and its Functional Applications" Organized by the Department of Automobile Engineering, Hindusthan College of Engineering and Technology from 06.07.2020 to 11.07.2020.
- Participated in a 5 days National level FDP on "Recent Advances in Process Metallurgy" organized by Department of Metallurgical Engineering, OP Jindal University in association with IIM student Raigarh chapter and ASM International, India chapter from 13.07.2020 to 17.07.2020.
- Participated in a 5 days National level FDP on "Recent Advances in Renewable Energy & Energy Efficiency Technologies" organized by Department of Mechanical Engineering (Mechatronics) Mahatma Gandhi Institute of Technology, Hyderabad. from 21.07.2020 to 25.07.2020.
- Participated in a 5 days National level FDP on "Artificial Intelligence and Data Analytics for Automation" organized by the Department of Robotics Engineering, Karunya Institute of Technology and Sciences, Coimbatore, held from 27.07.2020 to 31.07.2020.
- Completed 5 weeks International level Coursera online course on Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading on 16.07.2020.
- Completed 5 weeks International level Coursera online course on Mechanics of Materials II: Thin Walled Pressure Vessels and Torsion on 20.07.2020.
- Completed 3 weeks International level Coursera online course on Mechanics of Materials III: Beam Bending – Coursera on 22.07.2020.
- Completed 2 weeks International level Coursera online course on Mechanics of Materials IV: Deflections, Buckling, Combined Loading & Failure Theories on 23.07.2020.
- Participated in a 2 hours International level Webinar on Emerging Nanoelectronic Devices, IISc Bengaluru on 10.07.2020.
- Participated in a 2 hours International level Webinar on RF Technologies & Wireless Comm. IISc, Bengaluru on 10.07.2020.
- Participated in a 2 hours International level Webinar on Data analytics & Machine learning, IISc, Bengaluru on 10.07.2020.
- Participated in a 2 hours International level Webinar on Signal processing, Communication Networks, Information Theory, IISc, Bengaluru on 11.07.2020.
- Participated in a 2 hours International level Webinar on Cyber Physical Systems & IoT, IISc, Bengaluru on 12.07.2020.
- Participated in a 2 Days National level Workshop on "Intellectual Property Rights [IPR]: Focused on Engineering Applications, St. Joseph's College of Engineering, Chennai from 21.07.2020 to 22.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hour National level Webinar on "Alumni Talk Series 03 Session 02" on "Renewable Energy Resources: A Way Forward" by Mr. Vipin Balan of B. E. Mechanical Engineer . Batch 1994, India Head Commercial Partnering and Development at General Electrical Renewable Energy on 04.07.2020.

Dr. K. Ulaganathan, Assistant Professor - III

- Participated in a 1 Week National level FDP on NAAC Accreditation Organized by Dnyansagar Institute of Management & Research, Pune. from 21.07.2020 to 27.07.2020.
- Participated in a 1 Week National level Training on Future Scope of Engineering in Global Development Organized by Pantech E- Learning, Chennai. from 27.07.2020 to 31.07.2020.
- Completed 4 Weeks International level Coursera online course on Six Sigma Principles from 28.06.2020 to 25.07.2020.
- Completed 4 Weeks International level Coursera online course on Six Sigma Tools for Define and Measure from 29.06.2020 to 26.07.2020.
- Completed 4 Weeks International level Coursera online course on Six Sigma Tools for Analyze from 30.06.2020 to 27.07.2020.
- Completed 7 Weeks International level Coursera online course on Six Sigma Advanced Define and Measure Phase from 08.06.2020 to 30.07.2020.
- Completed 5 Weeks International level Coursera online course on Six Sigma and the Organization (Advanced) from 15.06.2020 to 24.07.2020.
- Completed 3 Weeks International level Coursera online course on Six Sigma Advanced Analyze Phase. from 01.07.2020 to 21.07.2020.
- Completed 5 Weeks International level Coursera online course on Data Analytics for Lean Six Sigma from 24.06.2020 to 30.07.2020.
- Completed 4 Weeks International level Coursera online course on Digital Product Management - Modern Fundamentals from 01.07.2020 to 28.07.2020.
- Completed 4 Weeks International level Coursera online course on Fundamentals of Management. from 01.07.2020 to 28.07.2020.
- Completed 5 Weeks International level Coursera online course on Introduction to Engineering Mechanics from 25.06.2020 to 30.07.2020.
- Participated in a 1 Week National level FDP on FDP on Recent Innovations and Futuristic Scope for Research in Internal Combustion Engines Organized by St. Joseph's College of Engineering, Chennai from 29.06.2020 to 04.07.2020.
- Participated in a 1 Week National level FDP on FDP on Materials Technology Advancement in Current Scenario - MTACS 2020 organized by Sathyabama Institute of Science and Technology, Chennai from 04.07.2020 to 10.07.2020.
- Participated in a 1 Week National level FDP on FDP on Recent Advances in Process Metallurgy Organized by OP Jindal University, Raigarh from 13.07.2020 to 17.07.2020.
- Participated in a 1 Week National level STTP on STTP on Advances in Materials Manufacturing Processes and Properties (AMMPP2020) Organized by NIT, Jaipur from 06.07.2020 to 10.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 Week National level FDP on Nanomaterial Synthesis, Process, Characterization and its Functional Applications Organized by Hindustan College of Engineering and Technology, Coimbatore from 06.07.2020 to 11.07.2020.
- Participated in a 1 Week National level FDP on Finite Element Analysis Organized by GCT FTC, Coimbatore. from 13.07.2020 to 17.07.2020.
- Participated in a 2 Hrs National level Webinar on Webinar session - Six Sigma - An Overview and Practical Training Organized by GCT FTC, Coimbatore. from 10.07.2020 to 10.07.2020.
- Participated in a 1.5 Hrs National level Webinar on Opportunities in Space Science and Astronomy Organize by Poornaprajna Amateur Astronomer Centre, Udupi. from 23.07.2020 to 23.07.2020.
- Participated in a 1.5 Hrs National level Webinar on Development of Bio-preservation and Manufacturing Methodologies for Clinical Applications Organized by St. Joseph's College of Engineering, Chennai on 25.07.2020.
- Participated in a 1 Hr National level Webinar on Engineering Optimization Methods and Application Organized by Sri Eshwar College of Engineering, Coimbatore. from 27.07.2020 to 27.07.2020.
- Participated in a 2 Days National level Webinar on Intellectual Property Rights [IPR]- Focused on Engineering Applications Organized by St. Joseph's College of Engineering, Chennai. from 21.07.2020 to 22.07.2020.

Dr. M. Balaji, Associate Professor

- Completed 2 weeks International level Certification through Online course, Coursera-RUTGERS University-Procurement and sourcing introduction from 01.07.2020.
- Completed 2 weeks National level Short term course on 'Learn to design your own solar home system'- Energy swaraj foundation from 02.07.2020.
- Completed 5 weeks International level Certification on Online course-Coursera-RUTGERS University-Procurement basics from 04.07.2020.
- Completed 3 weeks International level Certification on Online course-Coursera-RUTGERS University-Strategic sourcing from 07.07.2020.
- Completed 6 weeks International level Certification on Online course-Coursera-RUTGERS University-Supplier Management from 10.07.2020.
- Participated in a 1 week National level TEQIP III sponsored Online FDP-Challenges and Opportunities in Recent Emerging Technologies" at Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded from 06.07.2020 to 10.07.2020.
- Completed 4 weeks International level Certification on Online course-Coursera-RUTGERS University-Procurement negotiation from 13.7.2020.

DEPARTMENTAL ACTIVITIES

- Completed 2 weeks International level Certification on Online course-Coursera-RUTGERS University-Strategic procurement and sourcing conclusions from 16.07.2020.
- Completed 7 weeks course International level Certification on Online specialization-Coursera-RUTGERS University-Global Procurement and sourcing from 16.7.2020.
- Participated in a 1 week National level Online FDP on AICTE sponsored Online STTP "Smart Manufacturing – Opportunities & Challenges from 13.07.2020 to 18.07.2020.
- Completed 4 week course International level Certification on Online specialization-Coursera-IE Business School -Marketing strategy capstone project from 21.7.2020.
- Completed 4 weeks International level Certification on Online course-Coursera - University of California, Irvine- Project Management: the basics for success from 24.7.2020.
- Completed 4 weeks International level Certification on Online course-Coursera - University of California, Irvine- Finance for Non Finance Professionals from 27.7.2020.
- Participated in a 5 days National level FDP on "Finite Element Analysis" organized by the Department of Mechanical Engineering - PG, Government College of Technology, Coimbatore, Tamilnadu from 07.07.2020 to 16.07.2020.

Dr. PR. Ayyappan, Assistant Professor - III

Dr. N. Sangeetha, Sr. Associate Professor

- Completed 5 WEEKS International level Certification on 'Wind energy' on coursera -July 6, 2020 from 1ST JUNE to 6TH JULY.
- Participated in a 1 WEEK National level STTP on on "Fundamentals of Computational Fluid Dynamics and Numerical Simulation of Fluid Flows and Heat Transfer" jointly organized by National Institute of Technology (NIT) Arunachal Pradesh and GCT Coimbatore from 06-07-2020 to 10-07-2020 Sponsored by TEQIP III from 6TH JULY to 10TH JULY.
- Participated in a 2 HRS National level Webinar on Gannet 2020 Internship Presentations - Calibration and Optimization from 04.07.2020 to 04.07.2020.
- Participated in a 2 HRS National level Webinar on Art of writing scientific paper by Vingham institute of technology-Telangana- from 14.07.2020 to 14.07.2020.
- Participated in a 2 HRS International level Webinar on "Research and Innovation for Skill Development and Industrial Applications" Organized by Department of Mechanical Engineering, SRM Institute of Science and Technology, Ramapuram Campus, Chennai- 600089, on 15th July 2020.
- Participated in a 5 days National level STTP on TEQIP III Sponsored One week online STTP (OSTTP) on "Fundamentals of Computational Fluid Dynamics and Numerical Simulation of Fluid Flows and Heat Transfer organized by GCT, Coimbatore and NIT, Arunachal Pradesh. from 11.07.2020 to 16.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 2 HRS National level Webinar on "Diesel engine emission control technology " Organized by Department of Mechanical Engineering, PSG Polytechnic, Coimbatore, on 16th July 2020.
- Participated in a 2 HRS National level Webinar on Attended Webinar on "Research opportunities and challenges in solar thermal power generation" Organized by Department of EEE, KCT, Coimbatore, on 18th July 2020.
- Completed 5 weeks International level Online certification course on Introduction to Engineering Mechanics . Coursera from 09.07.2020 to 09.07.2020.
- Completed 5 weeks International level Online certification course on Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading Coursera from 09.07.2020 to 09.07.2020.
- Participated in a 1 Day National level Webinar on Webinar on Aerothermodynamic Challenges in Spacecraft by PSG CARE and Indian Society for Science and Engineering Coimbatore Chapter from 01.07.2020 to 01.07.2020.
- Participated in a 1 Day National level Webinar on webinar titled "Invention to Patent . Awareness & Strategies" by Department of Mechanical Engineering, St.Joseph's Institute of Technology, OMR, Chennai . 119. from 02.07.2020 to 02.07.2020.
- Participated in a 1 Day National level Webinar on Webinar on Introduction to Robotic Control by Adhishankara Institute of Engineering and Technology, Kalady in Association with ASME student section from 03.07.2020 to 03.07.2020.
- Participated in a 1 Day National level Webinar on "Unmanned Aerial Vehicle. A Sky Boon" Webinar by Sri Venkateswara College of Engineering, Chennai from 04.07.2020 to 04.07.2020.
- Participated in a 1 Day National level Webinar on Introduction to EndNote Basic and bibliography creation from 07.07.2020 to 07.07.2020.
- Participated in a 1 Day National level Webinar on Using the cite while you write plugin/Recap and Quiz from 10.07.2020 to 10.07.2020.

Dr. P. S. Samuel Ratna Kumar, Assistant Professor

- Participated in a 6 Days National level FDP on Recent Innovations and Futuristic Scope for Research in Internal Combustion Engines from 25.07.2020 to 25.07.2020.
- Participated in a 6 Days National level FDP on Nanomaterials Synthesis, Process, Characterization and its Functional Applications from 26.07.2020 to 26.07.2020.
- Participated in a 5 Days National level FDP on Recent Advances in Mechanical Engineering: A Research Perspective from 01.07.2020 to 01.07.2020.
- Participated in a 6 Days National level FDP on Future of Engineering Education and Work in Post COVID.19 World from 02.07.2020 to 02.07.2020.
- Completed 4 weeks International level Online certification course on Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360 Coursera from 07.07.2020 to 07.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 Day National level Webinar on Reference management on EndNote Desktop from 14.07.2020 to 14.07.2020.
- Participated in a 1 Day National level Webinar on Panel discussion on "Digital Transformation of Higher Education & preparing students for future job skills" by Coursera from 15.07.2020 to 15.07.2020.
- Participated in a 1 Day National level Webinar on Using EndNote for best fit journal selection, sharing research from 17.07.2020 to 17.07.2020.
- Participated in a 1 Day National level Webinar on KARE from 25.07.2020 to 25.07.2020.
- Participated in a 1 Day National level Webinar on Webinar on "Measuring the Surface Roughness of Thin Films and Substrates with Atomic Force Microscopy" by Oxford Instruments Asylum Research from 29.07.2020 to 29.07.2020.

Dr. P. Sathyabalan, Professor

- Completed 5 weeks International level Online Course on Coursera Materials Science: 10 Things Every Engineer Should Know - University of California Davis from 06-07-2020 to 27-07-2020.
- Participated in a 1 hour National level Webinar on Alumni Talk Series 03 Session 02" on "Renewable Energy Resources: A Way Forward: Resource person: Mr. Vipin Balan 1994 batch Mechanical from 04-07-2020 to 04-07-2020.
- Participated in a 2.5 hours National level Webinar on IEI Centenary Webinar, "Self Reliance and National Security Emerging Imperatives", 22.07.2020.
- Participated in a 2 hours National level Webinar on "Thermal Behaviour of Metals" - Annamalai University from 31-07-2020 to 31-07-2020.

Dr. R. Manivel, Professor

- Participated in a 5 days National level FDP on Advances in Automotive Mechatronics, RV College of Engineering, Bangalore from 27.07.2020 to 31.07.2020.

Dr. S. Balasubramanian, Associate Professor

- Participated in a 1 week National level STTP on "Fundamentals of Computational Fluid Dynamics and Numerical Simulation of Fluid Flows and Heat Transfer" sponsored by TEQIP III from 21.07.2020 to 22.07.2020."
- Participated in a 1 week International level FDP on "Recent Advances in process Metallurgy" organised by OP Jindal University from 13.07.2020 to 17.07.2020.
- Completed 4 Weeks National level Certification course in Coursera "Intro to Digital Manufacturing with Autodesk Fusion 360" from 11th July 2020.
- Completed 4 Weeks National level Certification in coursera "Intelligent Machining" from 25th July 2020.
- Participated in a 1 day National level Webinar on Webinar on "Solar PV Installation & Maintenance For Your Home" organised by Department of Electrical & Electronics Engineering, Sri Ramakrishna Polytechnic College, Coimbatore from 17.07.2020 to 17.07.2020.
- Participated in a 1 day National level Webinar on Webinar on "How to Create a Career of Choice after Graduation" organised by Intralogistics Engineering from 18.07.2020 to 18.07.2020.
- Participated in a 1 day National level Webinar on Webinar on "Recent trends in A.I. Robotics and Automation used in industrial applications" organised by Malla Reddy Institute of Technology and Science, Hyderabad from 18.07.2020 to 18.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 2 days National level Webinar on International conference on Advancements in Science and Technology from 25.07.2020 to 26.07.2020.
- Participated in a 1 day National level Webinar on Webinar on "Palsma in Messer cut systems" organised by Kjellberg Germany from 29.07.2020 to 29.07.2020.
- Participated in a 1 day National level Webinar on Webinar on "Latest in Rieter Spinning system" organised by Institution of Engineers India from 31.07.2020 to 31.07.2020.

Dr. S. Bhaskar, Associate Professor

- Participated in a 1 Hr National level Webinar on Webinar- Trends in IoT from 24.07.2020 to 24.07.2020.
- Participated in a 1 Hr National level Webinar on Webinar-How technology can help in NAAC accreditation process – 28th July 2020.
- Participated in a 1 Hr National level Webinar on Webinar- • OBE – Competency profile mapping with courses and course outcomes – 30th July 2020.

Dr. V. Muthukumaran, Professor

- Participated in a 6 days National level FDP on "Nanomaterial Synthesis, Process, Characterization and its Functional Applications" from 06.07.2020 to 11.07.2020.
- Completed 4 Weeks International level Certification course on Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion, Georgia Institute of Technology.
- Participated in a 4 Weeks International level Certification course on Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading. from 30.07.2020 to 30.07.2020.

- Participated in a 1 day National level Webinar on "DBT's Response to COVID-19" from 03-07-2020 to 03-07-2020.
- Participated in a 1 day National level Webinar on La Fondation Dassault Systemes Webinar "To Guide Students to Select Meaningful Engineering Projects" from 02-07-2020 to 02-07-2020.
- Participated in a 1 day National level Webinar on Employability Post COVID Era: Expectation of Industry Vs Education System's Preparedness." from 11.07.2020 to 11.07.2020.
- Participated in a 1 day National level Webinar on 1- "Efforts to Spread Awareness and Generate Discussions on Environmentally Meaningful and Sustainable Development" from 13-07-2020 to 13-07-2020.

Dr. V. Manivelmuralidaran, Assistant Professor - II

- Participated in a 1 week National level FDP on "Future of Engineering Educationa and work in Post COVID 19 World" from 06.07.2020 to 11.07.2020.
- Participated in a 1 Week National level FDP on A Vision towards Materials and Manufacturing from 20.07.2020 to 25.07.2020.
- Participated in a 1 Week National level AICTE Sponsored online Short Term Training Programme (STTP) on "Smart Manufacturing, Opportunities and challenges" from 13.07.2020 to 18.07.2020.
- Participated in a 2 Hour National level Webinar on Shape Memory Alloys. Applications and Research Opportunities from 07.07.2020 to 07.07.2020.

DEPARTMENTAL ACTIVITIES

Dr. V. R. Muruganantham, Associate Professor

- Participated in a 1 week National level FDP on Advanced Manufacturing Technology by Karpagam College of Engineering , Cbe from 23.07.2020.
- Participated in a 3 full day National level FDP on Industry 4.0 by Dr MGR Educational and Research Institute , Chennai from 25.07.2020.
- Participated in a 1 week National level FDP on Recent advances in Mechanical Engineering GATES institute of Technology, New Delhi from 27.07.2020.
- Participated in a 1 week National level FDP on Recent advances in Mechanical Engineering: A Research Perspective by MGIT, Hyderabad from 04.07.2020.
- Participated in a 1 week National level FDP on Recent Advances on Process Metallurgy, organized by OP Jindal University from 14.07.2020.
- Participated in a 1 week National level AICTE sponsored STTP on Smart manufacturing - opportunities and challenges, Chennai from 15.07.2020.
- Participated in a 1 week National level FDP on NAAC Accreditation organized by Dnyansagar Institute of management and Res. Pune from 16.07.2020.
- Completed 4 weeks Online course on with Coursera titled as Essential of Entrepreneurship : Thinking and Action on 6th July 2020.
- Completed 4 weeks Online course on Artificial Intelligence for Every one on 24th July 2020.
- Participated in a 3 hrs National level Webinar on Employability - Post Covid 19, Era, conducted by ASSOCHAM on 11th July 2020.

- Participated in a 2 hrs National level Webinar on Virtual Labs : For Effective tool for teaching and learning, conducted by Cummins College in association with AICTE from 07-10-2020 to 07-10-2020.
- Participated in a 2 hrs National level Webinar on Patent Prosecution , conducted by Turnip from 25-07-2020 to 25-07-2020.
- Participated in a 2 hrs National level Webinar on conducted by Innovative Solutions on 26th July 2020 from 26-07-2020 to 26-07-2020.

Mr. B. Jeeva, Assistant Professor

- Participated in a 1 Hour National level Webinar on Roots Virtual Internship Training for Engineering students from 08-07-2020 to 08-07-2020.
- Participated in a 2 Hour National level Training on CAMU conducted by Kumaraguru college of Technology from 21-07-2020 to 21-07-2020."

Mr. B. N. Sreeharan, Assistant Professor - II

- Participated in a 5 days National level FDP on Recent Developments In Mechanical Engineering (RDME-2020) conducted by Kakatiya Institute of Technology & Science from 25.07.2020.
- Completed 5 weeks Online course on Material Science: 10 Things Every Engineer Should Know on 26.07.2020.
- Participated in a 6 days National level FDP on Digital Education conducted by Bishop Appasamy College of Arts and Science, Coimbatore from 27.07.2020.
- Participated in a 6 days National level FDP on Mathematical Modelling for Data Analytics and Engineering conducted by Kumaraguru College of Technology from 11-07-2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 7 days National level FDP on Data Science and its learning techniques conducted by Dr. NGP Institute of Technology, Coimbatore from 10-07-2020.
- Participated in a 1 hour National level Webinar on Quality, Reliability and Safety - An Overview conducted by Sri Eshwar College of Engineering on 01-07-2020.
- Participated in a 1 hour National level Webinar on Where will you fit into a real time project? conducted by Sri Eshwar College of Engineering on 02-07-2020.
- Participated in a 1 hour National level Webinar on Introduction and Applications of CFD conducted by CIT Sandwich Polytechnic College on 02.07.2020.
- Participated in a 1 hour National level Webinar on CFD Modelling and Analysis for Electric Vehicles conducted by Kumaraguru College of Technology on 02.07.2020.
- Participated in a 1 hour National level Webinar on Data Analytics in Human Resources conducted by KCT Business School on 02.07.2020.
- Participated in a 1 hour National level Webinar on Operational Analytics and the Industry conducted by KCT Business School from 03.07.2020.
- Participated in a 1 hour National level Webinar on What it takes to become a data scientist? conducted by Kumaraguru College of Technology from 04.07.2020.
- Participated in a 1 hour National level Webinar on Automotive Seating System & its Validation conducted by Sri Eshwar College of Engineering on 07-07-2020.
- Participated in a 1 hour National level Webinar on Becoming a researcher and what it entails conducted by Dr. NGP Institute of Technology on 07-07-2020.
- Participated in a 1 hour National level Webinar on Quit your comfort zone and hit your target conducted by Sri Eshwar College of Engineering on 08-07-2020.
- Participated in a 1 hour National level Webinar on Product Life Cycle Management conducted by Sri Eshwar College of Engineering on 10.07.2020.
- Participated in a 1 hour National level Webinar on New Product Development in Automotive Industry conducted by Pallavi Engineering College on 10.07.2020.
- Participated in a 1 hour National level Webinar on Innovative Teaching Methodologies conducted by Kings College of Engineering on 10.07.2020.
- Participated in a 1 hour National level Webinar on Basics of Industrial Engineering conducted by Sri Ramakrishna Polytechnic College, Coimbatore from 10.07.2020.
- Participated in a 1 hour National level Webinar on Emobility: Electrification of Vehicle Powertrains conducted by Sri Eshwar College of Engineering on 11.07.2020.
- Participated in a 1 hour National level Webinar on Supply Chain - Overview conducted by Mohamed Sathak A J College of Engineering on 11.07.2020.
- Participated in a 1 hour National level Webinar on Innovation and Design Thinking conducted by Sri Ramkrishna Institute of Technology on 11.07.2020.
- Participated in a 1 hour National level Webinar on ICT Tools for Effective Teaching and Learning conducted by St. Joseph's College on 11.07.2020.
- Participated in a 1 hour National level Webinar on Innovative Design by TRIZ Method' conducted by Narsimha Reddy Engineering College on 13.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hour National level Webinar on Linear Regression Model in Machine Learning conducted by Sri Eshwar College of Engineering from 14-07-2020 to 14-07-2020.
- Participated in a 1 hour National level Webinar on An insight into mobility conducted by Sri Eshwar College of Engineering from 17-07-2020 to 17-07-2020.
- Participated in a 1 hour National level Webinar on Genetic Algorithm on Engineering Optimization conducted by Mahendra Institute of Technology from 18-07-2020 to 18-07-2020.
- Participated in a 1 hour National level Webinar on Data Science & Machine Learning conducted by KSR College of Technology, Tiruchengode from 18-07-2020 to 20-07-2020.
- Participated in a 1 hour National level Webinar on Innovation in Education conducted by Sri Eshwar College of Engineering from 21-07-2020 to 21-07-2020.
- Participated in a 1 hour National level Webinar on Application of Design Expert Software in Manufacturing Industry conducted by Kings College of Engineering from 22-07-2020 to 22-07-2020.
- Participated in a 1 hour National level Webinar on Recent Trends in Rehabilitation Robots conducted by Sri Eshwar College of Engineering from 22-07-2020 to 22-07-2020.
- Participated in a 1 hour National level Webinar on Last time - First time Approach to groom your knowledge and skills conducted by Sri Eshwar College of Engineering from 23-07-2020 to 23-07-2020.
- Participated in a 1 hour National level Webinar on NBA - Outcome Based Education conducted by Karpagam Academy of Higher Education from 23-07-2020 to 23-07-2020.
- Participated in a 1 hour National level Webinar on Trends in IoT conducted by Sri Eshwar College of Engineering from 24.07.2020 to 24.07.2020.
- Participated in a 1 hour National level Webinar on Future of Data Transmission . Li Fi conducted by Sri Eshwar College of Engineering from 25.07.2020 to 25.07.2020.
- Participated in a 1 hour National level Webinar on Data Science in Industrial Application conducted by PSG Institute of Technology and Applied Research from 25.07.2020 to 25.07.2020.
- Participated in a 1 hour National level Webinar on Engineering Optimization . Methods and Application conducted by Sri Eshwar College of Engineering from 27.07.2020 to 27.07.2020.
- Participated in a 1 hour National level Webinar on Digital Transformation conducted by Sri Eshwar College of Engineering from 29.07.2020 to 29.07.2020.
- Participated in a 3 days National level FDP on Virtual Teaching and Learning conducted by Government Polytechnic College, Srirangam from 30.06.2020 to 01.07.2020.
- Participated in a 3 days National level FDP on 21 St Century Teaching Skills conducted by Annai Ajira Women's College, Tirunelveli from 07.08.2020 to 07.10.2020.
- Participated in a 4 days National level FDP on Technological Advancements in Mechanical Engineering conducted by Balaji Institute of Technology and Science, Warangal from 29.06.2020 to 03.03.2020.
- Participated in a 4 days National level FDP on Emerging Research Areas In Mechanical Engineering conducted by CMR Technical Campus, Telangana from 29.06.2020 to 07.03.2020.

DEPARTMENTAL ACTIVITIES

Mr. K. Krishnamoorthi, Assistant Professor - II

- Participated in a 7 days Notional level FDP on "Materials technology advancement in current scenario – MTACS 2020", from 19.07.2020 to 16.07.2020.
- Participated in a 5 Days Notional level FDP TEQIP. III Sponsored on "Challenges and Opportunities in recent emerging technology" from 20.07.2020 to 16.07.2020.
- Participated in a 6 Days National level AICTE Sponsored STTP on "Smart manufacturing, Opportunities and challenges" from 07.07.2020 to 16.07.2020.
- Participated in a 6 Days National level STTP AICTE Sponsored STTP Phase . II (Virtual Mode) On "Composite Materials: Micro to Nano. Fabrication, Characterization and Modelling Including Additive Manufacturing". from 08.07.2020 to 16.07.2020.
- Participated in a 7 Days National level FDP on One week online FDP on "NAAC Accreditation" organised by DIMRI IQAC Cell conducted from 10.07.2020 to 10.07.2020.
- Participated in a 2 National level Workshop on Intellectual Property Rights [IPR]: Focused On Engineering Applications from 21.07.2020 to 22.07.2020.
- Participated in a 1 week National level FDP on Attended one week FDP on NAAC Accreditation organized by Dnyansagar Institute of management and Res. Pune from 24.07.2020.
- Participated in a 3 hrs National level Webinar on Attended a webinar titled as Employability . Post Covid 19, Era, conducted by ASSOCHAM from 11th July 2020.
- Participated in a 2 hrs National level Webinar on Attended a webinar titled as Virtual Labs : For Effective tool for teaching and learning, conducted by Cummins College in association with AICTE on 10.07.2020.
- Participated in a 2 hrs National level Webinar on Attended a webinar titled as Patent Prosecution , conducted by Turnip on 25.07.2020.
- Participated in a 2 hrs National level Webinar conducted by Innovative Solutions on 26th July 2020.
- Participated in a 6 days National level Seminar on A vision towards Materials and Manufacturing from 20.07.2020 to 25.07.2020.
- Participated in a 5 days National level Training on Future scope of Engineering in Global development from 27.07.2020 to 31.07.2020.
- Participated in a 2 days National level Workshop on Intellectual Property Rights [IPR]: Focused On Engineering Applications from 21.07.2020 to 22.07.2020.

Mr. K. Manikanda Prasath, Assistant Professor

- Participated in a 1 week National level FDP on Recent Advances on Process Metallurgy, organized by OP Jindal University from 26.07.2020.
- Participated in a 1 week National level STTP on Smart manufacturing, opportunities and challenges, Chennai from 23.07.2020.

Mr. Mr. M. A. Vinayagamooth, Assistant Professor - II

- Participated in a 7 days National level FDP on "Materials Technology Advancement in Current Scenario - MTACS 2020 organized by Sathyabhama from 22.07.2020.

DEPARTMENTAL ACTIVITIES

- Completed 4 WEEKS Certification online course ofnAI For Everyone from coursera from 07.07.2020.
 - Participated in a 6 days National level AICTE sponsored STTP on Smart Manufacturing- Opportunities & Challenges organized by St. Joseph's College of Engineering from 03-07-2020.
 - Participated in a 5 days National level FDP on Five Day online Faculty Development Program on Recent Advance in Process Metallurgy organized by OP Jindal University from 21-07-2020.
 - Completed 6 WEEKS Certification course on Fundamentals of Fluid Power from coursera from 29-07-2020.
 - Participated in a 5 days National level TEQIP III Sponsored One week online STTP (OSTTP) on "Fundamentals of Computational Fluid Dynamics and Numerical Simulation of Fluid Flows and Heat Transfer organized by GCT, Coimbatore and NIT, Arunachal Pradesh. from 16-07-2020.
 - Completed 5 weeks International level Online certification course on Machine Design Part I - Coursera on 18-07-2020.
 - Completed 3 weeks International level Online certification course on Digital Thread: Components - Coursera on 19-07-2020.
 - Completed 4 weeks International level Online certification course on Grammar and Punctuation - Coursera on 20-07-2020.
 - Completed 5 weeks International level Online certification course on Digital Thread: Implementation - Coursera on 21-07-2020.
 - Participated in a 6 Days National level FDP on Future of Engineering Education and Work in post COVID 19 World by Chouskey Group of Colleges, Bilaspur on 22-07-2020.
 - Participated in a 5 DAYS National level FDP on "Finite Element Analysis" organized by Faculty Training Centre, Government College of Technology, Coimbatore on 23-07-2020.
 - Participated in a 7 DAYS National level STTP on Artificial Intelligence in Health care, Department of Electronics and Communication Engineering, Kumaraguru College of Technology, Coimbatore on 24-07-2020.
 - Participated in a 1 hour National level Webinar on "Everyone Can Do Quality Research - Talk 01: Instrumentation for Research in Thermal Engineering" KIOT, Salem on 04-07-2020.
 - Participated in a 1 hour National level Webinar on "Future Technology of Online Learning" , CIT, Coimbatore on 06-07-2020.
 - Participated in a 1 hour National level Webinar on "Roots Virtual Internship Training for Engineering students", ROOTS Coimbatore on 08-07-2020.
- Mr. M. Thirumalaimuthukumar, Assistant Professor - II**
- Completed 4 weeks International level Online certification course on Intelligent Machining- Coursera on 12-07-2020.
 - Completed 4 weeks International level Online certification course on Work Smarter, Not Harder: Time Management for Personal & Professional Productivity -Coursera on 16-07-2020.
 - Completed 6 weeks International level Online certification course on Material Behaviour - Coursera on 16-07-2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hour National level Webinar on "Everyone Can Do Quality Research . Talk 04: From Research and Technology Innovation to Entrepreneurship", KIOT, Salem on 16.07.2020.
 - Participated in a 1 hour National level Webinar on Executive thought leadership session on COVID.19 Impact on Higher Education, by Untieup on 17.07.2020 to 17.07.2020.
 - Participated in a 1 hour National level Webinar on "Welding of Nickel Based Super Alloys: Scope and Challenges" by KPRIET, Coimbatore. from 20.07.2020 to 20.07.2020.
 - Participated in a 1 hour National level Webinar on Thermal Spray Coatings for High Temperature Applications, KPRIET, Coimbatore. from 21.07.2020 to 21.07.2020.
 - Participated in a 1 hour National level Webinar on Advanced Composite Materials for Automobile & Armour Applications: Scope and Challenges. KPRIET, Coimbatore. from 22.07.2020 to 22.07.2020.
 - Participated in a 1 hour National level Webinar on Webinar Series on "Envisage for Novel Product Development through Additive Manufacturing" by KPR Institute of Engineering and Technology, Coimbatore. from 23.07.2020 to 23.07.2020.
 - Participated in a 1 hour National level Webinar on Webinar Series on "Everyone Can Do Quality Research . Talk 05: Innovative Research . Need of the Hour" by Knowledge Institute of Technology, Salem from 23.07.2020 to 23.07.2020.
 - Participated in a 1 hour National level Webinar on Emerging Trends on CAE in Mechanical Engineering. KPRIET, Coimbatore. from 24.07.2020 to 24.07.2020.
 - Participated in a 1 hour National level Webinar on Advanced Troubleshooting Techniques in CNC Machine. KPRIET, Coimbatore. from 25.07.2020 to 25.07.2020.
 - Participated in a 1 hour National level Webinar on Monthly Lecture Meeting on "Design for lateral forces . Wind" by The Institution of Engineers (India), Coimbatore Local Centre and Department of Civil Engineering, KPR Institute of Engineering and Technology, Coimbatore. from 25.07.2020 to 25.07.2020.
 - Participated in a 1 hour National level Webinar on webinar on "Journey of Establishing a Digital Twin" by Department of Mechanical Engineering, PSG Tech, Coimbatore from 27.07.2020 to 27.07.2020.
- Mr. P. D. Devan, Assistant Professor
- Participated in a 1 week National level FDP on FDP on Advanced Manufacturing Technology, Karpagam College of Engineering from 28.06.2020 to 04.07.2020.
 - Participated in a 4 days National level FDP on Recent Advances in Material Science, St. Joseph Institute of Technology from 08.07.2020 to 10.07.2020.
 - Participated in a National level FDP on Advances Mechanical Engineering, GATES institute of Technology from 04.07.2020 to 10.07.2020.
 - "Participated in a 6 Days National level STTP on "Smart Manufacturing – Opportunities & Challenges", St. Joseph's College of Engineering from 13.07.2020 to 18.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 5 Days National level FDP on Recent Advances in Process Metallurgy ,OP Jindal University. from 13.07.2020 to 17.07.2020.
- Participated in a 5 days National level FDP on "Recent Advances in Mechanical Engineering: A Research Perspective" MGIT from 06.07.2020 to 10.07.2020.
- Participated in a 3 Days National level FDP on INDUSTRY 4.0", Dr. M. G. R. Educational and Research Institute. from 02.07.2020 to 04.07.2020.
- Participated in a 5 days National level STC on "Advanced Materials Manufacturing Processes and Properties, MNIT Jaipur from 06.07.2020 to 10.07.2020.
- "Participated in a 6 days National level FDP on "Nanomaterial Synthesis, Process, Characterization and its Functional Applications", Hindusthan College Of Engineering And Technology" from 06.07.2020 to 11.07.2020."
- Participated in a 7 Days National level FDP on NAAC Accreditation" organized by Dnyansagar Institute of Management & Research, Pune from 21.07.2020 to 27.07.2020.
- Completed 4 weeks International level Certification course on Initiating and Planning Projects, University of California from 02.07.2020 to 12.07.2020.
- Completed 4 weeks International level Certification course on Cyber Security in Manufacturing, University of Buffalo from 14.07.2020 to 25.07.2020.
- Completed 4 weeks International level Certification course on Intro to Acoustics (Part.I), KAIST from 02.07.2020 to 12.07.2020.
- Completed 4 weeks International level Certification course on Essentials of Entrepreneurship. Thinking& Action, University of California from 14.07.2020 to 25.07.2020.
- Participated in a 5 days National level FDP on on Future Scope of Engineering in Global Development organised by Velalar College of Engineering & Tech from 27.07.2020 to 31.07.2020.
- Participated in a 6 days International level FDP on A to Z of Research organised by SRM INSTITUTE OF SCIENCE AND TECHNOLOGY from 27.07.2020 to 01.08.2020.
- Participated in a 5 days National level STTP on Intellectual Property Rights & Effective Patent Drafting" from 27.07.2020 to 31.07.2020.
- Participated in a 1 day National level Webinar on Virtual labs: Effective tool for Teaching and Learning, AICTE from 10.07.2020 to 10.07.2020.
- Participated in a 1 day National level Webinar on Experience the Simulation of Electrical Vehicles. KCIRI from 22.07.2020 to 22.07.2020.
- Participated in a 1 day National level Webinar on Kanavu Meipada by Innovative Services from 26.07.2020 to 26.07.2020.
- Participated in a 2 days National level Webinar on "Innovate with 3D Printing" GCT, Coimbatore from 29.07.2020 to 30.07.2020.
- Participated in a 1 day National level Webinar on Patent Prosecution Challenges and Strategies in India organized by Turnip Innovations from 25.07.2020 to 25.07.2020.

DEPARTMENTAL ACTIVITIES

Mr. P. Pradeep, Assistant Professor

- Completed online course - Mechanics of material 2 thin walled pressure vessel Attended training programme on CAMU conducted by Kumaraguru college of Technology
- Attended the Webinar on ' CFD Modelling and Analysis of Electric Vehicle' " held on 2 nd July, 2020. Department of Mechanical engineering Kumaraguru college of Technology, Coimbatore
- Attended Webinar on Research Methodology held on 17th July 2020 at Loyola college.
- Attended a webinar on PCM nano fluids in thermal power plant.

Mr. P. Prashanth, Assistant Professor

- Participated in a 10 days National level FDP on CFD training Program from 24.07.2020 to 24.07.2020.

Mr. R. S. Mohan Kumar, Assistant Professor

- Participated in a 6 days National level AICTE Sponsored STTP on Micro to Nano fabrication , Characterization and Modeling including Additive Manufacturing from 08.07.2020 to 08.07.2020.
- Participated in a 6 days National level FDP on on "Nanomaterial Synthesis, Process, Characterization and Its Functional Applications" on 6th to 11th July 2020 by HICET from 06.07.2020 to 11.07.2020.
- Participated in a 1 day National level Webinar on BS VI Emission norms & Emission control techniques" by PSGPC on 07.07.2020.

- Participated in a 6 days National level STTP on Smart Manufacturing. Opportunities & Challenges from 13.07.2020 to 18.07.2020, organised by Department of Mechanical Engineering, St. Joseph's College of Engineering, Chennai.
- Participated in a 7 days National level FDP on NAAC Accreditation" in association with EduMentor organized by Dnyansagar Institute of Management & Research, Pune from 21.07.2020 to 27.07.2020.
- Participated in a 1 day National level Webinar on Self Assessment & Self Awareness, A Hands on Approach " organized by Electronic & Computer Engineering Department, JB Institute of Engineering & Technology Moinabad, Hyderabad on 01.07.2020.
- Participated in a 2 days National level Guest Lecture on Attended Lecture Series on "Advanced Materials and Modern Applications (AMMA.2020)", organized by the Department of Electronics and Communication Engineering together with SSNRC, SSN College of Engineering, Chennai from 01.07.2020 to 02.07.2020.
- Participated in a 1 day National level Webinar on Attended Webinar on CFD Modelling and Analysis for Electric vehicle organised by Department of Mechanical Engineering, Kumaraguru College of Technology on 02.07.2020.
- Participated in a 1 day National level Workshop on Attended Workshop on Overview of Advanced Driver Assistance System on 05.07.2020 by SKILL LYNC.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 day National level Webinar on Attended Webinar on Operation Management . an Overview organized by Departments of Mechanical Engineering, NRI Institute Of Technology, isidala(P), Medikonduru(M),Guntur (Dt), Andhra Pradesh on 03.07.2020.
 - Participated in a 2 days National level Webinar on Attended Webinar Series on "Advanced Materials for Sustainable Development" organized by the Department of Physics, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishankoil during from 02.07.2020 to 03.07.2020.
 - Participated in a 1 day National level Webinar on Composites for Beginners, organised by Department of Mechanical Engineering, VITS on 09.07.2020.
 - Participated in a 1 day National level Webinar on "New Product Development , organised by Department of Mechanical Engineering, HIT, on 17.07.2020.
 - Participated in a 1 day National level Webinar on How to create a career of choice after graduation" on 18.07.2020, 10.30 AM to 11.45 AM, organized by Department of Mechanical Engineering, KCT.
 - Participated in a 5 days National level Webinar on "Secrets from the Masters for Entrepreneurs", organised by LEED Forum of Kumaraguru Institutions, KCT. Coimbatore from 20.07.2020 to 24.07.2020..
 - Participated in a 2 days National level Workshop on "Intellectual Property Rights [IPR]. Focused on Engineering Applications from 21.07.2020 to 22.07.2020.
 - Participated in a 1 day National level Webinar on Attended One Day Webinar on "Artificial Intelligence" J.B. Institute of Engineering & Technology on 29.07.2020.
- Mr. S. Rajesh, Assistant Professor
- Participated in a 6 days National level AICTE sponsored STTP on "Smart Manufacturing – Opportunities & Challenges" organized by St. Joseph College of Engineering from 13.07.2020 to 18.07.2020.
 - Participated in a 1 day National level Webinar on on Everyone do Quality Research Talk 4. from research & Technology to Entrepreneurship organized by Knowledge Institute of Technology from 16.07.2020 to 16.07.2020.
 - Participated in a 1 day National level Webinar on "Shape memory Alloys: Applications and Research Opportunities" organised by Department of Mechanical Engineering, Vignan Institute of Technology and Science from 07.07.2020 to 07.07.2020.
 - "Participated in a 1 day National level Webinar on Optimization of Process Parameters for Elevated Temperature Anisotropy of Titanium Alloy for Aerospace Product Applications" organized by Sree Dattha Institute of Engg & Science held on 19.07.2020.
 - Participated in a 1 day National level Webinar on Attended webinar on Welding of Nickel based super alloys: scope and challenges organized by KPR institute of Engg & Technology on 20.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 day National level Webinar on Attended webinar on BS VI Emissions norms organized by PSG Polytechnic college on 07.07.2020.
- "Participated in a 1 day National level Webinar on Attended the webinar on "Writing ap Scientific Manuscript . Key Points to Remember & Key Factors for Writing a Scitific Proposal" held on 8 July 2020, Manonmaniam Sundaranar University.

Mr. S. Ramanathan, Assistant Professor

- Participated in a 1 WEEK National level STTP on "Fundamentals of Computational Fluid Dynamics and Numerical Simulation of Fluid Flows and Heat Transfer" jointly organized by National Institute of Technology (NIT) Arunachal Pradesh and GCT Coimbatore from 06.07.2020 to 10.07.2020 Sponsored by TEQIP III.
- Participated in a 7 DAYS National level WORKSHOP on "Materials Technology Advancement In Current Scenario . MTACS2020" organised by Sathyabama Institute of Science and Technology from 04.07.2020 to 10.07.2020.
- Participated in a 5 Days National level FDP on Recent Advances in process metallurgy organized by OP Jindal University from 13.07.2020 to 17.07.2020.
- Participated in a 12 days National level FDP on Finite element analysis, Ramco institute of technology, Mahatma gandhi institute of technology from 22.06.2020 to 06.07.2020.
- Participated in a 5 Days National level FDP on Thermal characterization techniques and its analysis, Acharya institute of technology from 22.07.2020 to 27.07.2020.

- Participated in a 5 Days National level FDP on Finite element analysis, GCT, Coimbatore, from 13.07.2020 to 17.07.2020.

Mr. S. Sivakumar, Assistant Professor - II

- Participated in a 6 days National level FDP on Nano materials Synthesis, process, characterization and its functional Application from 08.07.2020 to 08.07.2020.
- Participated in a 7 days National level STTP on Artificial Intelligence in Helath Care from 21.07.2020 to 21.07.2020.
- Completed 4 weeks International level Certification course on Material Behaviour in course era by Georgia Institute of Technology from 08.07.2020 to 08.07.2020.
- Completed 4 Weeks International level Certification course on Initiating and Planning projects in course era by University of California Irvine from 21.07.2020 to 21.07.2020.
- Participated in a 6 days National level Seminar on A vision towards Materials and Manufacturing from 20.07.2020 to 25.07.2020.
- Participated in a 5 National level Training on Future scope of Engineering in Global development from 27.07.2020 to 31.07.2020.
- Participated in a 1 hr National level Webinar on Importance of continuing education from 13.07.2020 to 13.07.2020.
- Participated in a 1 hr National level Webinar on Application management services from 14.07.2020 to 14.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hr National level Webinar on cyber security of critical Infrastructures from 15.07.2020 to 15.07.2020.
- Participated in a 1 hr National level Webinar on AI in new digital economy from 16.07.2020 to 16.07.2020.
- Participated in a 1 hr National level Webinar on Introduction to statistics and AI from 17.07.2020 to 17.07.2020.
- Participated in a 6 days National level Online AICTE Sponsored online Short Term Training Programme (STTP) on ""Energy Storage Characteristics, Surface treatment , Durability , Sustainability and Micro Structural Evaluation of smart and Phase change materials and Its Applications "" from 27-07-2020 to 01-08-2020.
- Participated in a 1 Hour National level Webinar on Roots Virtual Internship Training for Engineering students on 08-07-2020.
- "Participated in a 2 Hour National level Training on Attended training programme on CAMU conducted by Kumaraguru college of Technology from 21-07-2020 to 21-07-2020."

Mr. S. Subbiah, Assistant Professor

- Participated in a 7 days National level FDP on Nano Science and NANO technology current perspectives by G H Raison College of Engineering Nagpur from 27-07-2020 to 01-08-2020.
- Participated in a 7 days National level FDP on NAAC Accreditation" organized by Dnyansagar Institute of Management & Research, Pune in association with EduMentor from 21-07-2020 to 27-07-2020.
- Participated in a 5 DAYS National level FDP on Attended Five Days Online FDP- "Finite Element Analysis" from 13-17, July 2020 organized by Faculty Training Centre, Government College of Technology, Coimbatore.
- Participated in a 5 days National level FDP on Five days online faculty development program on recent trends in manufacturing by Mahatma Gandhi Institute of Technology from 28-07-2020 to 01-08-2020.

Mr. S. Suresh, Assistant Professor

- Participated in a 6 days International level FDP on Enhanced Learning Initiative for Technical Excellence- Manakula vinataga institute of technology on 24.07.2020.
- Participated in a 5 days National level FDP on Recent Advances in process metallurgy organized by OP Jindal University on 28.07.2020.
- Participated in a 7 days National level FDP on Online FDP on "Entropy based Grey Relational Analysis" organized by Vignan Institute of Technology and Science, Hyderabad, Telangana on 30.07.2020.
- Participated in a 5 days National level FDP on FDP on Thrust areas in Mechanical Engineering- Geetanjali institute of Science & Technology on 30.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hr National level Online E Quiz on Basics of Mechanical Engineering organized by Shaikh College of Engg & Tech on 03-07-2020.
- Participated in a 1 hr National level Online E Quiz on Thermal Engineering organized by Annamalai Polytechnic college on 04-07-2020.
- Participated in a 1 hr National level Online E Quiz on Engineering Chemistry organized by Sankar Polytechnic college on 07-07-2020.
- Participated in a 1 hr National level Online E Quiz on Mechanical instrumentation organized by Annamalai Polytechnic college on 07-07-2020.
- Participated in a 1 hr National level Online E Quiz on Environmental science on 08-07-2020.
- Participated in a 1 hr National level Online E Quiz on Refrigeration & Air Conditioning on 10.07.2020.
- Participated in a 1 hr National level Online E Quiz on Industrial Engg & Management organized by Annamalai Polytechnic college on 14.07.2020.
- Participated in a 1 hr National level Online E Quiz on Design of machine Elements organized by Annamalai Polytechnic college on 15.07.2020.
- Participated in a 1 hr National level Online E Quiz on Lathe & Lathe work organized by Sankar Polytechnic college on 17-07-2020.
- Participated in a 1 hr National level Online E Quiz on Special machines organized by Annamalai Polytechnic college on 18.07.2020.
- Participated in a 1 hr National level Online E Quiz on Chemistry in Everyday life organized by Govt P. G. College, Bislapur on 22.07.2020.
- Participated in a 1 hr National level Online E Quiz on Metrology organized by Annamalai Polytechnic college from 22.07.2020 to 22.07.2020.
- Participated in a 1 hr "International Level Online Quiz on Mechanical Engineering " organized by Majhigariyani institute of Technology & science from 23.07.2020 to 23.07.2020.
- Participated in a 1 hr National level Online E Quiz on Aptitude on stocks & shares organized by Sankar Polytechnic college from 23.07.2020 to 23.07.2020.
- Participated in a 1 hr National level Online E Quiz on Strength of Materials organized by Annamalai Polytechnic college from 24.07.2020 to 24.07.2020.
- Participated in a 1 hr National level Online E Quiz on AI & Robotics organized by Holy Mary institute of Technology & Science from 26.07.2020 to 26.07.2020.
- Participated in a 1 hr National level Online E Quiz on IC Engines organized by Annamalai Polytechnic college from 27.07.2020 to 27.07.2020.
- Participated in a 1 Hr National level E Quiz on 3D printing Technology. AJ institute of Technology from 28.07.2020 to 28.07.2020.
- Participated in a 1 hr National level E Quiz on Renewable energy sources. Annamalai Polytechnic college from 31.07.2020 to 31.07.2020.
- Participated in a 1.5 hrs National level Webinar on Self Assessment & Self Awareness organized by J.B.Institute of Engineering & Technology from 01.07.2020 to 01.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 hr National level Webinar on CAD Modelling from 02.07.2020 to 02.07.2020.
- Participated in a 1.5 hrs National level Webinar on BS VI Emissions norms organized by PSG Polytechnic college from 07.07.2020 to 07.07.2020.
- Participated in a 1 hr National level Webinar on Composite materials organized by Vignan institute of Tech & Science from 09.07.2020 to 09.07.2020.
- Participated in a 1 hr National level Webinar on Everyone do Quality Research organized by Knowledge Institute of Technology from 09.07.2020 to 09.07.2020.
- Participated in a 1 hr National level Webinar on Process safety management organized by Francis Xavier Engg College from 12.07.2020 to 12.07.2020.
- Participated in a 1 hr National level Webinar Series on Everyone do Quality Research Talk 4. from research & Technology to Entrepreneurship organized by Knowledge Institute of Technology from 16.07.2020 to 16.07.2020.
- Participated in a 1 hr National level Webinar on Nanotechnology & its Applications organized by Vignan institute of Technology & Science from 16.07.2020 to 16.07.2020.
- Participated in a 1 hr National level Webinar on AI Applications in power industry practices including Renewable energy organized by REVA University from 18.07.2020 to 18.07.2020.
- Participated in a 1 hr National level Webinar on Optimization of Process Parameters for Elevated Temperature Anisotropy of Titanium Alloy for Aerospace Product Applications” organized by Sree Dattha Institute of Engg & Science from 19.07.2020 to 19.07.2020.
- Participated in a 1 hr National level Webinar on Welding of Nickel based super alloys: scope and challenges organized by KPR institute of Engg & Technology from 20.07.2020 to 20.07.2020.
- Participated in a 1 hr National level Webinar on Advantages and Challenges of Entrepreneurship organized by CSI College of Engineering from 21.07.2020 to 21.07.2020.
- Participated in a 1 hr National level Webinar on Advanced Manufacturing Processes organized by Nadar Saraswathi College of Engineering and Technology, Theni from 22.07.2020 to 22.07.2020.
- Participated in a 1 hr National level Webinar Series on Everyone do Quality Research Talk 5. Innovative Research Need of the hour organized by Knowledge Institute of Technology from 23.07.2020 to 23.07.2020.
- Participated in a 1 hr National level Webinar on Selection of materials for Engg Design organized by Kuppam Engg College from 24.07.2020 to 24.07.2020.
- Participated in a 1 Hr National level Webinar on Revolutionize optimize operations in Indian manufacturing industries from 28.07.2020 to 28.07.2020.
- Participated in a 1 Hr National level Webinar on Industrial Automation. Rathinam Technical Campus from 28.07.2020 to 28.07.2020.

DEPARTMENTAL ACTIVITIES

- Participated in a 1 Hr National level Webinar on webinar series on Everyone do Quality Research Talk 6. Art of writing Quality research paper organized by Knowledge Institute of Technology from 30.07.2020 to 30.07.2020.

Mr. T. Karuppusamy, Assistant Professor - II

- Completed 6 weeks National level Certificate on Ferrous technology 1 coursera on 07.11.2020.
- Completed 6 weeks National level Certificate on Materials science coursera from 07.10.2020 to 07.10.2020.
- Completed 5 weeks National level Certificate on Material processing coursera from 25.07.2020 to 25.07.2020.
- Participated in a 2 hours National level Webinar on Welding of nickel based super alloys from 23.07.2020 to 23.07.2020.
- Participated in a 2 hours National level Webinar on Thermal spray coating for high temperature applications from 24.07.2020 to 24.07.2020.
- Participated in a 2 hours National level Webinar on Advanced composite materials for automobile and armour applications from 25.07.2020 to 25.07.2020.
- Participated in a 2 hours National level Webinar on Envisage for novel product development thorough AM from 26.07.2020 to 26.07.2020.
- Participated in a 2 hours National level Webinar on Emerging trends on CAE in mechanical engineering from 27.07.2020 to 27.07.2020.

Mr. T. R. Sukumar, Associate Professor

- Participated in a 2 National level Webinar on “Advanced Materials for Sustainable Development” organized by the Department of Physics, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishankoil during 2nd & 3rd, July 2020.
- Participated in a 2 HRS National level Training on Attended training programme on CAMU conducted by Kumaraguru college of Technology from 21.07.2020 to 21.07.2020.
- Participated in a 1 DAY National level Webinar on Attended One Day Webinar on “Artificial Intelligence” J.B. Institute of Engineering & Technology on 29.07.2020.
- Participated in a 2 HRS National level NPTEL Lecture Series on Title Instructional Communication from 16.07.2020 to 16.07.2020.

STUDENTS' ACTIVITIES

VIRTUAL INTERNSHIPS

- Following 62 students are undergoing internships in M/s. Roots Industries, Coimbatore from 20.07.2020 to 10.08.2020.

Mr. Kishore Kumar A, 17BME066
Mr. Abilash S, 17BME001
Ms. Abilasha, 17BME081
Mr. Adithyaa A, 18BME145
Mr. Ajay J, 17BME089
Mr. Akash Madhavan S, 18BME071
Mr. Aravindh B, 18BME090
Mr. Arishwaran R, 18BME220
Mr. Arunkumar A, 17BME088
Mr. Aswath D, 17BME147
Mr. Bhavesh Kishore E, 18BME104
Mr. Boopathi Karthik M, 18BME202
Mr. Gowtham S, 17BME109
Mr. Harshit S, 18BME109
Mr. Inkarutthu Vinaayaga Iyyappan, 18BME201
Mr. Ibrahim Basha B, 18BME095
Mr. Jeshanth J D, 18BME063
Mr. Jeffery Renold L, 18BME076
Mr. Kannathasan K, 17BME228
Mr. Krishnaprasad L, 18BME105
Mr. Kritikesh M P, 18BME015
Mr. Deepak M, 17BME068
Mr. Muthu Visakan M, 18BME154
Mr. Nishanth M, 17BME213
Mr. Pon Hariharan M, 17BME216
Ms. Madhumitta P, 18BME064
Mr. Mahesh Kumar U, 18BME122
Mr. Manojkumar T, 18BME110
Mr. Mohana Gowtham R, 17BME226
Ms. Nandhini Varudharaju, 18BME068
Mr. Niranjana, 18BME116
Mr. Nithish Kumaran B, 18BME062
Mr. Hemant Kumar P, 18BME066
Mr. Prasanth M, 18BME100

- Mr. Praveen B, 18BME092
- Mr. Praveenkumar D, 17BME075
- Mr. Pravin K, 18BME001
- Ms. Pavithra R, 18BME106
- Mr. Dharshan R, 18BME162
- Mr. Ragulkanth V, 17BME302
- Mr. Rahul R Menon, 18BME017
- Mr. Rakshit Stephen T, 18BME132
- Mr. Ram Kumar L, 18BME069
- Mr. Roshan Ashraf S, 18BME114
- Mr. Praneesh Kumar S S, 18BME134
- Mr. Arun S K, 18BME067
- Mr. Sachinjith K R, 17BME067
- Mr. Sameer Ahamed Khan A, 18BME103
- Mr. Saran T, 18BME096
- Mr. Sasikumar M, 17BME015
- Mr. Sharon Meshach R, 18BME033
- Mr. Sooraj M S, 17BME030
- Mr. Sridharan G, 17BME079
- Mr. Bala Kumaresh T, 17BME150
- Mr. Dhayanithi T, 18BME099
- Mr. Thirudhakshin T, 18BME027
- Mr. Thirunavukarasar M, 18BME089
- Mr. Johi Chandru U, 17BME090
- Mr. Venkatesh J P, 17BME032
- Mr. Yashwanth P, 17BME103
- Mr. Abdul Ahadu, 17BME063
- Mr. Pon Mukesh M P M, 18BME133

ALUMNI VISIT

Vedha Vyas, 14BME162 alumni of batch of 2014-2018, United States - passed out of Carnegie Mellon University interacted with the department.

STUDENTS' ACTIVITIES

PAPERS PRESENTED

- Mr. Rubakumar, 17BME164 and Mr. Sounder, 17BME157 presented paper titled "Experimental Study on impact of temperature variations in CNC Milling, during dry machining and wet machining for Al and CI material" "National Level E-Conference on Innovative Trends in Mechanical Engineering" (NECITME- 2020), Sinhgad Institute of Technology and also their paper was published in the "International Journal of Scientific & Engineering Research" Volume 11, Issue 7, July-2020.
 - Mr. L. Krishna Prasad, 18BME105, Mr. Mr. B. Praveen, 18BME092, and Mr. M. Prashanth, 18BME100 presented a paper on "UVC Light disinfectant on Biometric system" in online International Conference on Advancements in Science and Technology - ICOST 2020 RSP Science Hub, Journal Partner International Research Journal on Advanced Science Hub (IRJASH), An Open access Journal.
- Mr. Saravana Prabhu A E, 17BME060
 - Mr. Umapathi P, 17BME064
 - Mr. Gudan A, 17BME078
 - Ms. Rushethra P N, 17BME080
 - Mr. Mohamed Jakabar B, 17BME082
 - Mr. Rameshkumar R, 17BME104
 - Mr. Gowtham S, 17BME109
 - Mr. Varadharajan M, 17BME121
 - Mr. Naveenraj V, 17BME128
 - Mr. Dharankumar S, 17BME202
 - Mr. Harrish T, 17BME207
 - Mr. Shanmugam. G, 17BME218
 - Mr. Mohana Gowtham R, 17BME226
 - Mr. Bharathi S, 17BME232
 - Mr. Krishnakanth C K, 17BME233
 - Mr. Pranav Anand K, 18BME040
 - Mr. Sreekar Reddy A, 18BME065
 - Mr. Arun S K, 18BME067
 - Mr. Akash Madhavan. S, 18BME071
 - Mr. Jeffery Renold L, 18BME076
 - Mr. Joshua Peter A, 18BME084
 - Mr. Srivathsan V, 18BME088
 - Mr. Nitheaswaran S K, 18BME091
 - Mr. Prasanth M, 18BME100
 - Mr. Mahesh Kumar U, 18BME122
 - Mr. Naveenkumar M, 18BME125
 - Mr. Rohith S, 18BME149
 - Mr. Kishore Kumar A, 17BME066
 - Mr. Sachinjith K R, 17BME067
 - Mr. Sethu Y, 17BME076
 - Mr. Dinesh Kumar S, 17BME087
 - Mr. Ajay J, 17BME089
 - Mr. Johi Chandru U, 17BME090
 - Mr. Nanda Kumar S, 17BME092
 - Mr. Pramoth M, 17BME102
 - Mr. Ganesh Prakash K, 17BME148
 - Mr. Moulikrishnan R, 17BME209

SEMINARS / TRAINING PROGRAMMES ATTENDED

Following students participated in seminar(s) / training programme(s) as detailed below

Internshala:

- Mr. Sowndhar S, 17BME009
- Mr. Inbakumar S, 17BME019
- Mr. Vignesh B, 17BME023
- Mr. Anthony Steeban A, 17BME027
- Mr. Rahul K, 17BME036
- Mr. Susilnath, 17BME043
- Mr. Shivaananda Ganesh, 17BME054

STUDENTS' ACTIVITIES

- Mr. Nihaal A, 17BME215
- Mr. Pon Hariharan M, 17BME216
- Mr. Kumaran B, 17BME223
- Mr. Pavithran K, 17BME225
- Mr. Ragulkanth V, 17BME302
- Mr. Sriram A, 18BME037
- Ms. Madhumitta P, 18BME064
- Ms. Nandhini V, 18BME068
- Mr. Mithileshwaran R, 18BME080
- Mr. Sreejith Ravichandran, 18BME082
- Mr. Abishek D, 18BME087
- Mr. Praveen B, 18BME092
- Mr. Rishi S, 18BME093
- Mr. Karthikeyan S, 18BME094
- Mr. Ibrahim Basha B, 18BME095
- Mr. Saran T, 18BME096
- Mr. Pramod P S, 18BME097
- Mr. Bhavesh Kishore E, 18BME104
- Ms. Pavithra R, 18BME106
- Mr. Harshit S, 18BME109
- Mr. Praveenkumar P, 18BME112
- Mr. Roshan Ashraf S, 18BME114
- Mr. Niranjana S, 18BME116
- Mr. Mugesh M A, 18BME117
- Mr. Ashif Rahuman A, 18BME119
- Mr. Ponmukesh M P M, 18BME133
- Mr. Dharshan R, 18BME162
- Mr. Hemanathan C, 18BME163
- Mr. Sanjay Venkat, 18BME167
- Mr. Prabhujith Eshwar A, 18BME177
- Mr. Karutthu Vinaayaga Iyyappan I N, 18BME201
- Mr. Arun Kumar R, 18BME205
- Mr. Dhivagar M, 18BME206
- Mr. Karunakaran S, 18BME207
- Mr. Deepachandran D, 18BME218
- Mr. Nitheeshwar R K, 19BME067
- Mr. Idhayaraja I, 19BME072
- Mr. Yogeshkumar S, 19BME098

- Mr. Nitin D, 17BME050
- Mr. Aakash A, 17BME095
- Mr. Aadhil Sharif, 18BME029
- Mr. Jeshanth J D, 18BME063
- Mr. Krishna Raagavendhar, 18BME073
- Mr. Balaji S, 18BME170
- Ms. Sneha M, 19BME004
- Mr. Manav R Samant, 19BME006
- Ms. Preethi Sri S, 19BME011
- Mr. Mohan, 19BME017
- Mr. Mohamed Riswan U, 19BME027
- Mr. Kamalesh S, 19BME031
- Mr. Navaneethan M, 19BME035
- Mr. Nitish Kumar B J, 19BME055
- Mr. Ajithkumar G, 19BME063
- Mr. Pravin D, 19BME065
- Ms. Charunika A, 19BME071
- Mr. Dhayanandh E, 19BME084
- Mr. Ammar Husain Mf, 19BME088
- Mr. Barani M, 19BME091
- Mr. Mohamed Thoufeek M, 19BME094
- Mr. Suvanraj R, 19BME100
- Mr. Manoj, 19BME132
- Mr. Praneesh Kumar S S, 18BME134

AICTE-Mitacs Inc Globalink Research Internship (GRI)- 2021

- Mr. Sowanthar S, 17BME009
- Mr. Inbakumar S, 17BME019
- Mr. Vignesh B, 17BME023
- Mr. Anthony Steeban A, 17BME027
- Mr. Rahul K, 17BME036
- Mr. Susilnath, 17BME043
- Mr. Shivaananda Ganesh, 17BME054
- Mr. Saravana Prabhu A E, 17BME060
- Mr. Umapathi P, 17BME064
- Mr. Gagan A, 17BME078
- Ms. Rushethra P N, 17BME080

STUDENTS' ACTIVITIES

- Mr. Mohamed Jakabar B, 17BME082
- Mr. Rameshkumar R, 17BME104
- Mr. Gowtham S, 17BME109
- Mr. Varadharajan M, 17BME121
- Mr. Naveenraj V, 17BME128
- Mr. Dharankumar S, 17BME202
- Mr. Harrish T, 17BME207
- Mr. Shanmugam. G, 17BME218
- Mr. Mohana Gowtham R, 17BME226
- Mr. Bharathi S, 17BME232
- Mr. Krishnakanth C K, 17BME233
- Mr. Pranav Anand K, 18BME040
- Mr. Sreekar Reddy A, 18BME065
- Mr. Arun S K, 18BME067
- Mr. Akash Madhavan. S, 18BME071
- Mr. Jeffery Renold L, 18BME076
- Mr. Joshua Peter A, 18BME084
- Mr. Srivathsan V, 18BME088
- Mr. Nitheaswarran S K, 18BME091
- Mr. Prasanth M, 18BME100
- Mr. Mahesh Kumar U, 18BME122
- Mr. Naveenkumar M, 18BME125
- Mr. Rohith S, 18BME149
- Mr. Ganesh Raghul S, 18BME147
- Mr. Kishore Kumar A, 17BME066
- Mr. Sachinjith K R, 17BME067
- Mr. Sethu Y, 17BME076
- Mr. Dinesh Kumar S, 17BME087
- Mr. Ajay J, 17BME089
- Mr. Johi Chandru U, 17BME090
- Mr. Nanda Kumar S, 17BME092
- Mr. Ganesh Prakash K, 17BME148
- Mr. Moulikrishnan R, 17BME209
- Mr. Nihaal A, 17BME215
- Mr. Pon Hariharan M, 17BME216
- Mr. Kumaran B, 17BME223
- Mr. Pavithran K, 17BME225
- Mr. Ragulkanth V, 17BME302
- Mr. Sriram A, 18BME037
- Ms. Madhumitta P, 18BME064
- Ms. Nandhini V, 18BME068
- Mr. Sreejith Ravichandran, 18BME082
- Mr. Abishek D, 18BME087
- Mr. Praveen B, 18BME092
- Mr. Karthikeyan S, 18BME094
- Mr. Ibrahim Basha B, 18BME095
- Mr. Saran T, 18BME096
- Mr. Bhavesh Kishore E, 18BME104
- Ms. Pavithra R, 18BME106
- Mr. Harshit S, 18BME109
- Mr. Praveenkumar P, 18BME112
- Mr. Roshan Ashraf S, 18BME114
- Mr. Niranjan S, 18BME116
- Mr. Mugesh M A, 18BME117
- Mr. Ashif Rahuman A, 18BME119
- Mr. Ponmukesh M P M, 18BME133
- Mr. Dharshan R, 18BME162
- Mr. Hemanathan C, 18BME163
- Mr. Sanjay Venkat, 18BME167
- Mr. Prabhujith Eshwar A, 18BME177
- Mr. Karutthu Vinaayaga Iyyappan I N, 18BME201
- Mr. Arun Kumar R, 18BME205
- Mr. Dhivagar M, 18BME206
- Mr. Karunakaran S, 18BME207
- Mr. Deepachandran D, 18BME218
- Mr. Nitheeshwar R K, 19BME067
- Mr. Barath M, 17BME024
- Mr. Shrinick P B, 18BME013
- Mr. Karthik S, 18BME014
- Mr. Lingesh S, 18BME016
- Mr. Saran B, 18BME034
- Mr. Avinash Roshan V R V, 18BME045
- Mr. Deepan Issac T, 18BME050
- Mr. Nikhilesh M, 18BME052
- Mr. Sivadasan V K, 18BME156
- Mr. Saranyan B, 18BME172

STUDENTS' ACTIVITIES

- Mr. Indrajith RA, 18BME215
- Mr. Sidharth K, 17BME085
- Mr. Hrishikesh Nm, 17BME117
- Mr. Kritikesh M P, 18BME015
- Mr. Sharon Meshach R, 18BME033
- Mr. Kaviyan D, 18BME061
- Mr. Ram Kumar L, 18BME069
- Mr. Sankar Vignesh M, 18BME072
- Mr. Mohan Raj L, 18BME074
- Mr. Kavin Cn, 18BME075
- Mr. Revanth M, 18BME079
- Mr. Nethaji P, 18BME081
- Mr. Naveen RG, 18BME085
- Mr. Navinadhidyaa KVK, 18BME086
- Mr. Aravindh B, 18BME090
- Mr. Sameer Ahamed Khan A, 18BME103
- Mr. Krishnaprasad L, 18BME105
- Mr. Karthick S, 18BME210
- Mr. Akash B, 18BME222

National Design and Research Forum (NDRF) & The Institution of Engineers (India) - "Online 10 Days Internship Program

- Mr. Ganesh Raghu S, 18BME147
- Mr. Kishore Kumar A, 17BME066
- Mr. Sachinjit K R, 17BME067
- Mr. Sethu Y, 17BME076
- Mr. Dinesh Kumar S, 17BME087
- Mr. Ajay J, 17BME089
- Mr. Johi Chandru U, 17BME090
- Mr. Nanda Kumar S, 17BME092
- Mr. Pramoth M, 17BME102
- Mr. Ganesh Prakash K, 17BME148
- Mr. Moulikrishnan R, 17BME209
- Mr. Nihaal A, 17BME215
- Mr. Pon Hariharan M, 17BME216
- Mr. Kumaran B, 17BME223
- Mr. Pavithran K, 17BME225

- Mr. Ragulkanth V, 17BME302
- Mr. Sriram A, 18BME037
- Ms. Madhumitta P, 18BME064
- Ms. Nandhini V, 18BME068
- Mr. Mithileshwaran R, 18BME080
- Mr. Sreejith Ravichandran, 18BME082
- Mr. Abishek D, 18BME087
- Mr. Praveen B, 18BME092
- Mr. Rishi S, 18BME093
- Mr. Karthikeyan S, 18BME094
- Mr. Ibrahim Basha B, 18BME095
- Mr. Saran T, 18BME096
- Mr. Pramod P S, 18BME097
- Mr. Bhavesh Kishore E, 18BME104
- Ms. Pavithra R, 18BME106
- Mr. Harshit S, 18BME109
- Mr. Praveenkumar P, 18BME112
- Mr. Roshan Ashraf S, 18BME114
- Mr. Niranjana S, 18BME116
- Mr. Mugesh M A, 18BME117
- Mr. Ashif Rahuman A, 18BME119
- Mr. Ponmukesh M P M, 18BME133
- Mr. Dharshan R, 18BME162
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- Mr. Karutthu Vinaayaga Iyyappa I N, 18BME201
- Mr. Arun Kumar R, 18BME205
- Mr. Dhivagar M, 18BME206
- Mr. Karunakaran S, 18BME207
- Mr. Deepachandran D, 18BME218
- Mr. Nitheeshwar R K, 19BME067
- Mr. Idhayaraja I, 19BME072
- Mr. Yogeshkumar S, 19BME098
- Mr. Barath M, 17BME024
- Mr. Shrinick P B, 18BME013
- Mr. Karthik S, 18BME014
- Mr. Lingesh S, 18BME016

STUDENTS' ACTIVITIES

- Mr. Saran B, 18BME034
- Mr. Avinash Roshan V R V, 18BME045
- Mr. Deepan Issac T, 18BME050
- Mr. Nikhilesh M, 18BME052
- Mr. Sivadasan V K, 18BME156
- Mr. Saranyan B, 18BME172
- Mr. Indrajith Ra, 18BME215
- Mr. Praneesh Kumar S S, 18BME134
- Mr. Ajith Kumar S, 17BME142
- Mr. Shakulin Babu, 17BME143
- Mr. Vijay V, 17BME234
- Mr. Vishalnath Krishna S A, 18BME035
- Mr. Nithish Kumaran B, 18BME062
- Mr. Harishmaran S T, 18BME098
- Mr. Anuj P, 18BME113
- Mr. Saran P S, 18BME118
- Mr. Prasanna Venkatesh, 18BME127
- Mr. Gopala Krishnan M, 18BME139
- Mr. Dushyanth Y, 18BME174
- Mr. Muthukumaran P, 19BME086
- Mr. Vishnu J, 19BME08P
- Mr. Ananth S, 19BME095

GATE PROGRAMME

A webinar on "GATE Awareness Program - Benefits & Career Opportunities with GATE" was organized in association with The GATE Academy on 25-07-2020, 10.00 AM to 11.00 AM. 40 students benefited out the programme.

FATIGUE FAILURE

Sreeharan B N

It has been noticed that materials often fail or fracture at a stress level far below their strength, if the stress is either (i) alternating type or (ii) it is varying periodically. What is meant by alternating stress?

An example will make this clear. Consider an axle fitted with two wheels. The axle bears the weight of the vehicle and at the same time it rotates along with wheels. Because of weight, the axle undergoes a little deflection causing compressive stress in its top half and tensile stress in bottom half of the cross-section. But since it is rotating, with every 180° rotation, the bottom half becomes the top half and vice versa. Thus, the nature of stress at any point in the axle keep alternating between compression and tension due to its rotation. A varying stress cycle means that the magnitude of the stress keeps reducing and increasing periodically although its sign does not change. If the material is subjected to several million cycles of either the alternating or varying stress, it gets fatigued and fails even though the magnitude of such stresses may be far lower as compared to its strength. Fortunately, there is a level of alternating and varying stress, which the material is able to withstand without failure even if it is subjected to infinite number of cycles. This is called the **ENDURANCE LIMIT**. A designer ensures that a component subject to fatigue in service is so designed that its actual stress level remains below the endurance limit.

The visual examination of a fatigue fracture shows three distinct zones. These are: (i) The point of crack initiation, it is the point from where the crack may have originated e.g. a notch like a keyway or some materials defect like an impurity, or even a surface blemish. (ii) The area of crack propagation during service. This area is usually characterised by circular ring-like scratch marks with point of crack initiation as the centre. (iii) Remaining area of cross-section showing signs of sudden breakage. As a result of crack propagation with time, a stage comes, when the remaining cross-sectional area becomes too small to sustain the stress and fractures suddenly.

Courtesy: Manufacturing Processes, New Age International Publishers



KUMARAGURU college of technology

COIMBATORE – 641 049

Department of Mechanical Engineering

INSTITUTE VISION:

The vision of the college is to become a technical university of International Standards through continuous improvement.

INSTITUTE MISSION:

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

DEPARTMENT VISION:

To emerge as a centre, that imparts quality higher education through the programme in the field of Mechanical Engineering and to meet the changing needs of the society.

DEPARTMENT MISSION:

The department involves in sustained curricular and co-curricular activities with competent faculty through teaching and research that generates technically capable Mechanical Engineering professionals to serve the society with delight and gratification.


B. E. MECHANICAL ENGINEERING

PROGRAM EDUCATIONAL OUTCOMES (PEO's):

- PEO 1** : Graduates will take up career in manufacturing and design related disciplines.
- PEO 2** : Graduates will be involved in the execution of Mechanical Engineering projects.
- PEO 3** : Graduates will take up educational programme in mastering Mechanical sciences and management studies.

PROGRAM OUTCOMES (PO's):

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

- 
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
 5. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
 6. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
 7. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
 8. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
 9. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
 10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
 11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
 12. **Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO's):

1. Apply the fundamentals of science and mathematics to solve complex problems in the field of design and thermal sciences.
2. Apply the concepts of production planning and industrial engineering techniques in the field of manufacturing engineering.

M. E. INDUSTRIAL ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEO's):

- PEO 1 :** Graduates will be mid to higher level management / engineering professionals with responsibilities in engineering management, data analysis and business operations.
- PEO 2 :** Graduates will be engineering professionals, and technology leaders who would manage such functions as plant engineering, production, supply chain and quality management.
- PEO3 :** Graduates would function as educators or researchers in academic institutions.

PROGRAM OUTCOMES (PO's):

- P01: An ability to independently carry out research /investigation and development work to solve practical problems.
- P02: An ability to write and present a substantial technical report/document.
- P03: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PROGRAM SPECIFIC OUTCOMES (PSO's):

- PS01: Graduates able to apply the engineering management and data management concepts in industrial engineering areas.
- PS02: Graduates able to apply industrial engineering skills and knowledge to manage the functions of production and supply chain management.

M. E. CAD/CAM

PROGRAM EDUCATIONAL OBJECTIVES (PEO's):

- PE01: Graduates excel in Professional career and/or higher education or/ research by continuously updating the knowledge and skill in the fields of Computer Aided Design and Manufacturing.
- PE02: Graduates can analyze the complex problems using advanced modelling and analysis tools and thereby solve problems related to product design and manufacturing area.
- PE03: Graduates work individually and also in a team with effective communication skills and pursue lifelong learning.

PROGRAM OUTCOMES (PO's):

- P01: An ability to independently carry out research /investigation and development work to solve practical problems.
- P02: An ability to write and present a substantial technical report/document.
- P03: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PROGRAM SPECIFIC OUTCOMES (PSO's):

- PS01: Graduates will be able to apply the knowledge and skill in solving the real-time problems in the Computer Aided Design and Manufacturing field.
- PS02: Graduates will be able to analyse complex problems and provide solutions using advanced tools in product design and manufacturing area.