



DAYANANDA SAGAR COLLEGE OF ENGINEERING

“An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi”
Accredited by National Assessment & Accreditation Council (NAAC) with ‘A’ Grade
Shavige Malleshwara Hills, Kumaraswamy Layout,
Bengaluru-560078, Karnataka, India.



In Association With



*The Institution of
Engineers (India)*



*लघु उद्योग भारती
Laghu Udyog
Bharati – Karnataka*



*Operational Research
Society of India,
Bangalore chapter*



**THE INSTITUTE
OF INDIAN
FOUNDRYMEN**

**BANGALORE
CHAPTER**

*The Institute of Indian
Foundrymen,
Bangalore Chapter*

VIRTUAL INTERNATIONAL CONFERENCE ON “ADVANCES IN MECHANICAL ENGINEERING SCIENCES & MANAGEMENT-2020” (ICAMESM-2020)

(Jointly Organized by Department of AE, AU, IEM, ME & MBA)

7th -9th December-2020

IMPORTANT DATES

Last date for abstract submission	November 27, 2020
Notification of Acceptance	November 30, 2020
Last Date for Registration	November 30, 2020

Note: Full-length manuscript Submission - Only Short-listed abstracts will be invited to submit full length paper



Conference URL: <https://www.dsce.edu.in/ICAMESM-2020>

Registration Link: <https://forms.gle/o6SBKRcFgFyycMfz7>

About the conference ICAMESM -2020

ICAMESM-2020 will provide a platform for learning, exchange of ideas and networking with fellow colleagues, research scholars, engineers from industry and participants across the world in field of Mechanical, Automobile, Aeronautical, Industrial Engineering and Management studies. The conference looks forward in welcoming you to an inspiring research platform at Dayananda Sagar College of Engineering, Bangalore, India with the intention of highlighting the researches in Mechanical, Automobile, Aeronautical, Industrial Engineering & Management field.

In the present era, Cluster of Mechanical Engineering Sciences & Management are the back-bone of the economy of a nation. There is a strong motivation for optimizing the design and manufacturing process using experiments with high precision equipment's and computational techniques for modeling the processes. The present conference focuses on the advances in the field of Aeronautical, Automobile, Industrial, Mechanical Engineering and Management. In addition to contributory papers, the conference aims at inviting renowned experts for delivering keynote addresses/special lectures in the field of Mechanical Sciences & Management studies.

About Dayananda Sagar College of Engineering (DSCE)

Dayananda Sagar College of Engineering (DSCE) is an Autonomous Institute approved by All India Council for Technical Education (AICTE), Govt. of India and affiliated to Visvesvaraya Technological University (VTU). It has widest choice of engineering branches having 15 Under Graduate programs & 13 Post Graduate programs. In addition, it has 20 Research Centers in various branches of Engineering catering to research scholars for obtaining Ph.D under VTU. All the UG programs are accredited by NBA.DSCE is accredited by NAAC with "A" grade.

The Institute is spread over twenty-nine acres of land with large infrastructure supported by laboratories with State-Of-The-Art, Equipment & Machines. The Central Library with modern facilities and the Digital Library provides the knowledge base for the students. The campus Wi-Fi is equipped with large bandwidth internet facility. The College has good faculty strength with highest professional integrity and committed to the academics with transparency in their actions. The faculty members are research oriented having number of sponsored R & D projects from different agencies such as Department of Science & Technology, Defense Research & Development Organization (DRDO), Indian Space Research Organization (ISRO) and AICTE.

About Institution of Engineers (India) [IEI]

The Institution of Engineers (India) [IEI] is a statutory body to promote and advance the engineering and technology, established in 1920 and incorporated by Royal Charter in 1935. It is the largest multi-disciplinary professional body of engineers encompassing 15 (fifteen) engineering disciplines with a Corporate membership of over 2 lakhs, and serving the nation for more than 9 decades. The IEI has its headquarters located in Kolkata with national presence through more than hundred Centres and several Overseas Chapters, Foras and Organ. he Institution of Engineers (India) is a first professional body to represent India in several International Bodies, such as the World Mining Congress (WMC), the World Federation of Engineering Organizations (WFEO), the Commonwealth Engineers' Council (CEC), the Federation International du Beton (FIB), and the Federation of Engineering Institutions of South and Central Asia (FEISCA).

About Laghu Udyog Bharati -Karnataka

Laghu Udyog Bharati is a not for profit Pan India Organisation with the aim of empowering Micro and Small enterprises in the country since its formation in 1994. Today, it has the distinction of being one of the largest Industry networks with branches in all the 24 states of India and membership base of 27,000. At a national level, LUB endeavors to bring together like-minded industrialists and entrepreneurs to create a strong and progressive organisation that provides solutions to entrepreneurs with a national spirit. It also helps aspiring entrepreneurs to achieve their full potential through training programs to impart new management techniques, technology know-how as well as to transfer of technology. Taking this forward at the state-level is Laghu Udyog Bharati - Karnataka.

About Operational Research Society of India (ORSI-BC)

The Bangalore chapter of the Operational Research Society of India (ORSI-BC) started functioning from 31st August 1988 with its first general meeting at the Indian Institute of Science. After adapting several resolutions aimed at the organizational aspects, representation of industry, computer software and student interests, it was decided in that meeting to have regular programmes with as much emphasis as possible on the application of Operation Research.

Since its inception the chapter has arranged talks/seminars on various aspects of Operations Research. Some of these programmes were arranged jointly with the Bangalore Management Association, Institution of Engineers (Karnataka State Centre), Computer Society of India-Bangalore Chapter, Indian Institute of Science and the Indian Institution of Industrial Engineers-Bangalore Chapter. Its present membership is about 5 Institutional Life members, and more than 100 life members. It is now one of the most active chapters of the ORSI.

About Institute of Indian Foundrymen (IIF)

The Institute of Indian Foundrymen (IIF) was set up in 1950 to promote education, research, training and development to Indian foundrymen and to serve as a nodal point of reference between the customers and suppliers of the Indian foundry industry on a global scale. With its Head Quarter in Kolkata, IIF presently services the entire country through its 26 Chapters under four Regional Offices located at Kolkata, Delhi, Mumbai & Chennai. The Institute is a member of the World Foundrymen Organization (WFO) and Confederation of Indian Industry (CII).

About Department of Aeronautical Engineering

The Department of Aeronautical Engineering was established in 2009 and accredited by National Board of Accreditation (NBA), New Delhi. The department offers under-graduate course in Aeronautical Engineering with an intake of 60 students and Research Programs in Aeronautical Engineering. The main aim is to impart quality education in Aeronautical Engineering and to create engineers of excellence for the best institutions in Aeronautical domain. The Department has modern infrastructure with hi-tech laboratories. It actively tries to fill the gap between academic and industrial needs by frequently organizing guest lectures, seminars and workshops on current technology by inviting eminent persons from premier aeronautical industries and institutes.

About Department of Automobile Engineering

The department was established in the year 2009 and is autonomous from 2015 affiliated to VTU and accredited by NBA, New Delhi, with an intake of 60 per year. It takes pride in its academic achievements by bagging gold medals consecutively along with numerous VTU ranks. Department has a team of highly qualified and experienced faculty members in diversified fields. The course imparts a strong foundation in Automobile Engineering connected to vehicle design and development, with emphasis given to the use of present day analytical and Computer Aided Engineering strategies. The department has well equipped laboratories and R&D centre recognized by VTU. As part of Industry-Institute Relation, the department has signed MOU's with BOSCH, VOLVO, TOYOTA and BMW. We conduct Joint Certification Programme in collaboration with BOSCH, trained to achieve excellence in developing core employability skills. SAE Collegiate Club and Automobile Engineering Students Forum (AESF) encourages students to participate in SAE and other activities.

About Department of Industrial Engineering & Management

Set up as an interdisciplinary program, the Department of Industrial Engineering and Management (IEM) at DSCE was one of the unique departments to leverage the analytical education of engineers in the training of management professionals. The department has well qualified faculties, having interests in diverse fields such as quantitative and statistical decision modelling, operations and supply management, manufacturing systems, finance, marketing, economics, analytics, infrastructure, IT, Innovation, Intellectual Property Management and knowledge management.

About Department of Mechanical Engineering

The Department of Mechanical Engineering, Dayananda Sagar College of Engineering, was started in the year 1979. Department of Mechanical Engineering offers Undergraduate and Post Graduate programs in Mechanical Engineering with the present intake of 180 students and 36 students respectively. Both Undergraduate and Postgraduate Students have been getting ranks consistently at the University Level and the Department has the excellent Placement record with the students getting placed in reputed core industries as well as IT sectors. The department is accredited with NBA. Students have been winning awards consistently at various technical events, conferences and symposiums held at prestigious institutions. The Department has a dedicated and experienced faculty team with more than fifteen PhD's driving the department towards excellence in academics as well as R & D activities. The department has a culture of nurturing research along with academics and the department has number of sponsored R & D projects from various funding agencies such as Department of Science & Technology, Naval Research Board, Defense Research & Development organization, VGST, Institute of Engineers, AICTE etc.

With the Make in India mission as its goal, the Dept. of Mechanical Engineering, DSCE with the support of its well-equipped laboratories and training methodologies is striving constantly to carry out skill development activities and Research work in the fields of 3 D Printing, FEA, Product design, Production technology, Nanotechnology and Nano Materials. Dept. of Mechanical Engineering also has to its credit few unique facilities and clubs like 3-D Printing Laboratory, Manufacturing processes Laboratory, Autodesk Laboratory, Robotics Club, Additive Manufacturing Club, CNC Laboratory etc.

About Department of Master of Business Administration

Established in 2006, the department's flagship program is a 2-year MBA affiliated to VTU (AICTE approved). Crafted to guide the students through a period of self-discovery, the pedagogy takes the students on an exploratory journey. The faculty brings a blend of strong industry and academic experiences while possessing a flair for research. The department has an established research Centre under VTU with four guides and 11 research scholars. It provides cutting edge industry-oriented programs by leveraging our external partnerships and alumni community and by giving students the technical and leadership skills to succeed in the current business environment.

Call for Papers

We invite high quality, state-of-the-art, previously unpublished original research papers. The authors may limit their papers to a maximum of 10 pages. The authors will then be invited to submit the final papers based on the recommendations of the reviewers for inclusion into the proceeding. The authors should use the template as provided in conference website for preparation of the paper. Manuscripts should follow the style of the conference proceedings publisher and are subjected to both peer review and editing.

Paper Submission

Essential title page information includes, Title, Author names and affiliations, Abstract (restrict to 300 words) and keywords. All the abstracts should be sent through the following Link: <https://forms.gle/o6SBKRcFgFyycMfz7>. Full length papers should be submitted, after receiving intimation of acceptance of the abstracts.

Publication

All Accepted Papers will be published in Scopus Indexed Journals after peer review with publication charges. Further, publishing/partnering Journals will be updated in the Conference website.

Mode of Payment: (Online)

Account Name: Dayananda Sagar College of Engineering
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Registration Details

Category	Fee Structure (INR)
International Delegates (Academia, R&D Organizations & Industries)	500
National Delegates (R&D Organizations/Industries/Academia/Faculty)	250
National Delegates (Students/Research Scholars)	100

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~~: CONFERENCE THEMES :~~

ENGINEERING

Aeronautical Engineering

- Spacecraft, Rotorcraft, Aircraft designs and structures
- Aeroelasticity & structural dynamics
- Aircraft & Rocket Propulsion
- Computational Fluid Dynamics
- Unmanned Aerial Vehicles
- Aerodynamics Tools and Methods in Aircraft Design
- Intelligent Transport Systems
- Avionics and Astronomy
- Combustion and Propulsion
- Aircraft Control and Simulation
- Advances in Satellite and Space Communications
- Alternative fuels and power source
- Satellite Remote sensing and subsystems
- Aerospace Engineering and Technology
- Flight Dynamics and Control

Automobile Engineering

- Automotive Technology
- Automotive Materials and Process
- Emission Control Design
- Electric and Hybrid Vehicles
- Green Fuel Technologies
- Innovation on Green Vehicles
- Intelligent Systems in Vehicles Vehicle Dynamics

Mechanical Engineering

- Advanced Ceramic Materials
- Material modelling and simulation
- Metals, alloys and composites
- Energy harvesting and power systems
- Additive processes and printing technology
- Materials for sustainable energy
- Equipment design and behavior
- Engineering failure analysis
- Mechanism Design
- Non Traditional Machining
- Welding
- Renewable Energy and IC Engines
- Biofuels
- Thermal Engineering
- Mechatronics System
- IoT and Machine Learning in Manufacturing

Industrial Engineering & Management

- Agriculture and Agronomics
- Business Intelligence
- Customer Relationship Management
- Data Mining and Big Data Analytics
- Total Quality Management
- Human Factors Engineering
- Facilities Planning
- Smart Cities
- Value Engineering
- Enterprise Resource Planning

MANAGEMENT STUDIES

- Marketing Management issues and opportunities
- Advancements in Analytics and Information Technology
- Banking, Financial services and financial inclusion
- Strategic Business leadership
- Global challenges in the face of economic uncertainty
- Logistics and Supply Chain Management
- Entrepreneurship Development
- International Business in digital Era

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