

About News Letter

The Department of Mechanical Engineering at SSBT is delighted to present its 2023-24 Newsletter (Volume XIX Issue-I). Our primary goal with this newsletter is to provide our students, parents, faculty, and industry partners with insights into the department's ongoing activities.

This semi-annual publication serves as a means to foster connections and enhance networking among our diverse stakeholders. We trust that you will find it both informative and enjoyable.

Editorial Board

Dr.P.G. Damle,
Associate Prof. & HOD
Mechanical

Dr. Krishna S. Shrivastava,
Associate Prof. and News Letter
Coordinator

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Smt. PRATIBHA DEVISINGH PATIL
Former President of India
Founder Chairperson
Shram Sadhana Bombay Trust



Lt. Dr. DEVISINGH R. SHEKHAWAT
An Eminent Educationist
The Founder President of
Vidya Bharti Shaikshanik



Shri. RAOSAHEB SHEKHAWAT
Chairman
Governing Body,
Shram Sadhana Bombay Trust



Prof. Dr. G. K. Patnaik
Principal
SSBT's COET, Bambhori, Jalgaon



Prof. Dr. S.B.pawar
Vice-Principal
SSBT's COET, Bambhori, Jalgaon



Dr. P.G.Damle
HOD, Mech. Dept.
SSBT's COET, Bambhori, Jalgaon

Chairman's Message...



We have a vision to build up excellent center of technical education coupled with industrial interaction. This will be structured with the academic excellence that the institution has set for itself. The Institute organizes programs that highlight the fundamental values in life directing its students to achieve excellence in their respective fields. The green campus extends career building opportunities for more than 400 students every year. Highly qualified and well experienced faculties mould and mentor the students for prospective careers. We have a very dedicated group of faculty & Staff who works together to spread the quality knowledge. These staff members bring an immense amount of talent, resources and experience to the table for benefit of SSBT College of Engineering & Technology. As part co-curricular and extracurricular activities, we conduct state level and intercollegiate level seminars and workshops; encourages students to participate in technical paper presentation contests; organize lectures by experts from leading industries etc. SSBT aims at not only educating the young to be successful Engineers, Managers and Entrepreneurs but also to churn out socially responsible human beings of tomorrow. I convey my best wishes to all the students and their parents for a successful future and good education.

From Principal's Desk...



On behalf of Shram Sadhana Bombay Trust's College of Engineering & Technology, Bambhori, Jalgaon I heartily welcome you all!

Started in 1983 with scarce infrastructure, developing infrastructural support, particularly in rural area, has been a challenge. Since then the institute with its visionary governing body has transformed into a pleasant, conducive and eco-friendly environment that carry the flame of quality education, knowledge and progressive technology for global societal development.

During these four decades since inception, the institute has evolved to a green campus with consistent efforts and dedication. The campus with lush green lawn, trees with name, pollution free makes more joyful. Towards sustainable development the campus has renewable energy through solar plant, waste water recycling plant, rain water harvesting, garbage composting etc. These amenities make the campus ideal for lifelong learning. The institute has been accredited by various accreditation board/council and bagged several awards during these four decades.

The institute has the policy to create and enhance the infrastructure that facilitates effective teaching and learning. The institute with its huge built up, full greenery campus, ICT class rooms, well equipped laboratories, spacious library, gymnasium with advanced facilities, play grounds, open air theatre, furnished hostels, staff quarters, cafeteria, guest house, renewable energy sources, Internet access anytime – anywhere etc. reflects the vision of the institute.

Making students competent to face real world challenges for better career opportunities & self reliance necessitates quality education. For all-round development of students, moulding them academically, professionally and intellectually through value added and skill education are integral part of our quality education mandate.

Today, the institute is one of the most preferred for fresh aspiring engineering students. We are sure that the kind of infrastructure provided, well qualified & experienced faculty and enthusiastic students will continue to glow the flame even brighter.

VISION of SSBT's COET

Today we carry the flame of quality education, knowledge and progressive technology for global societal development; tomorrow the flame glow even brighter.

MISSION of SSBT's COET

To provide conducive environment for preparing competent, value added and patriotic engineers of integrity of par excellence to meet global standards for societal development.

OBJECTIVES

- To impart innovative teaching and learning.
- To provide quality education with futuristic trends in engineering and technology.
- To develop the institute as a research center for academic excellence.
- To ensure continual improvement in quality management system.
- To inculcate social values, patriotism and professional ethics among students.

SSBT's COET at a Glance

SSBT's College of Engineering & Technology is an Engineering College governed by Shram Sadhana Bombay Trust (SSBT). It is a college with long tradition of imparting excellence in education.

- The institute is conferred “A” Grade by Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon vide letter number KBCNMU/11A/Academic Audit/246/2019 dated 04/06/2019 as per its Academic Audit.
- The institute is included in the list of colleges prepared under Section 2(f) of the UGC Act, 1956 vide letter number F 8-40/2008 (CPP-I) dated 2 June 2008 and 12(B) vide letter number F.No. 8-40/2008(CPP-I/C) dated 23 September 2010.
- Quality Management System (QMS) of the institute conforms to ISO 9001:2008 since March 2009 and ISO 9001:2015 since February 2018.
- The institute is awarded “Outstanding IQAC Awards – 2021” in the category of Research Environment by Green Mentors, Ahmadabad.
- The institute is awarded “Engineering College of the Year for Academic Productivity” in 2020 by The Academic Insights, Bangalore.
- The institute is awarded “Better India Education Awards 2018” on June 30, 2018 by Today Research & Rating, New Delhi.
- The institute is awarded “Brand Excellence in Education” in 2017 by 94.3 MY FM, Dainik Bhaskar Corporation Ltd.

- The institute is awarded "Engineering Education Excellence Award-2015" by INDO Global Chamber of Commerce Industries and Agriculture Pune, for the efforts in promoting Quality Education and implementing the higher standards of Technical Education in the field of Engineering.
- The institute is awarded "Corporate Excellence Award" on 28th November 2015, for Brand Excellence in Education by Lokmat.
- The institute is awarded "EEF Award for Excellence 2008 - 09" by Engineering Education Foundation, Pune.
- The Institute is Accredited by National Assessment and Accreditation Council (NAAC) with CGPA of 3.14 on a four point scale at 'A' Grade, valid for a period of Five Years from 06-09-2022.

MECHANICAL ENGINEERING: SHAPING A SUSTAINABLE FUTURE

MECHANICAL ENGINEERING, once the domain of tools and machinery, has evolved into a dynamic field shaping a brighter future for humanity. Driven by scientific advancements and technological breakthroughs, it encompasses a wide range of specializations, from composite materials and mechatronics to renewable energy and robotics.



Robotic arm being used to assemble a car (www.wired.com)

Mechanical engineers are at the forefront of developing composite materials with exceptional strength, lightness, and flexibility, pushing the boundaries of performance and efficiency. This is evident in the development of lighter, stronger airplanes and more fuel-efficient vehicles.

The field of mechatronics, which merges mechanical and electronic systems, is transforming industries and revolutionizing daily life.

ROBOTICS, a key aspect of mechatronics, is impacting various sectors, from manufacturing and healthcare to transportation and logistics.

Mechanical engineers are driving automation and intelligent machines, leading to a new era of efficient and cost-effective manufacturing. This is crucial for increasing productivity and competitiveness in a globalized world.

From sleek consumer electronics to life-saving medical devices, mechanical engineers are designing products that enhance our lives and address global challenges. Their creativity and innovation improve our daily experiences and



Wind turbine (windsystemsmag.com)

contribute to advancements in healthcare, communication, and transportation.

The fight against **CLIMATE CHANGE** is fueled by the efforts of mechanical engineers working in the renewable energy sector. They are developing sustainable energy solutions, such as solar and wind power systems, to reduce our reliance on fossil fuels and create a cleaner future.

Mechanical engineers are also shaping the landscape of modern society, from infrastructure and transportation to smart cities. They are building bridges, tunnels, and other essential infrastructure, while also developing sustainable urban environments that promote well-being and prosperity.



Self-Driving Car (valientemott.com)



**Robot Assisting in Surgery
(www.zanesvilletimesrecorder.com)**

A CAREER in mechanical engineering offers a vast array of exciting opportunities. You can delve into thermal engineering to design efficient energy systems or work in manufacturing to optimize production processes. **DESIGN ENGINEERS** shape the future with innovative product designs, while aerospace engineers explore the frontiers of aviation by developing the next generation of aircraft and space vehicles.

The field of **ROBOTICS** provides a unique opportunity to design and develop intelligent robots that redefine interaction and automation. This holds immense potential for various sectors, including healthcare, manufacturing, and disaster relief.

The Department of Mechanical Engineering provides a stimulating environment where students can learn, explore, and contribute to groundbreaking research. Our highly qualified faculty offer expert guidance and mentorship, ensuring students receive the highest quality education.

STATE OF THE ART laboratories provide students with the tools and resources to experiment, innovate, and translate theory into practice. This hands-on experience is crucial for preparing students for successful careers in the field.

Students actively participate in funded research **PROJECTS**, contributing to the advancement of knowledge and tackling real-world challenges. This research experience equips them with the skills and knowledge needed to become future leaders in the field.

Beyond the classroom, students have the opportunity to participate in a variety of extracurricular **ACTIVITIES**, fostering teamwork, leadership, and communication skills. These activities provide valuable learning experiences and help students develop their social and professional skills.

Extension activities allow students to apply their knowledge and skills to community development projects. This fosters **A SENSE OF SOCIAL** responsibility and allows students to make a positive impact on the world around them. Through participation in prestigious competitions such as SAE BAJA and ROBOCON, students push their limits, fostering creativity, innovation, and teamwork. These competitions provide valuable learning opportunities and challenge students to think critically and solve complex problems.

The Department of Mechanical Engineering is committed to nurturing the next generation of leaders in the field. We empower our students to shape a sustainable and prosperous future for all, ensuring that the future of mechanical engineering is bright and impactful.

VISION of DEPARTMENT

“To become the center of excellence by developing futuristic Mechanical Engineering Technocrats of Integrity to meet Global and Societal Development”

MISSION of DEPARTMENT

“To nurture the Mechanical engineers at par excellence to meet global and societal development with quality education and progressive technology”

SALIENT FEATURES

- Experienced, Qualified & Research Oriented Faculty
- Teacher Guardian Scheme
- Modern and Well-Equipped Laboratories
- Well-equipped laboratories
- NAAC Accredited for 5 Years with A Grade
- Research Facilities
- Project Based Learning
- Wi-Fi Campus

PROGRAM OUT COMES (POs)

1	Engineering knowledge : Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialisation for the solution of complex engineering problems
2	Problem analysis : Identify, formulate, review research literature, and analyses 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 public health and safety, cultural, societal and environmental considerations
4	Conduct investigations of complex problems : Use research-based knowledge & research methods including design of experiments, analysis & interpretation of data and synthesis of information to provide valid conclusion
5	Modern tool usage : Create, select and apply appropriate techniques, resources, modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations
6	The engineer and society : Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice
7	Environment and sustainability : Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development
8	Ethics : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
9	Individual and team work : 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 the 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
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PROGRAM SPECIFIC COMES (PSOs)

1	To develop professional leadership through co-curricular & extracurricular activities.
2	To impart skillful, value based & modern technology knowledge centre for lifelong learning.
3	To develop multidisciplinary, multi-skill technical abilities through integration of mechanical engineering & other engineering disciplines.

FACULTY PROFILE




Sr. no.	Faculty Name	Designation	Email - Id
1	Dr. P.G.Damle	HOD & Asso. Prof.	pgdamle8@gmail.com
2	Prof. Navneet K. Patil	Asso. Prof. & W.S.	patil.navneet@sscoetjalgaon.ac.in
3	Dr. Krishna S. Shrivastava	Asso. Professor	krishnashrivastava38@gmail.com
4	Dr. Devendra B. Sadaphale	Asst. Professor	devendra_sadaphale@rediffmail.com
5	Prof. Prashant N. Ulhe	Asst. Professor	prashantulhe@rediffmail.com
6	Dr. Pradeep M. Solanki	Asst. Professor	p_msolanki@rediffmail.com
7	Prof. Pravin D. Patil	Asst. Professor	pravinpatil100@rediffmail.com
8	Dr. Ajay R. Bhardwaj	Asst. Professor	bharadwaj.ajay@sscoetjalgaon.ac.in
9	Dr. Dipak C. Talele	Asst. Professor	taleledeepak190687@gmail.com

FACULTY ACHIEVEMENT



Dr. Deepak C. Talele has completed his Ph.D. in subject of Mechanical Engineering under faculty of Science and Technology, KBCNMU, Jalgaon.

FACULTY PROMOTION

Sr. No.	Promoted to Associate Professor with effective from 1 st July, 2024	
1.		Dr. D.B Sadaphale
2		Dr. P.M.Solanki
3		Dr. Ajay R. Bhardwaj

FACULTY PARTICIPATION

Sr. No.	Name of Faculty	Publication / Conference / Training / STTP/ FDP/ Workshop / Seminar / Others
1.	Dr. Krishna Shrivastava	<p>1) Secured Gold Medal in NPTEL certification for the subject Experimental Robotics, in June 2023-24.</p> <p>2) Invited as subject expert in the KBCNMU Research convention Avishkar 2023-24 at KBCNMU Jalgaon on 20th October, 2023.</p> <p>3) Published research paper on topic Maximizing Educational Quality for Industry Applications: Harnessing Rubrics for Program Outcome Achievement, Industrial Engineering Journal, ISSN: 0970-2555, Volume: 53, Issue 4, No.5, April: 2024, (UGC Care-1 Journal).</p> <p>4) Participated in One Week National Level Faculty Development Program on “Electric Vehicles”, organized by the Department of Mechanical Engineering, Padm. Dr. V. B. Kolte College of Engineering, Malkapur in association with IQAC Cell, ISTE Faculty Chapter of VBKCOE-Malkapur & IE (I) Aurangabad Local Chapter. From 22nd Jan to 27th Jan 2024 (online).</p> <p>5) Attended Workshop “DRONE Design and Analysis using ANSYS Simulation Solutions” held from 06th to 10th November, 2023 organized by the Department of Mechanical Engineering of S. V. National Institute of Technology, Surat.</p>
3	Dr. Ajay R. Bhardwaj	<p>1) Published research paper on topic Maximizing Educational Quality for Industry Applications: Harnessing Rubrics for Program Outcome Achievement, Industrial Engineering Journal, ISSN: 0970-2555, Volume: 53, Issue 4, No.5, April: 2024, (UGC Care-1 Journal).</p> <p>2) Presented Research article entitled “Effect of titanium carbide (TiC) particles as a reinforcement on Aluminium Metal Matrix Composites: A Review” in 38th National Convention of Mechanical Engineers (38th NCMC) & National Seminar on Emerging Trends and Developments on Smart Manufacturing, Renewable Energy and Mechanical System Diagnostics/Design Organized by The Institution of Engineers (India) Nagpur Local Centre in association with VNIT Nagpur during 08-09-23 to 09-09-23.</p> <p>3) Participate in “IP awareness/Training program” under the National Intellectual Property Awareness Mission on 25-01-23 at Jalgaon (M.S).</p> <p>4) Participate in National Level Faculty Development Programme on “Cloud Infrastructure (AWS)” organized by SSGB Bhusawal, Maharashtra in Collaboration Brain Vision Solutions Pvt. Ltd. and All India Council for Technical Education (AICTE) during 21-08-23 to 25-08-23.</p> <p>5) Participate in Two Weeks Faculty Development Programme on “Induction Training” organized by National Institute of Technical Teacher’s Training and Research (NITTTR) Kolkata (W.B) during 18-09-23 to 29-09-23.</p>
4	Dr. P.G. Damle	<p>1) Paper Published in Engineering Advances 2024: First International Conference on “Tribo corrosion and Wear Resistance of Biomedical Material: A Comprehensive Review” held on 12-4 June 2024 organized by Pravara Rular Engineering College, Loni.</p> <p>2) Participated in one Week Online National Level Faculty Development Program on "INNOVATION, RESEARCH AND IPR - JOURNEY TOWARDS EXCELLENCE" organized by BVB's Sardar Patel College of Engineering, Mumbai & HSM's Shri. Sant Gadge Baba College of Engineering & Technology, Bhusawal, held from 1st– 5th March 2023.</p> <p>3) Participated in one Week Online National Level Faculty Development Program on “Recent Advances in Mechanical Engineering” organized by Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, held between 24th to 28th July 2023.</p> <p>4) Participated in one Week Online National Level Faculty Development Program on “EDUCATION 4.0 IN HIGHER EDUCATION” organized by department of Computer Engineering, VIT, Pune, held between 31st July to 4th Aug. 2023</p>

5	Prof. N.K. Patil	<p>1) Participated in one Week Online National Level Faculty Development Program on “Recent Advances in Mechanical Engineering” organized by Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, held between 24th to 28th July 2023.</p> <p>2) Participated in one Week Online National Level Faculty Development Program on “EDUCATION 4.0 IN HIGHER EDUCATION” organized by department of Computer Engineering, VIT, Pune, held between 31st July to 4th Aug. 2023.</p> <p>3) Participated in one day workshop on syllabus framing for 1st year engineering of kavayitri bahinabai Chaudhari North Maharashtra University Jalgaon.</p> <p>4) Participated in a one week National level online faculty development program on additive manufacturing technology organised by Sandeep University Nashik.</p> <p>5) Participated in one week international faculty development program on advanced research methodology and AI</p>
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STUDENT’S PARTICIPATION



Paid Internship offered to Ms Sweta and Ms. Chanchal (SE- Mech) at Sky – Tech , Pune for two months. The Efforts for paid internship was taken by Dr. Krishna Shrivastava

Glimpses of Internship



Spectrum Jalgaon



Spectrum Jalgaon



Alpha Reverse engineering and design solutions pvt Ltd, Chakan Pune



India Garage, Jalgaon

STUDENT'S PARTICIPATION



Mr. Ujjawal Patil and Mr. Harshal Jhakhete won first prize in National level Paper presentation Mile stone 2k24. The students got the mentorship of Dr. Krishna Shrivastava



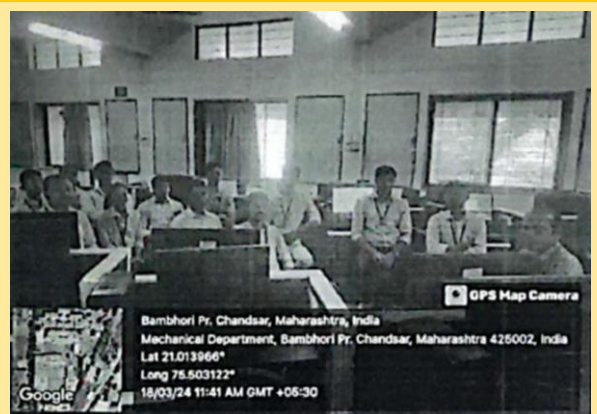
Industrial Visit at Deep Nagar Power Plant, District Jalgaon. The Visit was coordinated by Dr. D.B.Sdap[hale and Dr. P.M.Solanki



Major & Minor Project Presentation by Students, Activity Coordinator by Er. N. K. Patil.

ADD-ON- COURSE

Add on Course "Introduction to Hypermesh" conducted for third year and final year students from 18th March to 23rd March 2024. This course was coordinated by Dr. P.M.Solanki and Dr. D.C.Talele.



PLACEMENTS A.Y.- 2023-24

PLACEMENTS IN A.Y. 2023-2024



93% Placements

Amit Gokulsing Patil, Danish Khatik , Divyanshu Bhavsar , Gaurav Gadhe ,Gaurav Nitin Patil, Harshal Dilip Zurkale, Jay Arun Bhoi ,Jayesh Koli, Jayesh Sonavane ,Khan Mohd Kaif Zafar, Lalit Jagatap, Lucky Singh, Mohammad Kaif Shaikh Yusuf .Mohan Patil ,Mohd Saweeb Nazeem Mujawar, Nilesh Kumar ,Om Rajendra Bhalodkar ,Pinjari Mohd Suzefa Shaikh ,Pranav Ghuge, Prem Dinesh Surwade, Rahul Ashok Patil, Rohit Anil Navhi, Sheetal Pruthviraj More, Swapnil Dhumal, Tejas Devidas Patil, Ujjwal Mahajan, Vaibhav Patil, Vaibhav Ulhas Patil, Vivek Anil Nirkhe

PARENTS MEET A.Y.- 2023-24



MESA ACTIVITIES

Expert Lecture:

Resource persons Er. Satyawan Deore and Er. Apurva Dusane has presented the working nature of Mechanical engineer in core industries and opportunities in power plants, refineries, steel plants, design sector Etc. Discussed about the expectations of core industry from graduates.



Expert lecture by Er. Satyawan Deore and Er. Apurva Dusane.

Expert Lecture:

Expert Lecture conducted by Mr. Vedant Patil on the various aspects of industrial design. He has also briefed regarding to start the career as design engineer. He also guided students about various professional design software to be learned by the students.



Expert Lecture by Alumni batch 2019, Mr. Vedant Patil, Design Engineering, Mercedes Benz, Pune

Expert Lecture:

Mr. Yogesh Hebalkar was invited as guest speaker for the topic How to Prepare for an Interview. He talked on various aspects of interview process and questions asked normally in the interviews. He gave deep insights of mistakes which candidates make while attending interviews and explained about overcoming from those mistakes. He explained how to give the answers very effectively of certain questions like,

- Why should we hire you?
- Where do you see yourself 5 years from now?
- What are your strengths and weaknesses?
- When can you join if selected?
- How much salary do you expect?
- What do you know about our company



Expert Lecture by Mr. Yogesh Hebalkar DGM, Hitachi Astemo Brake System Ltd., Jalgaon.



Peer learning, under the guidance of Er. N. K. Patil

MESA ACTIVITIES



(a)



(b)



(c)



(d)



(e) Treeplantaion

Glimses of a) Tie day b) Traditional Day c) Shri Vishwakarma Jayati Celebrations d) Visit of Mr. Mandar Alumni 2018 batch, recently working with reputed company in Germany e) Tree Plantation