# Shram Sadhana Bombay Trust's College of Engineering & Technology, Bambhori, Jalgaon.



#### **About News Letter**

SSBT's COET, Department of Mechanical Engineering is proud to publish its NEWS LETTER 2022-23 (Vol. XXII).

The objective of this News Letter is to keep our Students, Parents, Faculty and Industry informed about the activities happening in the Department.

**Through** this yearly half publication, we hope to engage our various stakeholders in building the network among themselves. We hope you enjoy it!

#### **Editorial Board**

Dr. P.G. Damle, HOD MED Mr. D. C. Talele

#### **Members:**

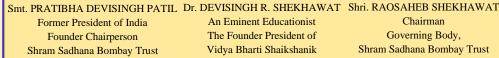
Dhakad Atharva sunil (B.E.) Rane Mangesh Rahul (T.E.) Wani Kartik (S.E.)

#### INSIDE.....

- Chairman's Message...
- From Principal's Desk ...
- SSBT's COET at a Glance
- **About Department**
- Faculty Profile
- **Faculty Participation**
- **Publications**
- Result Analysis
- **MESA** Activities
- **Students Participation**
- Photo Gallery









An Eminent Educationist The Founder President of Vidya Bharti Shaikshanik Mandal, Amravati



Chairman Governing Body, Shram Sadhana Bombay Trust



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



Dr. Sudhakar B. Pawar Vice-Principal 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 800 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 2.91 on a seven-point scale at B++ Grade, valid for a period of Five Years from 16-09-2016 (Vide letter No: F.19.26/EC(SC-17)/DO/2016/132.1, dated 19-09-2016).
- 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

### ABOUT DEPARTMENT

Mechanical engineering focuses on working with the tools and machinery taking into account the principles of Science, mainly Physics for the development of various systems for mankind.

In today's world, Mechanical Engineering are pursuing developments in the fields such as Composite Materials, Mechatronics, Industry Automation, Product Design and Development, Renewable Energy Sector and Industrial developments.

Mechanical Engineering aim to ease the lifestyle with the advancement in technology to further advance the world around us, providing more comfort, ease and economic vitally globally.

Today we find that Mechanical Engineering have made a benchmark with their creations, innovations and inventions in almost all the aspects of life.

Mechanical Engineering can make their career in the field of Thermal Engineering, Manufacturing, Design Engineering, Aerospace, Automobile, Robotics etc.

The department also offers PhD in major thrust areas. The department has highly qualified faculty members, state of art laboratories and infrastructures. Various Funded Research Projects and Consultancy projects are also taken up. Students of the department are actively involved in various

extracurricular activities and extension activities. A group of students are participating in a national SAE BAJA competition and ROBOCON.

### VISION of DEPARTMENT

To nurture the students by providing high quality broad based technical education for global societal development and continuous improvement in value added knowledge.

#### MISSION of DEPARTMENT

To cultivate a conducive environment through teaching, application specific learning and services to foster the technical critical thinking ability of the students as well as the faculties to contribute for developing global mechanical engineering professionals and well-being of the society

#### **SALIENT FEATURES**

- Experienced, Qualified & Research Oriented Faculty
- Modern and Well-Equipped Laboratories
- NAAC Accredited for 5 Years with A Grade
- Project Based Learning

- Teacher Guardian Scheme
- Well-equipped laboratories
- Research Facilities
- Wi-Fi Campus

#### **Programme Educational Objectives (PEOs)**

- **PEO 1. Core Knowledge** The mechanical engineering graduates will have the knowledge of basic science, engineering skills, humanities, social science, management, conceptual and practical understanding of core mechanical engineering area with project development.
- **PEO 2. Employment/ Continuing Education -** The mechanical engineering graduates will have the knowledge of Industry-based technical skills to succeed in entry level engineering position at various industries as well as in academics.
- **PEO 3. Professional Competency** The mechanical engineering graduates will have the ability to communicate effectively in English, to accumulate and disseminate the knowledge and to work effectively in a team with a sense of social awareness.

### **Programme Specific Outcomes (PSOs)**

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

## **Programme Outcomes (POs)**

- 1) Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization for 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 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

## **FACULTY PROFILE**

Sr.	Faculty Name	Designation	Email - Id	
no.				
1	Dr. Prajitsen G. Damle	Asso. Professor	pgdamle2@yahoo.com	
2	Mr. Navneet K. Patil	Asso. Professor	navneetkpatil@gmail.com	
3	Dr. Krishna S. Shrivastava	Asso. Professor	krishnashrivastava@yahoo.co.in	
4	Dr. Mahesh V. Rawlani	Asso. Professor	meshu_sir@rediffmail.com	
5	Dr. Devendra B. Sadaphale	Asst. Professor	devendra_sadaphale@rediffmail.com	
6	Mr. Prashant N. Ulhe	Asst. Professor	prashantulhe@rediffmail.com	
7	Dr. Pradeep M. Solanki	Asst. Professor	p_msolanki@rediffmail.com	
8	Mr. Pravin D. Patil	Asst. Professor	pravinpatil100@rediffmail.com	
9	Mr. Ajay R. Bhardwaj	Asst. Professor	mailme_ajaybhardwaj09@rediffmail.com	
10	Mr. Dipak C. Talele	Asst. Professor	taleledeepak190687@gmail.com	

Congratulations to Mr. Devendra B. Sadaphale for Completion of his Ph. D. On "Inception of Salt Gradient Solar Pond with Additional Non-Convective Zone: An Experimental Validation"



## **FACULTY PUBLICATION**

Sr. No.	Faculty Name	Papers in Journals	Title	Impact Factor
1.	Dr. D.B. Sadaphale	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) e- ISSN: 2319-8753, p-ISSN: 2320-6710	Optimization of Extrusion Process Parameter to Reduce Uneven Wall Thickness in HDPE Pipes by Using Taguchi Method 8328-8338	8.423
2.	Dr. D.B. Sadaphale	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) e- ISSN: 2319-8753, p-ISSN: 2320-6710	Optimization of Injection Molding Process Parameters to Reduce Defects in Chlorinated Polyvinly Chloride Pipe 8339- 8347	8.423

Sr. No.	Faculty Name	Papers in Journals	Title	Impact Factor
3	Mr. A.R. Bhardwaj	International Journal on Interactive Design and Manufacturing (IJIDeM) Springer Electronic ISSN:1955-2505 & Print ISSN:1955-2513, SCOPUS indexed and UGC care list India. Published -June 23	investigation of aluminum metal matrix composite reinforced with	2.2
4	Mr. A.R. Bhardwaj	International Journal of Novel Research and Development Volume 8, Issue 5 May 2023 ISSN: 2456-4184	Experimental Analysis of Air Conditioner Performance Improvement: Enhancing COP and Reducing Power Consumption via Sub-cooling, pp. i192-i199	8.76

# STTP/FDP/Seminar/Workshop attended

Sr. No.	Faculty Name	Name of STTP/FDP/Seminar/Workshop	Venue	Date
1.	Mr. A.R. Bhardwaj	"IP awareness/Training program" under the National Intellectual Property Awareness Mission	Jalgaon (M.S)	25-01-23

## LIST OF TOPPERS

**KBCNMU MAY- 2023** 

Class	Merit No.	Name of the Student	SGPA	University Rank
	1	Patil Mohit Sunil (Charulata)	9.76	I
	2	Misar Rajeshwari Ravindra (Ravina)	9.44	II
	3	Bhangale Nikita Shirish (Jayashree)	9.41	III
	4	More Revati Dilip (Jyotsna)	9.32	V
BE (A)	5	Dhakad Atharv Sunil (Priti)	9.31	VI
	6	Bodade Harsh Sanjay (Sangita)	9.3	VII
	7	Bhole Tejas Sachin (Ujjwala)	9.28	VII
	8	Sirsath Jitendra Sanjay (Nirmala)	9.26	IX
	9	Chaudhari Prashant Jitendra (Pratibha)	9.22	
	10	Patil Pushpak Prakash (Vandana)	9.14	

Class	Merit No.	Name of the Student	SGPA	University Rank
	1	Kolhe Nikhil Pradip (Mohini)	9.41	III
	2	Bhoite Nivedita Vikas (Sadhana)	9.4	IV
	3	Amodkar Chetan Vijay (Minakshi)	9.32	V
	3	Jadhav Darshan Vijay (Jyoti)	9.32	V
	4	Badgujar Mukesh Pandit (Surekha)	9.3	VII
BE (B)	5	Sanap Pratik Sanjay (Suvarna)	9.25	X
	5	Sonar Gayatri Sanjay (Sushma)	9.25	X
	6	Joshi Heral Satish (Manisha)	9.16	
	7	Wani Lokesh Digambar (Rekha)	9.15	
	8	Pagare Mansi Milind (Jyoti)	9.13	
	9	Mali Nayana Ravindra (Mirabai)	9.11	
	10	Teli Mohit Ravindra (Sunita)	9.08	

Class	Merit No.	Name of the Student	SGPA	University Rank
	1	Patil Tejas Devidas (Kalpana)	8.19	III
TE	2	Nhavi Rohit Anil (Jyoti Nhavi)	8.05	IV
	3	Ghuge Pranav Sandip (Savita)	7.62	

Class	Merit No.	Name of the Student	SGPA	University Rank
	1	Rajput Dhairyasing Bhupatsing	7.38	9
	2	Sapkale Gaurav Milind	7.14	
	3	Dusane Nikhil Shrikant	6.9	
SE	4	Thakre Rahul Suresh	6.62	
	5	Kasar Mayur Vijay	6.38	
	6	Sawant Prasad Dinkar	6.33	
	7	Sonar Tushar Rajesh	6.29	

## PHOTO GALLERY









