



ShramSadhana Bombay Trust's College of Engineering & Technology, Bambhori, Jalgaon

DEPARTMENT OF MECHANICAL ENGINEERING

GRAVITY

Volume XI

Newsletter: July2017-December2017

Our Inspiration

About College



Hon. Smt. PratibhataiPatil

&

Hon. Dr. Devisinghji Shekhawat

Shri.Raosaheb Shekhawat

Trustee

Shram Sadhana Bombay Trust runs the College of Engineering. & Technology at Bambhori, which is the one of the important Industrial Town & District Headquarters of Maharashtra state. College is awarded as Best Engineering College of Maharashtra State by Engineering Education Foundation, Pune in year2008-09. The College has ten full-fledged Departments. The college has been included in the list of colleges prepared under Section 2(f) of the UGC Act, 1956 vide letter number F8-40/2008(CPP-I), May, 2008 & 12(B) vide letter number F.No.8-40/2008(CPP-I/C) dated Sept2010. 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.)

SALIENT FEATURES

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

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

VISION

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

MISSION

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

DEPARTMENT VISION

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

DEPARTMENT MISSION

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.



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 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.
- 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).

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 vitality 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.

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

Audit Courses Details

Sr. No.	Course Title	Duration
1	Introduction to Auto CAD	1 to 5 Aug 2017
2	Introduction to Hyper mesh	28 Aug to 1 Sep 2017
3	Alternative Fuel	28 Aug to 1 Sep 2017
4	Introduction to Autodesk Inventor	28 Aug to 1 Sep 2017
5	Introduction to CFD	28 Aug to 1 Sep 2017
6	Introduction to Pro-E	4 Sep to 8 Sep 2017
7	Japanese Management	25 to 28 Sep 2017
8	Design & Installation of solar water Heater	6 to 11 Oct 2017
9	3D Modelling, assembly and analysis of Automotive Parts using CATIA	11 to 16 Sept-2017

Ongoing Funded Projects

Sr. No.	Name of Faculty	Agency	Amount in Rs.
1	Mr. D. B. Sadaphale	NMU(VCRMS)	1,00,000/-
2	Mr. P. N. Ulhe	NMU(VCRMS)	90,000/-
3	Mr. P. M. Solanki	NMU(VCRMS)	1,10,000/-

DEPARTMENTAL EVENTS



**Teachers Day Celebration
on 5th Sept 2017**



**Motivational Video Lecture By Swami Sukhabodhananda, On
"Changing Your Life and Achieving Peace of Mind" On 28/08/2017**

AUDIT COURSES



**Audit Course, "Introduction to CFD"
from 28-Aug-1 Sept-2017**



**Audit Course "3D Modelling, assembly and analysis of
Automotive Parts using CATIA" from 11 to 16 Sept 2017**



One Week STTP on "3D Modelling, assembly and analysis of Automotive Parts using CATIA" from 14 to 18 Nov 2017



**Congratulations to Mr. P. G. Damle for Completion of his Ph. D.
On "Critical Ergonomics Analysis of Manufacturing Industries
In the Context of Productivity Improvement"**



STUDENT'S PARTICIPATION –CO-CURRICULAR

SR. NO	Student Name	Event Type	Competition
1	Kharul Akash, Khadke Tejas, Kasar Hitendra, Sonawane Shubham, Jadhav Uddhav	Model	District Level Research Convention Avishkar-2017
2	Gaurav Bornare, Khushal Chaudhari, Ganesh Sapkale, Dipak chaudhari, Nikhil Bari		
3	Wagh Sachin	Poster	
4	Rahul Vishwakarma, Arpit Pandey		

TOPPERS OF THE DEPARTMENT (DEC 2017)

SE-A		
Rank	Student Name	SGPA
I	Borase Ritesh Adhikar	8.3
II	Chaudhari Shubham Vikas	8.26
III	Khandelwal Amod Girish	7.78

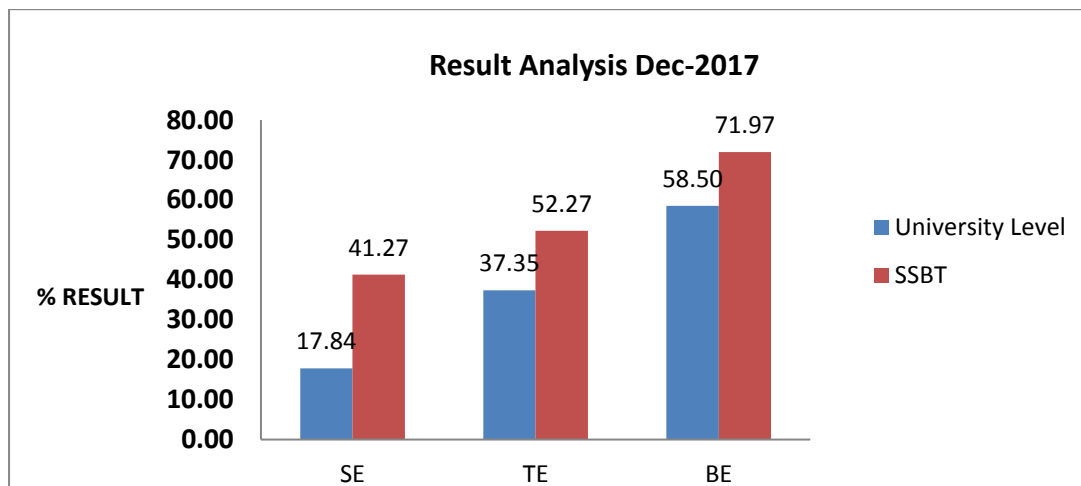
SE-B		
Rank	Student Name	SGPA
I	Bhamare Harshal Vijay	7.7
	Sutar Dhiraj Ashok	
II	Badgujar Manish Sanjay	7.52
	Deore Hitesh Suresh	
III	Patil Paresh Vishwas	7.43

TE-A		
Rank	Student Name	SGPA
I	Vinit Bhawsar	8.39
II	Tushar Bobade	7.83
	Patil Jayesh	
III	Jadhav Mayur	7.78
	Patil Pratik	

TE-B		
Rank	Student Name	SGPA
I	Patil Jitendra Ravindra	9.09
	Pingale Sagar Bhikari	
II	Momin Arbaz Salim	9.04
III	Wagh Bhushan Jayavant	8.91

BE-A		
Rank	Student Name	SGPA
I	Deshpande Shreyas Sunil	9.09
II	Bute Shreyas Ashok	8.83
III	Patil Snehal Pandurang	8.61

BE-B		
Rank	Student Name	SGPA
I	Waykole Aniket Arun	8.7
II	Patil Praful Jitendra	8.57
	Patil Yogesh Yashwant	
III	Ingle Prajakta Nimbaji	8.48



FACULTY PARTICIPATION & PUBLICATIONS

Sr. No.	Faculty	Training/STTP/Workshops	Duration	Venue
1	Mr. P. M. Solanki,	One Day Workshop on 'Automation Studio Academic User's Meet 2017.	06-10-2017,	Indiasoft Technologies (P) Ltd, Pune'
2	Dr. S P Shekhawat Mr. N K Patil Mr. K. Shrivastava, Mr. M V Rawlani, Mr. D B. Sadaphale, Mr. M. V. Kulkarni, Mr. P. D. Patil Mr. C. K. Mukharjee. Ms. J. R. Surange, Ms. C. S. Chopade, Mr. S. M. Arbat	3D Modelling, assembly and analysis of Automotive Parts using CATIA	14-11-2017 To 18 -11-2017	SSBT's COET, Jalgaon
3	Mr. Deepak Talele, Dr. P. P. Bornare	AICTE Sponsored Two week " Faculty Development Programme " Present Scenario of Treatment of Waste in India: Challenges, Issues and New Techniques of Treatment	12/11/2017 to 25/11/2017	SRES Sanjivani College of Engineering, Kopargaon
4	Mr. T. G. Patil	Recent Advances in PCM based Cooling Technology	11/12/2017 to 15/12/2017	IIT Bhubanreshwar
5	Mr. P. N. Ulhe, Mr. A. R. Bharadwaj, Mr. A. V. RAjput,	FDP on "Team Bonding"	8 Oct 2017	GATI & SSBT's COET, Jalgaon
6	Mr. D B. Sadaphale	Pedogogy of Teaching –Learning Methods	20-1-2017 To 21-1-2017	Godavari College of Engg & Technology, Jalgaon
7	Mr. C. K. Mukharjee.	Research Oriented Training on CNC Machines	14-12-2017 To 18-12-2017	MNIT, Bhopal
8	Mr. A. J. Puri.	Two Week workshop on Recent Trends and Challenges in Metal and Manufacturing Processes.	13-11-2017 To 23-11-2017	RIT, Islampur
9	Mr. K. Shrivastava, Mr. P.M. Solanki, Mr. D. B. Sadaphale, Mr. P. N. Ulhe,	District Level Research Convention Avishkar-2017 (Post PG)	21st December 2017	M.J. College, Jalgaon

Sr. No.	Faculty	Papers in Conferences/ Journals
1	Dr. S P Shekhawat	Published a research paper on "Understanding the transmission method in turbid water using net Radiation method" at International Journal Of Basic And Applied Research.
2	Dr. S P Shekhawat	Published a research paper on, " Experimental Investigation of Molten Salt in Concentrated Solar Power Systems", at Pratibha International Journal-2017

3	Mr. P. M. Solanki, Dr. S. P. Shekhawat	"Thermoelectric generator system for generation of electric power through waste heat energy from two wheeler silencer", International Journal of Creative Research Thoughts (IJCRT),
4	Dipak C. Talele, Dr. S. P. Shekhawat	Published a research paper entitled "Mathematical Model Formulation for Investigation of Influence of Air Induction Pressure as an Operating Variable on A Stationary Compression Ignition Engine Performance" International Journal of Creative Research and Thoughts (IJCRT), ISSN: 2320-2882, Page No. 152 - 157, Volume 5, No. 12, December, 2017. Impact Factor: - 5.97.
5	Mr. C. K. Mukharjee	Presented and Published research paper on "A study of Power Sector –Safety issues of Industrial Scenario" at ICIE-2017, at SVNIT Surat.
6	Mr. P. D. Patil, Mr. Mahesh Marathe	Design & Development of Hydraulic Milling Fixture", Site: (PGCON). Study of Human Operated System to Generate Electricity", Site: IJSRD (International Journal for Scientific Research and Development), Design of Flywheel to Minimize Human Efforts to Generate Electricity", Site: IJSRD (International Journal for Scientific Research and Development), "Improvement In Design Of Flywheel To Increase Efficiency Of Human Efforts To Generate Electricity"
7	Dr. S. P. Shekhawat, Mr. M. V. Rawlani	Published a Book "Introduction to Mechanical Engineering And Engineering Drawing"
8	Mr. M. V. Rawlani	Published a Book "Engineering Graphics"

PHOTO GALLERY



Students Visit to Plastindia-2018 on 11 Feb 2018



Winners of One Day Event "Answer to the Problem"
On 29th Sept 2017

Editor: Dr. P.G. Damle

Members:

1. Junagade Mandar Vilas (B.E.)
2. Pawar Prajakta Shamkant (T.E.)
3. Bari Mayur Ganeshrao (S.E.)