



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

DEPARTMENT OF MECHANICAL ENGINEERING

GRAVITY

Volume XII

Newsletter: January 2018–June 2018

Our Inspiration



Hon. Smt. Pratibhatai Patil
&

Hon. Dr. Devisinghji Shekhawat



Shri. Raosaheb Shekhawat

Trustee

About College

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 year 2008-09. 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 Sept 2010. 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.
- 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 "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 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.

PROGRAM 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.

PROGRAM OUTCOMES (POs)

- Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialisation for the solution of complex engineering problems
- Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
- 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
- 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
- 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
- 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
- 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
- Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
- Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings
- 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
- 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
- Life-long learning:** Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

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

Ongoing Funded Projects

Sr. No.	Name of Faculty	Agency	Project Title	Amount in Rs.
1	Mr. D. B. Sadaphale	NMU (VCRMS)	Inception of Salt gradient Solar Pond with Additional non Convective Zone: Experimental Validation	1,00,000/-
2	Mr. P. N. Ulhe	NMU (VCRMS)	Optimization of Burning Process to Improve Quality of Work piece	90,000/-
3	Mr. P. M. Solanki	NMU (VCRMS)	Generation of Electricity from Two Wheeler Exhaust Waste Heat Energy Using Thermoelectric Generation	1,10,000/-
4	Mr. N K Patil	IEDC		30,000/-
5	Mr. K Shriwastva	IEDC	Design and Fabrication of Automated and Movie Operated Grass Cutter	40,000
6	Mr. M V Rawlani	IEDC		40,000
7	Ms. J. R. Surange	SSBT's COET(SSRPS)		1,04,000/-

DEPARTMENTAL EVENTS



**Expert Guest Lecture on “Get your Dream Job”
By Mr. Devdatta Gokhale On 9 March 2018**



**Industry Expert Lecture on “Opp. in Process Industries”
by Mr. Rohit Kumar M . Deshmukh**



**Industry Expert Lecture on “Innovation and Sustainability”
by Er. Vishwas Paharia Technical Director,
Arcading Consulting, UK on 23rd March 2018.**



**Industry Expert Lecture on “SAP and Latest software”
by Er. Ravindra Sapkale, Quality Assurance Engineer
Amazon Corp., Ltd. on 16 March 2018.**



**Motivational Lecture on “Discovering me within you”
by Akhil Kausturkar-2Feb-2018**



**Inaugural Function for Shodh Prkalp Pratiyogita-2018
organised on 31 March2018**

STUDENT’S PLACEMENT IN 2017-18

Sr.No.	Name of Student	Company Name	Package in Lakhs
1	Vishal Ghuge	3idea Tech, Mumbai	1.2
2	Kapil Patil	3idea Tech, Mumbai	1.2
3	Tejas Khadke	SKYCAD, Mumbai	1.2
4	Anup Nagtilak	SKYCAD, Mumbai	1.2
5	Chetan Badgular	Shriram Transport Finance Company	2.44 in non metro ciites and 2.77 in Metro cites
6	Swapnil Potdar	Shriram Transport Finance Company	2.44 in non metro ciites and 2.77 in Metro cites
7	Rahul Ingale	Spectrum Polytech Jalgaon	1.2
8	Rashmi P Chaudhari	Spectrum Polytech Jalgaon	1.2
9	Jitendra Sahebrao Patil	Spectrum Polytech Jalgaon	1.2
10	Snehal Panduran Patil	Treezec- E Solution Pvt. Ltd.	1.2
11	Sagar P Khachane	Treezec- E Solution Pvt. Ltd.	1.2
12	Shreyas Ashok Bute	Treezec- E Solution Pvt. Ltd.	1.2
13	Chetan Jitendra Badgular	Treezec- E Solution Pvt. Ltd.	1.2
14	Patil Ashok Prabhakar	Treezec- E Solution Pvt. Ltd.	1.2
15	Praful Jitendra Patil	Treezec- E Solution Pvt. Ltd.	1.2
16	Amol Ishwar Patil	Treezec- E Solution Pvt. Ltd.	1.2
17	Shubhum Sonawane	Uvimac Engineering Soutions, Pune	1.4
18	Harshal Kumbhar	Uvimac Engineering Soutions, Pune	1.4
19	Sachin Wagh	Uvimac Engineering Soutions, Pune	1.4
20	Dipak Shimpi	Uvimac Engineering Soutions, Pune	1.4
21	Krushna Thakre	Uvimac Engineering Soutions, Pune	1.4
22	Akshay Kharul	Uvimac Engineering Soutions, Pune	1.4
23	Kushal Kishor Bhangale	Uvimac Engineering Soutions, Pune	1.4
24	Shubhum Mahajan	Uvimac Engineering Soutions, Pune	1.4

25	Ganesh Sapkale	Myco Industries Mumbai	1.4
26	Mahendra Walmik Patil	Sharpline Solutions, Mumbai	1.2
27	Ankush R Gadhari	Sharpline Solutions, Mumbai	1.2
28	Gajendra Madhukar Patil	Sharpline Solutions, Mumbai	1.2
29	Vishal Govinda Patil	Sharpline Solutions, Mumbai	1.2
30	Hatkar Ravindra Motilal	Sharpline Solutions, Mumbai	1.2
31	Chaudhari Akshay R.	Sharpline Solutions, Mumbai	1.2
32	Hitendra Kasar	Sharpline Solutions, Mumbai	1.2

STUDENT'S PARTICIPATION –CO-CURRICULAR

Sr. No.	Student Name	Event Type	Competition	Remark
1	Aniket A. Waykole, Rohit K. Koli, Saurav H. Zope, Kunal C. Patil	Model DIPEX-2018,	State Level Project Competition, Sangali	2 nd Prize Winner
2	Swapnil Pardeshi	Paper Presentation	KCE	2 nd Prize Winner
		Paper Presentation	IGNITE-18, Mauli College of Engg., Shegaon	1 st Prize Winner
		Paper Presentation	GHRIEM, Jalgaon	1 st Prize Winner
3	Gajendra Patil and Team		ROBOCON-2018	

STUDENT'S PARTICIPATION –EXTRA CURRICULAR

Sr. No.	Student Name	Event	Achievement
1	Ajay Nagare	Inter College Basket Ball Competition	Winner
2	Shahid Khan	Volleyball, Zonal Level Competition	Best Player
3	Sagar Koli	Hockey	Winner
4	Yogesh Sarode	Archery, University Level	--
5	Sagar Kale	Zonal Matches, Cricket	--
6	Shubham Sonawane	Zonal Matches, Cricket	--
7	Atul Telang	Soft Ball Inter College Competition	Winner
8	Shubham Badgujar	Zonal Matches	Runner
9	Rohitkumar K. Koli	Tie Day	Winner
10	Harshal Chaudhari	Singing	Second
11	Dance (United Dance King's Group)	Dance Competition VASANTOTSV-2018	Second
12	Mechanical Boys	Dance Competition VASANTOTSV-2018	Third

TOPPERS STUDENT'S (2017-18)

SE-A		
Rank	Student Name	SGPA
I	Sutar Dhiraj Ashok	8.43
II	Patil PareshVishwas	8.39
III	Badgujar Manish Sanjay	8.35

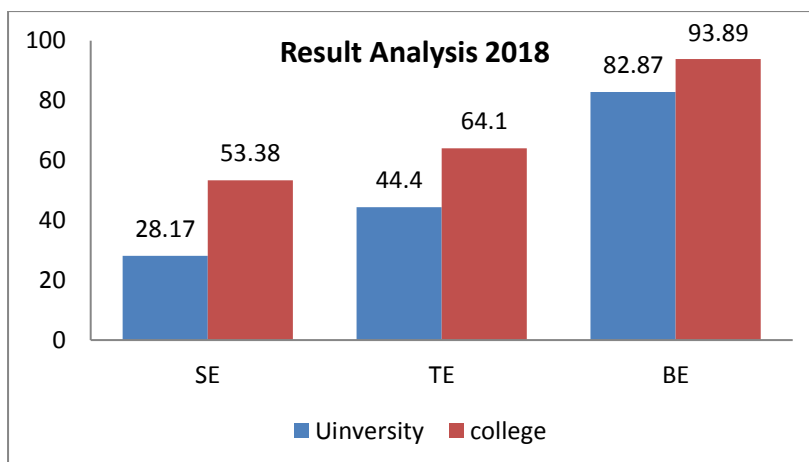
SE-B		
Rank	Student Name	SGPA
I	Bari Vaibhav Prakash	8.3
II	Deore Hitesh Suresh	8.09
III	Chaudhari Bhavesh Kiran	7.87

TE-A		
Rank	Student Name	SGPA
I	Vineet Sanjay Bhavsar	8.74
II	Tushar Bobde	8.39
III	Surbi Kashyap	8.04

TE-B		
Rank	Student Name	SGPA
I	Momin Arbaz Salim	9.04
II	Sagar Bhikhari Pingale	8.91
III	Hitesh Kiran Zope	8.87

BE-A		
Rank	Student Name	SGPA
I	Bute ShreyasAshok	8.59
II	Deshpande Shreyas Sunil	8.5
III	Chaudhari Rashmi Pramod	8.33

BE-B		
Rank	Student Name	SGPA
I	Waykole Aniket Arun	8.88
II	Koli Sagar Kailas	8.54
III	Shaikh Sohail Rais Ahmed	8.4



FACULTY PARTICIPATION & PUBLICATIONS

Sr. No.	Faculty	Training/STTP/Workshops	Duration	Venue
1	Dr. S. P. Shekhawat Dr. P. G. Damle Mr. P. M. Solanki	Innovative Methods for Teaching Mechanical Engineering	22 nd -26 th April 2018	NIT Warabgal
2	Mr. M. V. Rawlani	Advanced Industrial Waste Management Techniques	May 14-19.2018	NMU Jalgaon
3	Mr. P N Ulhe	Advances in Computer aided Design and Manufacture	May 21-25,2018	At NIT, Rourkela.

Sr. No.	Faculty	Papers in Conferences/ Journals
1	P. M. Solanki	International Conference on Transformation in Engineering Education (ICTIEE-18) held on 4th -6th January 2018 at Bennett University, New Delhi (Greater Noida), India
2	Pravin D. Patil	“Design and Development of Human Powered Electric Generation Machine” in Pratibha: International Journal of Science, Spirituality, Business and Technology (IJSSBT), Page No. 60 - 68, ISSN (Print) 2277—7261, ISSN (Online) 2278 – 3857, Vol. 6, No. 1, January 2018.
3	Pravin D. Patil	“Design of Systems for Headlights tilting according to steering.” in Pratibha: International Journal of Science, Spirituality, Business and Technology (IJSSBT), Page No. 79 - 82, ISSN (Print) 2277—7261, ISSN (Online) 2278 – 3857, Vol. 6, No. 1, January 2018.
4	Mr. A.J. Puri, Dr. S.P. Shekhawat	“Human Factors of accident and unexpected road Hazards: A Review”, PRATIBHA: International Journal of Science, Spirituality, Business and Technology IJSSBT volume 6, Number 1, January 2018 , pp No. 1-4, ISSN Number: Print: 2277-7261 Online: 2278-3857.
5	Mr. T.G. Patil, Dr. S.P. Shekhawat	“Thermal Image Processing in Horticulture Sectors - A Review”, PRATIBHA: International Journal of Science, Spirituality, Business and Technology IJSSBT volume 6, Number 1, January 2018 , pp No. 46-53, ISSN Number: Print: 2277-7261 Online: 2278-3857
6	P P Bornare, P D Patil, D C Talele, M A Marathe,	“Experimental Investigation of Air Pollution from Automobile Using Electrostatic Methodology”, International Journal of Innovative Research in Technology IJIRT volume 4, Number 10, March 2018 , pp No. 251-255, ISSN: 2349-6002, Impact Factor 5.8.
7	Pravin. D. Patil	National Conference on title “Study of Ocean Thermal Energy Conversion” in “Convergence of Technology-2018 (NCCT-2018)”, organized by Vishwabharati Academy’s, College of Engineering & Polytechnic, Pune on dated 23rd –24th February –2018.
8	Pravin. D. Patil	National Conference on title “Third Generation future Fuel, Sodium Borohydride Fuel” in “Convergence of Technology-2018 (NCCT-2018)”, organized by Vishwabharati Academy’s, College of Engineering & Polytechnic, Pune on dated 23rd – 24th February – 2018.
9	Pravin. D. Patil	National Conference on title “Headlight Titling according to Steering” in “Convergence of Technology-2018 (NCCT-2018)”, organized by Vishwabharati Academy’s, College of Engineering & Polytechnic, Pune on dated 23rd – 24th February – 2018.
10	Pravin. D. Patil	National Conference on title “Historical Study of Flywheel with it’s advantages and application in different fields” in “Convergence of Technology-2018 (NCCT-2018)”, organized by Vishwabharati Academy’s, College of Engineering & Polytechnic, Pune.on dated 23rd – 24th February – 2018.
11	Pravin. D. Patil	National Conference on title “Past current and Future Trends in digital Manufacturing” in “Convergence of Technology-2018 (NCCT-2018)”, organized by Vishwabharati Academy’s, College of Engineering & Polytechnic, Pune.on dated 23 rd – 24 th February – 2018.
12	Pravin. D. Patil	National Conference on title “Study on Optimization of Operating Performance of Bicycle, Tricycle and other similar vehicles” in “National Conference on Current trends in Engineering, Science and Technology-2018 (NACCTEST-2018)”, organized by Godavari Foundation’s, Godavari College of Engineering, Jalgaon on dated 20 th March – 2018
13	Pravin. D. Patil	National Conference on title “Experimental Investigation of Human Operated Water Pumping with Electricity Generation” in “National Conference on Current trends in Engineering, Science and Technology-2018 (NACCTEST-2018)”, organized by Godavari Foundation’s, Godavari College of Engineering, Jalgaon on dated 20 th March – 2018.

14	P. M. Solanki Dr. S .P. Shekhawat	“Effects of Machining Parameters on Cutting tool Steel EN8 in Wire cut EDM” in Pratibha: International Journal of Science, Spirituality, Business and Technology (IJSSBT), vol. 6, No. 1, January 2018 ISSN (Print) 2277—7261,page No.33-39.
15	A. R. Bharadwaj	“Machining of Metal Matrix Composite: A review” National conference, Innovative Solutions for Rural Development of Chhattisgarh (NCISRDC-2018), 23-24 February, 2018 at Kruti Institute of Technology.

S.N.	Name Author	Title of the book	Publisher of the book	ISBN no.
1	Mr. M. V. Rawlani	Engineering Graphics	Nirali Prakashan	987-93
2	Mr. M. V. Rawlani	Engineering Graphics	Nirali Prakashan	-87686
3	Mr. M. V. Rawlani Dr. S. P. Shekhawat	Introduction to Mechanical Engineering and Engineering Drawing	NiraliPrakashan	-19-9

PHOTO GALLERY



Addressing by the Principal Dr. K. S. Wani to Achievers-2018 students



ROBOCON-2018 Team



Editor: Dr. P.G. Damle

Members:

1. Thakkar Ashwin Paresh (B.E.)
2. Junagade Mandar Vilas (T.E.)
3. Pawar Prajakta Shamkant (S.E.)