

#### Shrama Sadhana Bombay Trust's

# College of Engineering & Technology, Bambhori, Jalgaon

# DEPARTMENT OF MECHANICAL ENGINEERING

# GRAVITY

Volume I Newsletter: July 2011 – June 2012

#### **Our Inspiration**





Shri. Raosaheb Shekhawat

Trustee

#### **About College**

Shram Sadhana Bombay Trust runs the College of Engineering. & Technology at Bambhori, Jalgaon, 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 Under Graduate programs in 7 courses are accredited by National Board of Accreditation, AICTE, New Delhi for 5 years with effect from 19/07/2008 vide letter number NBA/ACCR-414/2004. The college has been 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), May, 2008 & 12(B) vide letter number F.No. 8-40/2008 (CPP-I/C) dated Sept 2010.

#### **SALIENT FEATURES**

- Experienced, Qualified & Research Oriented Faculty
- Modern and Well Equipped Laboratories
- Program Re-Accredited by NBA for 5 Years
- Online Center for Various Campus and Entrance Exams
- Research Facilities
- Teacher Guardian Scheme
- WiFi Campus

#### **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.



## ABOUT MECHANICAL ENGINEERING DEPARTMENT



The Mechanical Department was established in 1994 and got NBA Accreditation w.e.f 15-02-2005 and got double accredited from 19-07-2008 for 5 years. The present intake capacity of UG is 120. The department also run PG course in Machine Design. The present intake capacity of PG is 18.

Mechanical Engineering is a core branch; in general it is called as evergreen. It deals with Machine Design, Thermal Engineering, Material Science and Metallurgy, Manufacturing, CAD/CAM/CIM, Mechanical Measurement, Operation Research, etc.

This is a unique branch of engineering in which a balanced approach is given towards basic branch of engineering and management science. Candidates having a creative, innovative mind, sound technical knowledge, analytical skills, and possessing excellent leadership qualities will probably find Mechanical engineering as a challenging and lucrative career.

The Mechanical Engineers find their skills in demand in a variety of fields and industries including Medical, Aerospace, Manufacturing industries, Automobile industries, Management Consultancies, Finance and Investment Consultancies, Construction industries, Jewellery industries, Refining industries, Service industries, Petroleum, Plastic industry, etc. If a device requires movement or manufacturing, design, testing, or packaging, a mechanical engineer will most likely be involved.

#### **PROGRAM EDUCATIONAL OBJECTIVES (PEOS)**

- **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.
- **2. Employment:** 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.
- **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)**

- a) An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline
- b) An ability to analyze a problem, identify and formulate the mechanical engineering requirements appropriate to its solution
- c) An ability to design, implement, process and component to meet desired needs with appropriate consideration for public health, safety, cultural, societal and environmental considerations
- d) An ability to design and conduct experiments as well as to analyze and interpret data
- e) An ability to use current techniques, skills, and modern tools necessary for mechanical engineering practice
- f) An ability to analyze the local and global impact of mechanical engineering task on individuals, organizations and society
- g) Knowledge of contemporary issues
- h) An understanding of professional, ethical, legal, security, social issues and responsibilities
- i) An ability to function effectively individually, on teams, including diverse and multidisciplinary, to accomplish a common goal
- j) An ability to communicate effectively with a range of audiences
- k) An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects
- I) Recognition of the need for and an ability to engage in continuing professional development

#### **LABORATORY FACILITIES IN DEPARTMENT**

EABORATORT FACILITIES IN DEPARTMENT		
Sr.No.	Name of the Laboratory	
1.	Material Science & Metallurgy	
2.	Tribology	
3.	Mechanical Measurement & Metrology	
4.	Model	
5.	Theory of Machine	
6.	Mechatronics	
7.	Heat Power	
8.	Heat Transfer	
9.	Refrigeration & Air Conditioning	
10.	CAD/CAM	
11.	Computer	
12.	Turbo Machine	
13.	Workshop	















"The secret in education lies in respecting the students"
"The only person who is educated is the one who has learned how to learn and change"

#### **DEPARTMENTAL EVENTS**



Expert Lecture by Alumni for creating awareness regarding competition in market



Soft Skill Training Program was conducted for the Final Year B.E. Student from 19th Sept 2011 to 24th Sept 2011, for improving communication and presentation skill.



Avishkar-2012: Students named Sumit Naik, Bhushan Patil ,Sanuj Agrawal & Vishal Mougal won first prize at University level project Technical Event.



Expert Lecture on "Oppurtunities of CAD/CAM/CAE in on 8th Sept, 2011 by Shri. Prasanna Joshi, CADCAM Guru, Pune



Celebrating the spirit and fervor of Eid impinges upon bringing togetherness, harmony, gratitude and peace, cutting across religion and geographic boundaries.



Workshop on Research Methodology: more than 50 Participants in this work shop all over India

"Live as if you were to die tomorrow. Learn as if you were to live forever" — Mahatma Gandhi "The task of the modern educator is not to cut down jungles, but to irrigate deserts" — C.S. Lewis

#### **DEPARTMENTAL EVENTS**



Teacher's day was celebrated on 5th Sept 2011. The program started with Saraswati Poojan followed by garlanding photo of Dr. Sarvapalli Radhakrishnan. Teachers were felicited by students. Speeches were delivered by students as well as teachers.



MECH FEST 2012: More than 2000 Students all over India participated in this event on 03 March 2012



Farewell to B.E. students of batch 2011-12 on 26 April 2012 Students shared their memories and experiences with the faculty and students.



Shastra Puja: at Mechanical Dept. Laboratories



National Level Paper Presentation for students Milestone 2K12 was held on 30t March, 2012. Technical Papers were presented by students coming from various Institutes.



SHODHPRAKALP Pratiyogita 2012



Parents Meet - 2012

## **Toppers of the Department in University Examination Results 2011-12**

#### **B.E. Mechanical**

#### T.E. Mechanical

#### S.E. Mechanical

Rank	Name	%
1	Patil Bhshaun B.	80.13
2	Matade Pradeep	76.06
3	Chavan Swapnil P.	75.93

Rank	Name	%
1	Mohan Patil	78.7
2	Sachin P.Khadke	75.77
3	Vaibhav S. Raverkar	74.3

Rank	Name	%
1	Patil Swapnil S.	67.80
2	Zambare Nikhil D.	67.67
3	Chaudhari Lokesh J.	67.60

## **Sports**

Student Name	Place	Position	
Kho Kho			
Avhad Somnath, Patil Pushpajeet, Shinde Prashant, Sharad Nannaware, Shinde Vipin, Patil	NMU	4 <sup>th</sup> Place	
Vivek			
Basketball			
Deepak Yadav, Payal Ramesh Mule	NMU	Winner	
Cricket			
Raj Dhumal, Chinchole Tushar, Bhadane Viki, Amol Patil	NMU	Winner	
Volley Ball			
Anand Kumar, Abinash Barnwal, Kalkar Dhanesh	NMU	4 <sup>th</sup> Place	
Hockey			
Patil Dhanraj, Patil Amol Umraosing	NMU	Winner	
Kabaddi			
Nerlikar Ankit, Patil Sachin, Patil Nikhil	NMU	3 <sup>rd</sup> Place	

### **Training & Placement Corner**

Sr. No.	Name of the Company	Number of students placed
1.	Thermax Ltd., Pune	01
2.	L&T Infotech	01
3.	Bridgestone Pvt. Ltd.	09
4.	Fabtech Pvt. Ltd.	03
5.	Precision Engg. Ltd.	01
6.	Ramboll Pvt. Ltd.	10
7.	Aspire Infinite Ltd.	03
8.	Epitome	01
9.	J.K. Paper	03

## **GATE Qualified Students GATE 2012**

Sr. No.	Name of the Student	Gate Percentile
1	Shoeb Shaikh	95.57
2	Neve Sushant	95.37
3	Chavan Swapnil	91.00
4	Patil Bhushan	89.9
5	Zope Ritesh	89.00
6	Gawade Ganesh	81.00

## **FACULTY ACHIEVEMENTS**

Publications in International Journal	Publications in International Conference	
Mr.Sanjay Kumawat, Mr.P. N. Ulhe, Mr. V.R. Firke, Mr. J.R. Chaudhari "Vibration Analysis of Annular Disc having Radial Crack.", International Journal of Innovations in Mechanical & Automobile Engineering, ISSN: 2249-2968 March 2012	Shivaji Aher, P. M. Solanki, J.R. Chaudhari "Windmill power generation using different rotor blade mechanism", International Conference on new development and challenges in Engineering, Technology, and Management, held on 22 <sup>nd</sup> Mar, 2012	
Mr. P. G. Damale, Mrs. Asha Gawali, Mr. S. C Kumawat "Nano Tribological Concept of MEMS and NEMS" International Journal of Innovations in Mechanical and Automobile Engineering September 2011	Prashant H. Bhole, N.K.Patil, Dnyaneshwar J. Sushir, D.R.Tayade "Internal combustion Engine – Camless by using development of controlled hydraulic actuator" International conference on Engineering Research and application at Godavari college of Engineering, Jalgaon P.No.665-673, 1st - 2nd March 2012	
R. D. Misra and M. S. Murthy, "Blending of additives with biodiesel to improve the cold flow properties, combustion and emission performance in CI engine" International Journal of Engineering Science and Research (IJESR), 2012, 3 (1), pp. 627-632, ISSN: 2230-8504. 2011-2012	D. E.Mahajan, D. K. Thakur, D.B. Sadaphale, J.R. Chaudhari "Design and Supporting Product by Feature base object oriented Expert system" International conference on Engineering Research and application at Godavari College of Engineering, Jalgaon 1 <sup>st</sup> -2 <sup>nd</sup> March 2012	
Mr.Sandip Chaudhari, Mr. S. P. Shekhawat, Mr.Ambeprasad Kashwaha "Advanced Technology of Cry-processing for the Enhancement of Tool Material Machining characteristics: A Review" International Journal of Emerging Technology and Advanced Engineering Volume 2, April 2012	N. B. Patil, P.M. Solanki, J. R. Chaudhari "Design of Geneva Mechanism for various Industrial Application" International conference on Advances in Mechanical Engineering 2012 Organized by Department of Mechanical Engineering at Amrutwani College of Engineering Sangamner 12 <sup>th</sup> -14 <sup>th</sup> March 2012	
R.Y.PATIL, S.P.SHEKHWAT, P.P.PATIL, I.D.PAUL "Analysis of spur gear for finding stresses and deformation by using finite element method in gear box" International Journal of Emerging Technology and Advanced Engineering, Volume 5, Issue 1 ISSN 0974-3588, P. No. 150-154 Jan 12 – June 12	Deepak Patil, P.M. Solanki, J. R. Chaudhari "Vibration Control in Mechanical system" International Conference on "Advances in Mechanical Engineering" 12 <sup>th</sup> -14 <sup>th</sup> March 2012	
Mr. P.R Sonawane, Mr. S. P Shekhawat, Mr. K. K Rajput "Aerodynamic analysis of the car body for minimum fuel consumption" International Journal of information, knowledge and research in Mechanical engineering (ISSN0975-668X) October 2011	Murthy M.S. Green Air conditioner with double cooling effect International Conference IEEE Business Engineering and Industrial application colloquium 2012,(IEEE BEIAC 2012) 7 <sup>th</sup> -8 <sup>th</sup> April	
Mrs.A.L Gawali, Mr.P.G Damale, Mr.J.R Chaudhari, Mr.D.B Patil "Vibration Analysis of Cracked Cantilever Beam with Suitable Boundary conditions" International Journal of Innovations in Mechanical & Automobile Engineering, ISSN: 2249-2968 March 2012	P.N. Ulhe "Result of Aromatic Fuel content on Pab Emission from A Heavy Duty Diesel Engine" ICERA-2012, at GCOE, Jalgaon 1st -2nd March 2012, P. No. 625-633.	
Mr.Sanjay Kumawat, Mr.P.N Ulhe "Application of CAD in rapid prototyping technology" International Journal of Advanced Engineering Technology; Vol 2; Issue 4 ISSN: 0976-3945 Oct - Nov 2011  Mr P. P. Bornare, Mr .B. B. Deshmukh, Mr. M. Husain "Constraints in Banana Marketing and Suggestions for improvement" Research in Link Issue -90 Volume X(7) September 2011 ISSN – 0973 – 1628 September 2011		

"The art of TEACHing is the art of ASSISTing DISCOVERY"
"A teacher takes a Hand, opens a Mind, and touches a Heart"
"Teaching is the profession that teaches all the profession"

Mr P. P. Bornare, Mr. B. B. Deshmukh, Mr. M. Husain "Marketing of Banana" Research in Link Issue -91 volume

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# PHOTO GALLERY





























**♦** COMMITTEE **♦** 

◆ Er. J. R. Chaudhari ◆ Er. N. K. Patil ◆ Er. M. V. Rawalani ◆ Er. P. D. Patil