# **INFORMATION BOURCHER**



SHAHAJIRAO PATIL VIKAS PRATISHTHAN

S. B. PATIL COLLEGE OF ENGINEERING, INDAPUR

DEPARTMENT OF
MECHANICAL ENGINEERING





## "Expanding its horizon in engineering research"

Mechanical engineering is one of the most versatile disciplines among the wide spectrum of engineering studies. Some of the areas in mechanical engineering such as production automobile, aeronautical, marine, and industrial, tool and die engineering have developed as independent full-fledged disciplines. Any industry requires inputs from mechanical engineering.



There is substantial research work in the diverse fields of this broad discipline. The study of mechanical engineering bestows the scholar with an excellent general education and prepares students for the multifaceted challenges of our evolving technological world. As one might imagine, a merger of this complexity is not achieved overnight. The next few years will witness exciting changes in our research portfolio, faculty demographics, and academic programs.

Mechanical Engineering Department was established in 2010, with an annual intake of 60 students per year to impart quality technical education to students, with highly qualified and hard working staff, the department has developed excellent laboratory facilities and teaching methodology to shape the students into a bright engineer which can meet the need of industry.

- The department is established in Year 2009 2010.
   The department has 05 class rooms and 14 laboratories including workshop.
- Department is having 25 teaching staff, 01 adjunct faculty, 01 visiting faculty and 07 Nonteaching staff
- Four staff members is Perusing Ph.D,
- The students will be given exposure for advances in Mechanical Engineering by industrial visits, technical events, seminar, conferences, expert lectures etc.
- Department having a library with good number of reference/text books prescribed by Pune University.

Prof. Kshirsagar S. R.

### VISION OF THE INSTITUTE

To be fountainhead of novel ideas and innovation in technology and science dedicated to the service of the nation.

### MISSION OF THE INSTITUTE

To create an ambience of academic excellence and to impart value based quality

Education to the students to groom them to be conscious professional engineers and good citizen for
nation building and to disseminate knowledge in massed for sustainable socio-economic development
of society.

### **QUALITY POLICY**

We, at S. B. P atil college of engineering are committed to provide technical education to the undergraduate students in engineering and post graduate students in master in computer application for better career growth through academic excellence.

We shall achieve this by continual compliance of all requirement, improvement in teaching and learning process, infrastructure and enhancement in staff competancies.

We will also contribute to the society by organizing various social programmes.

### VISION OF THE DEPARTMENT

To develop the student's with innovative minds in mechanical engineering and technology to seek global and social opportunities through research and entrepreneurship.

### MISSION OF THE DEPARTMENT

To impart high quality globally recognized value based education to the students.

To provides an opportunities to be innovative, knowledgeable students to meet ever changing industrial and social needs.

### **GOALS**

- •To maintain a high standard of mechanical engineering education through outstanding teaching, innovative curriculum, and research training that reflect the changing needs of society.
- •To attract highly motivated students with enthusiasm, aptitude and interest in mechanical engineering.
- •To pursue excellence in research and technology transfer. To recruit, retain, and develop the members of the Department.
- •To increase the public awareness of Departmental activities and the Mechanical Engineering profession.

### **OBJECTIVE:**

To provide best possible education, training and develop adequate practical skills in various subject areas and impart moral and ethical values in student to prepare them for challenging career of 21st century.

## **Program Education Objectives (PEO)**

- 1. Build engineers with a sound technical knowledge necessary to formulate, analyze and solve engineering problems.
- 2. Develop engineers for victorious careers in industry, research and higher educations.
- 3. Improve leadership quality, thinking ability and communication skill of engineers to solve communally industrial and socially relevant problems.
- 4. Encourage engineers for creating awareness and commitment enduring learning with professional and social ethics.

### **Program Outcomes (PO)**

- 1. Capability to apply knowledge of mathematics, science and engineering
- 2. Capability to design, conduct experiments and finding outcome by analyzing and interpreting data
- 3. Capability to understand desired needs within realistic constraints of economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- 4. Capability to work in multidisciplinary area
- 5. Adopt professional and ethical responsibility
- 6. Capability to communicate effectively
- 7. Capability to accept challenges
- 8. Awareness of technological changes

## **Salient Features of Departments:**

- 1. Well furnished class rooms and laboratories
- 2. Qualified and experienced faculties.
- 3. Academic excellence.
- 4. Patent filing by staff and students.
- 5. Research platform for faculty and students.
- 6. MoU with the industries.
- 7. Good results and placement.
- 8. Solar Cell, Competitive Exam. Cell.+
- 9. Good practical exposure.
- 10. Excellent ICT facilities.

## **Department Profile**

## Total Intake for under graduate programme

Year of Establishment	2009
Sanctioned Intake (U.G.):	60
Intake of U.G. increased in 2012-13 (DSE)	60 + 60 = 120

# Faculty Profile:

Sr.No	Name of Faculty	Designation	Qualification	Exp.
01	Prof. Kshirsagar S. R.	HoD & Assoc. Professor	M.E(Heat Power)	22
02	Prof. Kolgiri S. G.	W/S & Assoc. Professor	Ph.D. (Pursuing), M.E (Design).	16
03	Prof. Kambale S. P.	Assistant Professor	M.E. (Heat Power)	16
04	Prof. Kulkarni S.C.	Assistant Professor	*PhD, M. Tech. (Production)	15
05	Prof. Adhapure D. U	Asst. Professor	M.E (Production)	11
06	Prof. Ghodke R. M.	Assoc. Professor	M.E. Heat Power	11
07	Prof. Kawale R.M	Asst. Professor	M.E (Design)	12
08	Prof. Ganeshpure A.M.	Asst. Professor	M.E (CAD/CAM)	09
09	Prof. Ankush R.D	Asst. Professor	Ph.D.(Pursuing), M.E (Design)	07
10	Prof. Wasnik M.P	Asst. Professor	M.Tech (Design)	07
11	Prof.Peshatwar S.V	Asst. Professor	MTech. (CAD/CAM)	07
12	Prof. Kare K.M	Asst. Professor	M-Tech (Thermal)	06
13	Prof. Khare G.N	Asst. Professor	M.E (Design)	06

14	Prof. Amrute A.V	Asst. Professor	MTech (CAD/CAM)	06
15	Prof. Narale P.D	Asst. Professor	M.E (Design)	06
16	Prof. Dhandhya R.V.	Asst. Professor	M.E (CAD/CAM)	06
17	Prof. Chaure B.M	Lecturer	M.E (Design)	05
18	Prof. Kuber K.H	Asst. Professor	M.E (Design)	04
19	Prof. Taware O.H	Asst. Professor	M.E (Energy Engineering)	04
20	Prof. Deshmukh S.A	Asst. Professor	M. E. (Heat Power)	04
21	Prof.Malve A.C	Asst. Professor	M.E (Design)	04
22	Prof. Jagtap M.	Asst. Professor	M.E (CAD/CAM)	04
23	Prof. Paval K.N	Asst. Professor	M.E (Design)	01
24	Prof. Gaikwad S.N	Asst. Professor	MTech (Metallurgy)	01
25	Prof. Raut P. S.	Lecturer	M.E (Design)	06
26	Dr. Hiremath R. M.	Adjunct Faculty	Ph. D.	07
27	Mr. Gengaje A. S.	Visiting Faculty	B. E. (Mech) MBA (HR)	14

# **Technical Supporting Staff**

Sr.No	Name of Faculty	Designation	Qualification	Exp.
01	Mr. Jadhav S. J.	Lab Assistant	Diploma (Mechanical)	14
02	Mr. Parekar S.S	Lab Assistant	Diploma (Mechanical)	14
03	Mrs. Khule P.V.	Lab Assistant	Diploma (Mechanical)	5
04	Mr. Kulkarni N.S.	NCTVT, ITI (Turner)	W/S Instructor	10
05	Mr. Kalsait M.	NCTVT, ITI (Welder)	W/S Instructor	03
06	Mr. Ghogare S. B.	NCTVT, ITI (Turner)	W/S Instructor	03
07	Mr. Mali Y. P	NCTVT, ITI (Carpenter)	W/S Instructor	04

# **Supporting Staff**

Sr.No	Name of Faculty	Designation	Qualification	Exp.
01	Mr. Kamathe	Peon	HSC	7

# State Of Art Infrastructure

• Number of Laboratories 14

• Number of class rooms 05

• Good ICT facilities

• Well equipped workshop

• Departmental library

# Laboratories

SR.NO	NAME OF LABOURATORY	TOTAL COST IN (RS)
01	Metallurgy	04,39,557/-
02	CAD/CAM - I	21,09,361/-
03	Thermodynamics	3,28,589/-
04	Fluid Mechanics & Turbo Machinery	7,27,577/-
05	Applied Thermodynamics	12,32,616/-
06	CAD/CAM-II	19,75,508/-
07	Heat Transfer	2,73,384/-
08	Theory of Machines	2,74,872/-
09	Refrigeration & Air Conditioning	5,79,813/-
10	Metrology & Quality Control	5,02,828/-
11	Mechatronics	1,21,299/-
12	Dynamics of Machines	3,98,576/-
13	Industrial Fluid Power/ H. P. Lab.	2,43,375/-
14	Workshop	26,36,686/-
_	Grand Total	1,18,44,041/-





# ICT Facilities:

Sr. No.	Name of equipment	Quantity
01	Computers	95
02	Projectors	07
03	Printers	03
04	Software	50 pro-e, 5 ansys (6+6+6) master cam
05	NPTEL Video	100+



# Department Library:

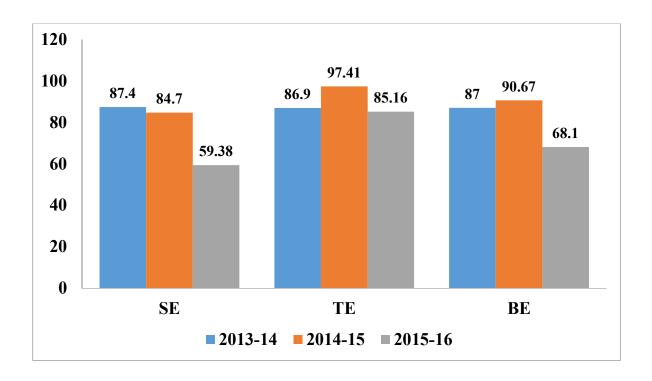
Sr. No.	<b>Details of the Title</b>	Numbers
1	Title	108
2	Volumes	386
3	Competitive Exam	18
4	Student's Project Report (UG)	79
5	Video Lecture, animation DVDs	35
6	Journal	



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# **Student Result:**

Year	2013-14	2014-15	2015-16
SE %	87.4	84.7	59.38
TE %	86.9	97.41	85.16
BE %	87	90.67	68.1



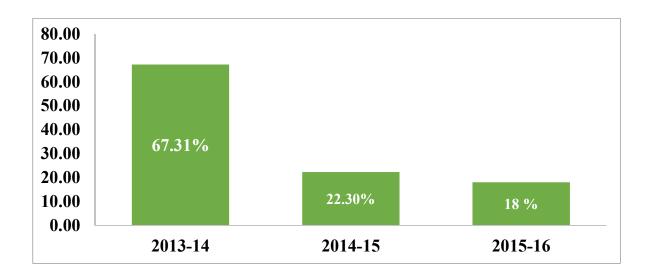
# **Toppers: Academic Year 2015-16**

Class	Div	Rank	Name of the Student	Marks	% Marks
SE		I	Ghadge Rohit Dhanyakumar	964	64.26
	Div-A	II	Dhole Dattatray Madhukar	948	63.2
		III	Doke Namdev Dattatrya	934	62.27
SE		Ι	Mahamuni Shubham Rajiv	946	63.07
	Div-B	II	Shinde Snehal Rajendra	924	61.60
		III	Misal Dnyaneshwar Hanumant	914	60.93
TE	Div-A	I	Deshmukh Kishor Sopan	1166	77.73 (II)
		II	Kavale Ganesh Hanumant	1102	73.47

		III	Gaikawad Snehal Shahajirao	1066	71.07
TE		I	Mulik Vishal Shamrao	1099	73.27
	Div-B	II	Raskar Kiran Dilip	1072	71.47
		III	Pimpre Balaji Govind	1066	71.07
BE		I	Dange Pratik Suresh	1162	77.47
	Div-A	II	Dhanur Prasad Prabhuling	1099	73.27
		III	Chavan Akash Uttam	1062	70.8
BE		I	Shende Kiran Ashok	1173	78.20 (I)
	Div-B	II	Sawant Rahul Arjun	1164	77.60 (III)
		III	Wayal Vishal Radhesham	1162	77.47

# **Students Placement:**

Academic Year	2013-14	2014-15	2015-16
Students Placed	35	31	25



# **Outstanding Recruitment:**

Sr. No.	Name of the students	Passing year	Placed company
01	Vishal Kshirsagar	2014	Bosh, Nashik
02	Akash Chavan	2015	Piaggio, Baramati
03	Jivan Pawar	2015	Piaggio, Baramati

## MOU of Dept.

Sr. No	Name of the Agency	Purpose	Date
1.	IGTR, Aurangabad	Training	2014
2.	Tata Technology, Pune	Training & Placement	2016
3.	Prathamesh Academy, Baramati	Training for competitive	2016
		Exam	
4.	Prabhakar Metal Industries, Solapur	Training and interaction	2016
5.	Spitzen Energy Solutions Pvt. Ltd.,	Training and interaction	2016
	Bavdhan, Pune		
6	Green Flame Pvt. Ltd., Shivajinagar, Pune	Training and interaction	2016
7	Karmayogi Shankarraoji Patil SSK Ltd., Bijwadi, Indapur	Training and industrial visit	2016
8	Nira Bhima SSK Ltd., Redani, Indapur	Training and and industrial visit	2016
9	Copper Track Industry, Nashik	Training and interaction	2016
10	Mahalaxmi Automotive Pvt. Ltd., Baramati	Training and interaction	2016

## FACULTY ACHIEVEMENTS (2016-17):

# Publication by staff & students

Sr.No	Number of publications
2015-16	33
2014-15	04
2013-14	17

# **Industrial Training by Faculty and Students**

	2014-15	2015-16	Total
Faculty	1	12	13
Student	3	48	51
Total	4	60	64

### PUBLISHED AND COMMERCIALIZED PATENTS

Sr. No.	Name of Project	Name of Applicant	Academic Year
1	Sliding Helmet	Prof. Adhapure D. U.	2016-17
2	Automatic Chalk & Marker Board Cleaner	Prof. Adhapure D. U.	2016-17
3	Multi Purpose Tractor	Mr. Gavasane A. N.	2013-14
4	Sugarcane Harvester (NTAT)	Mr. Gavasane A. N.	2013-14
5	Advance Locker (ATLAC)	Mr. Gavasane A. N.	2013-14

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# **Departmental Highlights**

## **Events conducted**

Sr.No	Name of Conference/Workshop/Seminar Held	coordinator
1	International Conference on Science and Technology 2014 (ICST 2K14)	Prof. Dalvi M V
2	National Conference on Science and Technology 2013	Prof. S R Kshirsagar
3	State Level Workshop on Patent and IPR 2016	Prof. Joshi S P
4	State Level Event on renewable energy sources Aurafesto 2k16	Prof. Deshmukh S.A
	2610	Prof.Kolgiri S.G
5	State level workshop on Renewable Energy- Opportunity &	Prof. Deshmukh S.A
	Challenges	Prof.Ghodke R. M.

## **BEST TEACHER AWARD**

2015	Prof. Kshirsagar S. R.	Upkramsheet Shikshak Award by	
2015 Froi. Ksiiirsagar S. K.	D. Y. Patil & Lions Club Pune Pride		

Year	Name of Faculty	Ву
	Prof. Kshirsagar S.R.	
	Prof. Wasnik M. P.	
2016	Prof. Deshmukh S.A.	CDDCOF Indones
2016	Prof. Deshmane P.B.	SBPCOE, Indapur
	Prof. Joshi S.P.	
	Prof. Dalvi M.V.	

## **Workshop on Master Cam**



**Workshop on Master Cam** 



Electric Solar Vehicle got future Scope Award in March 2016 in ESVC championship, Bhopal.



# **Outstanding Projects**







## **Best Practices**

- Solar Cell
- Competitive Examination Cell
- E- yantra Robotics Laboratory
- Youth corner notice board, words boards, slogan boards
- Project / Model Exhibition
- Project report/Seminar reports in Latex.
- Benches manufactured in workshop are donated to near by primary Schools.
- Practical jobs done by students in workshop are used in Institute.

### **Future Plans**

- To start PG course
- To establish and Upgrade laboratory facilities to promote research
- To provide 100% Placements for Eligible Students.
- Bridge the gap between Industries Academia.
- Prepare for NBA
- Enhancement Industry Institute collaboration and funding from industry to take up the project of mutual interest.
  - Consultancy
  - Innovative Research, Publications and Patents

