

Rayat Shikshan Sanstha's

# Karmaveer Bhauroao Patil Polytechnic Satara



# Newsletter

Volume 02 Issue 02

OFFICIAL NEWSLETTER OF

## DEPARTMENT OF MECHANICAL ENGINEERING

For Private Circulation Only

<http://www.kbppoly.edu.in/>





## VISION

**Mechanical engineering department strives to provide quality technical education and to provide the best and efficient technicians for meeting day to day challenges of industries.**

## MISSION

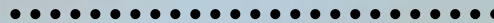
**To empower the mechanical human resource at grass root level through strengthening technical education**

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Karmaveer Bhaurao Patil  
Polytechnic , Satara  
Received Best Polytechnic  
Award in satara Region on  
15th september 2021



Certificate of Honor Awarded  
by Builders Association of  
India (Satara Region) for  
Academic Performance for  
2020-21





# ABOUT DEPARTMENT

Mechanical engineering is one of the oldest branches of engineering. It is also referred to as the mother branch of engineering. Another appealing feature of mechanical engineering is that the application base of this field of study is extremely broad and diverse. Almost all inventions during the ancient period and a vast majority in the modern era are direct contributions of one or the other application of mechanics. Traditionally, mechanical engineers have to deal with concepts such as mechanics, thermodynamics, robotics, kinematics, structural analysis, fluid mechanics and many others. These concepts are applied in the process of designing state-of-the-art manufacturing units, different types of motor vehicles, aircraft and aerospace parts and a vast assortment of industrial machinery. Mechanical engineers also contribute in the development of various engines, power plant equipment, heating and cooling systems and other simple and complex machinery. Mechanical engineers not only design new mechanical systems but they are also responsible for testing, maintaining and manufacturing them. The aforementioned are the conventional roles and responsibilities of mechanical engineers. However, times have changed. Nowadays the scope of mechanical engineering is expanding beyond its traditional boundaries. Mechanical engineers are focusing their attention towards new areas of research such as nanotechnology, development of composite materials, biomedical applications, environmental conservation, etc. The ever increasing scope of this particular job profile now requires professionals to get into financial and marketing aspects of product development and even into people and resource management. All in all mechanical engineering offers a wide bouquet of job options to students who are looking for a stable and stimulating career.

# Program Outcomes (PO's) of Mechanical Engineering Department

**At the entry point of the industry soon after successful completion of the diploma program, students will be able to**

PO 1 - Basic Knowledge: Apply knowledge of basic mathematics, science and basic engineering to solve the broad-based Mechanical engineering problems.

PO 2 - Discipline knowledge: Apply Mechanical engineering knowledge to solve broad-based mechanical engineering related problems.

PO 3 - Experiment and Practice: Plan to perform experiments and practices to solve broad-based Mechanical engineering problems.

PO 4 - Engineering tools: Apply relevant Mechanical technologies and tools with an understanding of the limitations.

PO 5 - The engineer and society: Assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to practice in field of Mechanical engineering.

PO 6 - Environment and sustainability: Apply Mechanical engineering solutions also for sustainable development practices in societal and environmental contexts.

PO 7 - Ethics: Apply ethical principles for commitment to professional ethics, responsibilities and norms of the practice also in the field of Mechanical engineering.

PO 8 - Individual and team work: Individual and team work: Function effectively as a leader and team member in diverse/ multidisciplinary teams.

PO 9 - Communication: Communicate effectively in oral and written form.

PO 10 - Lifelong learning: Life-long learning: Engage in independent and life-long learning activities in the context of technological changes also in the Mechanical engineering and allied industry.

# Program Specific Outcomes (PSO's) of Mechanical Engineering Department

**At the entry point of the industry soon after successful completion of the Mechanical Engineering Diploma program, students will be able to**

**PSO 1** - Modern Software Usage: Use latest Mechanical engineering related software's for simple design, drafting, manufacturing, maintenance and documentation of mechanical engineering components and processes.

**PSO 2** - Equipment and Instruments: Maintain equipment and instruments related to Mechanical Engineering.

**PSO 3** - Mechanical Engineering Processes: Manage Mechanical engineering processes by selecting and scheduling relevant equipment, substrates, quality control techniques, and operational parameters

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# PRINCIPAL'S DESK

*Prin. Dr. Shaikh K. C.*

*I/c Principal*

*Karmaveer Bhaurao Patil Polytechnic, Satara*

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Dear students and faculty members,

Karmaveer Bhaurao Patil Polytechnic, Satara has a reputation of maintaining vibrancy by creating an environment where student can cultivate his prosperity.

I am glad to know that the Department of Mechanical Engineering of Karmaveer Bhaurao Patil Polytechnic, Satara is bringing out a even Semester Newsletter

The Polytechnic is proud of the achievements of the students and staff of the department and bringing out this Newsletter. The Department of Mechanical Engineering has carried a name for itself in pursuit of polytechnic's vision and mission and its own vision and mission. Its students, staff and alumni have made their alma mater proud by becoming very responsible citizens and professionals doing service to the society. I wish all success for the Newsletter and hope they carry forward the vigor and dedication for bringing out the future volumes of Newsletter.

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# HOD'S DESK

Mr. N. B. Devi

*I/c Head of Department (Mechanical Engineering)*

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I have immense pleasure for bringing out the Volume 2 of the "Newsletter" of Department of Mechanical Engineering of Karmaveer Bhaurao Patil Polytechnic, Satara. The Department of Mechanical Engineering started in 2005 has been the heart and spirit of this premier institution right from its inception. Rated very high, this department is Alma Mater to several successful entrepreneur's, industrialists and technocrats.

The department has a rich tradition of pursuing academic excellence and providing congenial environment for the overall development of its students. This newsletter provides a panoramic view of the academic, co-curricular activities and achievements of the faculty and students of this Department. I congratulate the editorial team for their sincere effort to bring out the news letter in time. This inaugural issue of newsletter should inspire all of us for a new beginning; enlighten us with hope, confidence and enthusiasm towards the road ahead.

# EDITOR'S DESK

**Mr. P.V. ZORE**

*Lecturer (Mechanical Engineering)*



Welcome to Second edition of Newsletter published by Department of Mechanical engineering . At the outset, let me deeply and whole-heartedly thank our Principal, Head of Department and all my colleagues who have extended their kind and timely support for the release of this newsletter.

This issue is a fountain of information on the various activities and triumphs of our Department during the last semester. Be sure to read it all to gain an even better insight of our prestigious department. Enjoy reading. As always, we welcome your comments.

## ABOUT DMESA

Diploma Mechanical Engineering Student Association (DMESA) is an Association formed by the students of Mechanical Engineering Department to foster the growth of knowledge. With the support and guidance of the faculty, Technical and Nontechnical events are organized for assisting students to increase their knowledge and skills in planning, delegating, decision making and to develop a more positive and realistic attitude toward themselves, their peers and the institute. It provides opportunities for social interaction among organization members. Under DMESA we have conducted various events as paper presentation, industrial visits, guest lectures, soft-skills development programs, welcome function to all new comers of the entire Mechanical Engineering Department.



# DMESA Committee

Sr. No	Post	Class	Name
1	President	TY	Jadhav Mayur Subhash
2	President	TY	Diwakar Vishwesh Shirishkumar
3	Vice – President	SY	Gonjare Omkar Amol
4	Treasurer	TY	Rathod Amit Devu
5	Treasurer	SY	Tupe Prasanna Dinesh
6	Auditor	TY	Phadatare Ganesh Rajendra
7	Auditor	SY	Homkar Sejal Nilesh
8	Class Representative	TY	Ghorpade Sanket Shankar
9	Class Representative	SY	Yadav Harsh Amol
10	Ladies Representative	TY	Chavan Aditi Bhaskar
11	Ladies Representative	SY	More Aakanksha Chandrashekhar
12	Class Representative	FY	Salunkhe Atharv Govind
13	Ladies Representative	FY	Thorat Arya Akash

# Departmental Activities

## EXPERT LECTURE

Expert Guest Lecture delivered by Mr. Nagraj Hamilpure and Mr. Sushant Tangade on topic of Make Your Career in Manufacturing Industry on 15 February 2022

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Rayat Shikshan Sanstha's  
Karmaveer Bhaurao Patil Polytechnic,  
Satara

Department of  
Mechanical Engineering  
ORGANIZES

**MAKE YOUR CAREER IN  
MANUFACTURING INDUSTRY**

Know about:

- Industry Opportunities
- Industry Requirement
- Technical Skill Gap
- IMTMA Job Oriented Course

IMTMA Technology Centre

Date: 15 February 2022  
Time: 11:30am - 12:30pm

Speakers

Nagraj Hamilpure  
Executive Officer - IMTMA

Sushant Tangade  
Executive Officer - IMTMA


Scan for registration

For more details call  
9881616902

Prof. R.V. Kumbhar  
Co-ordinator

Prof. N. B. Devi  
HOD Mechanical Engg. Department

Prof. Dr. K. C. Shaikh  
I/c Principal



RAYAT SHIKSHAN SANSTHA'S  
Karmaveer Bhaurao Patil  
Polytechnic, Satara

Department of Mechanical  
Engineering

in Association with  
**THE WORLD OF AUTOMATION,  
PUNE**  
Organizes  
**Three Days Training Program**  
On  
**"PLC Programming & SCADA"**

Date :  
From 04/04/2022 to  
06/04/2022

Registration  
fee Rs.700/-

Prof. Miss. K.H Sakhare  
Co-ordinator

Prof. P.V. Zore  
Co-ordinator

Prof. N. B. Devi  
HOD Mechanical Deptt.

TOPICS TO BE COVERED  
PROGRAMMABLE LOGIC  
CONTROLLER

SUPERVISORY CONTROL AND DATA  
ACQUISITION (INTOUCH SCADA)

Dr. K. C. Shaikh  
I/C Principal

## WORKSHOP ON PLC AND SCADA

Three Days Training program was arranged for Second Year Mechanical Engg Students on "PLC Programming and SCADA" BY Mechanical Engg. Department in association with The world of Automation, Pune from 04/04/2022 to 06/04/2022

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# Departmental Activities

Cast Validity Certificate  
Distribution event was  
organized on 13th April 2022  
at Auditorium on a occasion of  
Dr. Babasaheb Ambedkar  
Jayanti



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## THREE DAYS FDP ON RECENT TRENDS IN TECHNICAL TEACHING

FDP Session on CO and PO  
Attainment was delivered by  
Prof. N. B. Devi on 4th April  
2022

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# Departmental Activities



## Cooper Corp Pvt. Ltd Campus Interview

VENUE - AUDITORIUM

Department of Mechanical Engineering organized Campus drive of Cooper Corporation Pvt. Ltd for final Year Mechanical and Electrical engineering Diploma students on 29-04-2022. Total 21 Students were selected





# Departmental Activities



## Three Days Workshop On “PLC Programming & SCADA”

**Venue :** Computer Lab

Three Days Training program was arranged for Second Year Mechanical Engg Students on "PLC Programming and SCADA" BY Mechanical Engg. Department in association with The world of Automation, Pune from 04/04/2022 to 06/04/2022



# Departmental Activities



## Parents-Teacher-Students Meet 2021-22

**Venue :** Auditorium

Online Parents-Teachers-Students Meet Organised by Mechanical Engineering Department on 15 March 2022 for parents whose ward are in Second Year and Third year of Mechanical Engineering Diploma.



### Outline of Meeting

1. Overview of Mechanical Department
2. Academic Activities 2021-22
3. Class Test and MSBTE Exam
4. Use of Moodle For Academic activities
5. Feedback of Parents





# POLYQUEST 2K22

VENUE - AUDITORIUM , C- WING

Polyquest 2k22 was arranged on 27th and 28 April 2022. Mechanical Department Organized State level Technical Paper Presentation and Technical Quiz Competition. Prof. K.B.Dhanawade Co-ordinated Technical Paper Presentation and Prof. D.R.Waghmode coordinated Technical Quiz Competition. Hon. Mohammad Shahid Usmani, Deputy Secretary at Maharashtra State Board of Technical Education, Mumbai Was Chief Guest for Above event







# Departmental Activities



VARAD CHARITABLE & MEDICAL TRUST'S

## BALAJI BLOOD CENTER, SATARA

Plot No.30,467/7A/1/44, Behind Sanjeevan Hospital, Sadar Bazaar, Satara-415001. Ph.: 02162 - 226995, 226996

Email : balajibbsatara@gmail.com Lic No.: MH/104235

### Certificate


This Certificate Has Been Awarded to Blood Camp Organiser

***Mechanical Engineering  
Karmaveer Bhaurao Patil Polytechnic, Satara.***

For Organising a Voluntary Blood Camp

On **25<sup>th</sup> March 2022** This Impressive  
Contribution to The Noble Cause is Highly Appreciated.



  
MR. AMOL YUVRAJ JADHAV  
Public Relation Officer  
9921992298 / 9423353698



## Blood Donation Camp

Venue - Auditorium , C- Wing

Blood Donation camp was arranged on 22th March 2022 for all eligible students above 18 year old. Above Voluntary Blood Camp was Organised in Assosication with Balaji Blood Center, Satara.

# Departmental Activities



## Industrial Visit - SYME

**VENUE - SHREE TOOLS, MIDC SATARA**

One Day Industrial Visit was arranged for SYME Students on 01 April 2022 at Vishwakarma Engineering, Satara under coordination of Mr. R.V. Kumbhar



## Industrial Visit - TYME

**VENUE - KOTIBHASKAR INDUSTRIES, MIDC, SATARA**

One Day Industrial Visit was arranged for TYME Students on 01 April 2022 at KOTIBHASKAR Industries, MIDC, SATARA



# Departmental Activities



## Industrial Visit - SYME

**VENUE - SHREE TOOLS, MIDC SATARA**

One Day Industrial Visit was arranged for SYME Students on 25 May 2022 at Ajinkya Plastics, satara and Yuvraj Plastics, Satara under coordination of Mr.S.G. Sherkar and Mr. Bodhe A.G.





# Changes in education system after Covid-19 pandemic

**Mr. N. B. Devi**

**Head of Department (Mechanical Engineering)**

Corona-induced severe disruption the world over shut an unprecedented 1.4 billion students out of their pre-primary, primary and secondary schools in more than 190 countries. Schools were closed and children were confined to their houses. The education of around 360 million students was hampered in India alone!

We shifted to an alternative education mode but that alternative was not accessible to all. Children belonging to the poor strata or even the middle class were not able to arrange the required smart phones or computers or get internet access for the online learning. They were forced to be dropout from schools. Poor children were disproportionately affected by disrupted schooling.

The pandemic made us realise that the one single area wherein reform is needed is education. There was something required to stop the children from being mentally obtused.

From nothing to something ---that was the prime task. However, the shift from the traditional education system to online education mode was so sudden and unplanned that teachers did not get time for preparation or for training in it. But this transformation, despite difficulties and limitations, has paved the way for a change in the existing education system.

The foremost change required was towards the environmental awareness, where students are sensitised to the contemporary issues. The pandemic underscored the importance of health and sanitation - that cleanliness is not beneficial for us alone but is required for the well-being of our family and the people around us. Life on this earth is possible only when the whole community is healthy and there is interdependence on one another.

This difficult time has compelled us to think that only bookish knowledge which limits students only to their career is not the basic aim of our education system. To instil the life skills in the future citizens of our country should be our prime aim. They should be strong, have self-confidence and be adaptable and resilient, so as to have balance even during difficult time or any calamity.



They should also be kind, tolerant, and respectful, apart from being able to take decision during any situation.

Conduct of examinations or competitions posed another problem due to the drawbacks of our assessment and evaluation system. It became evident that the education system should be made flexible and accessible for all. We have options like open book exams, aptitude-based assessment, and linking content knowledge to values of life. Fortunately, NEP 2020 has paid attention towards this.

The online system of education failed to compete with the traditional system, but it put the foundations of modernisation of education. It can play an important role for teachers to assess each individual student with the help of technology. The abundance of the readymade quality contents and material availability on various educational online platforms is the most obvious change in education due to the pandemic.

The pandemic also made it crystal clear that nothing can substitute schooling. Education is a continuous process of developing a child's intellectual, mental and emotional quotient. Bookish learning cannot suffice in developing the social traits of a person and making a child a good human being. Using school's classrooms for the purpose of debate and group discussion, science labs for experiments and action learning and playground for physical and mental development of children will only be capable in instilling all the life skills among the students.

At the same time, it cannot be ignored that online learning can be a useful mode through which children are not only taught content knowledge but also communication skills as well. Through the help of online machine learning and artificial intelligence we can easily bridge the learning gap of our students. Its combining with regular schooling will definitely help in the optimum use of resources and catering to the need of conservation of resources, time and environment.

All this transformation will be the foundation stone for the social, the environmental and most importantly the national development.



# GREEN ENERGY

**Mr. Kishor Babanrao Dhanawade**

**M.E. Heat Power**

In any discussion about climate change, renewable energy usually tops the list of changes the world can implement to stave off the worst effects of rising temperatures. That's because renewable energy sources, such as solar and wind, don't emit carbon dioxide and other greenhouse gases that contribute to global warming.

Clean energy has far more to recommend it than just being "green." The growing sector creates jobs, makes electric grids more resilient, expands energy access in developing countries, and helps lower energy bills. All of those factors have contributed to a renewable energy renaissance in recent years, with wind and solar setting new records for electricity generation.

For the past 150 years or so, humans have relied heavily on coal, oil, and other fossil fuels to power everything from light bulbs to cars to factories. Fossil fuels are embedded in nearly everything we do, and as a result, the greenhouse gases released from the burning of those fuels have reached historically high levels.

As greenhouse gases trap heat in the atmosphere that would otherwise escape into space, average temperatures on the surface are rising. Global warming is one symptom of climate change, the term scientists now prefer to describe the complex shifts affecting our planet's weather and climate systems. Climate change encompasses not only rising average temperatures but also extreme weather events, shifting wildlife populations and habitats, rising seas, and a range of other impacts.



Of course, renewables—like any source of energy—have their own trade-offs and associated debates. One of them centers on the definition of renewable energy. Strictly speaking, renewable energy is just what you might think: perpetually available, or as the United States Energy Information Administration puts it, "virtually inexhaustible." But "renewable" doesn't necessarily mean sustainable, as opponents of corn-based ethanol or large hydropower dams often argue. It also doesn't encompass other low- or zero-emissions resources that have their own advocates, including energy efficiency and nuclear power.



## DRONE RACING IS BUILT FOR SPEED

*By : Sejal Nilesh Homkar*

*CLASS : SYME*



- Creating a new sport for a generation raised on video games requires flashy lights, first-person view headsets, and the world's fastest racing drones.
- Suburban big-box store parking lots aren't known to be inspiring. But the dreary space behind a Long Island Home Depot was where Nicholas Horbaczewski first glimpsed an amateur drone race in 2015, and he was thunderstruck.
- 
- "At the time, I think people were trying to figure out how to think about drones," Horbaczewski said years later in an interview with Cognitive Times, "and when you bring them in a sporting context, you kind of sit back and enjoy all the excitement without having to interrupt it with all the broader questions associated with them."
- 
- Racing aircraft dates nearly as far back as the Wright Brothers. The first major flying competition, during 1909's Grande Semaine d'Aviation de la Champagne in France, featured aviation pioneers such as Glenn Curtiss and Louis Blériot. Air races were staged throughout the 1920s and 1930s, sometimes to large crowds. But the planes were often high up and far away, which made for a poor viewing experience.
- 
- 



THE DRL RACE DRONES MANEUVER THROUGH GATES AND CHECKPOINTS, COLLECTING POINTS TO FINISH FIRST IN THEIR HEATS AND ADVANCING TO THE CHAMPIONSHIP FINAL. PHOTO: DRONE RACING LEAGUE



Drone racing, Horbaczewski realized, could be different. He wasn't simply standing in a parking lot looking at the sky. Instead, he had slipped on virtual reality goggles and was using the first-person view to fly the drone himself.

"I was just blown away. I thought we should be sharing it with more people," said Horbaczewski, a young Harvard graduate with experience in military equipment and extreme sports. Horbaczewski realized the potential and quickly founded the Drone Racing League.

The races began in abandoned power plants and malls and then went on to competitions in iconic sports arenas, international landmarks, and even palaces in London. Fast forward to 2022, the DRL has a loyal following of 75 million global fans and airs in 250 million households in over 140 countries.

The league's aspirations are more than just providing exhilarating races, however. It is working to innovate drone technology at a large scale.



## CARBON OFFSETTING FOR MANUFACTURING FACILITIES

By Omkar Gonjare

SYME



The world of manufacturing is vast, complex, and utterly essential for modern living. It's also a considerable source of carbon emissions. Given the advanced state of anthropogenic climate change and widespread awareness of its human impact, it's time for manufacturing to adopt carbon offsetting practices.

Here's a look at the various forms offsetting can take in manufacturing and why it's so essential right now.

### Manufacturing's Impact on Global Emissions

When you break it down by category, you come to two conclusions about manufacturing's impact on global carbon emissions: the scope of the impact and the variety of sources from which it manifests.

There are, after all, many different types of manufacturing and endless kinds of workflows within each one. Global manufacturing sectors broken down by emissions look something like following, with each value representing a fraction of the total global output of greenhouse gases (GHGs):

**General energy use in industry:** Includes activities associated with iron and steel fabrication, foodstuffs, tobacco, paper and pulp, machinery, and others: 24.2%

**Transportation:** Including road transport for manufactured goods, aviation, oceangoing freight, rail, and pipelines: 16.2%

**Energy used by buildings:** Residential heating, cooking, and lighting sits at 10.9% of total GHG emissions; commercial locations contribute 6.6%.

**Direct industrial activities:** Includes cement production as well as petrochemicals and chemicals: 5.2%

This is not a comprehensive list. Also significant are so-called "fugitive" emissions that escape during the production of energy. These contribute 5.8% of global greenhouse gas emissions.

Now that we have an appreciation of where these emissions come from and the degree to which they contribute to atmospheric degradation and climate change, it's time to look at some of the most notable methods manufacturing entities can use to eliminate or offset their carbon emissions.

#### **Map Emissions and Create a Budget**

Manufacturing companies must begin by mapping their industrial activities by type, energy requirements, and carbon output. You must know where to begin before you begin

All of these factors contribute to a manufacturing plant's or company's carbon budget. From there, it's a matter of identifying which amelioration efforts will bring both short-term environmental improvements and longer-term financial benefits.

#### **Look Into New Fuels and Technologies**

Manufacturers today have many ways in which they can reduce the energy requirements of their equipment and processes, and in doing so reduce or eliminate their carbon emissions.

New technologies and techniques can provide a compelling starting point:

Adopting newer manufacturing or processing equipment may deliver energy savings thanks to updated standards and modern regulations.

Switching to green energy suppliers that draw on wind, solar, and geothermal, or transition fuels, like natural gas, can substantially reduce a manufacturer's carbon footprint.

Some manufacturers choose to invest in their own on-site sustainable energy generation equipment to provide for their own needs, store the excess, or sell power back to the local utility company.

#### **Purchase Carbon Offsets**

Many companies don't have the funds on-hand to make significant purchases or leases of new manufacturing equipment, no matter how well-meaning they are. In cases like these, the mission switches from carbon reduction and elimination to carbon offsetting.

Purchasing carbon offsets may be the most immediately impactful thing an eco-conscious manufacturer can do if they want to begin making a difference today. Each carbon offset purchased represents the reduction of 1 metric ton of carbon dioxide (CO<sub>2</sub>) emissions. When companies purchase offsets, they receive certification from the broker that their money is going toward carbon offsetting programs.



## THE BENEFITS OF FACTORY AND MANUFACTURING AUTOMATION FOR TODAY'S INDUSTRY

By Aakanksha More

SYME



Nowadays, with the help of automatic control or automation, companies can carry out processes with slight to no human support. Automation commands equipment and finishes processes for a wide range of things and manufacturing surroundings around the world. Automation can improve quality, efficiency, and effectiveness. Moreover, it is frequently all but concealed to the ordinary user.

The automation process includes a computer controller that matches specific measures to pre-existing ideal values, adjusting the metrics to keep the required product's values and conditions. Automation in industry powers control systems (like computers) and data to control equipment and operations in manufacturing or other activities.

Automation has obtained a growing adoption through production facilities around the globe. It improves the manufacturing process while at the same time it maintains the complexity of the product within its ideal proportion. Besides, it enables as little change as possible from the predefined proportional values of each product.

Companies may use automation for creating, machining, and forming parts, along with assembling products. Companies now benefit from highly innovative production techniques like rapid manufacturing, which is basically the employment of software automation and connected production equipment used to speed up the production process

In general, automated production facilities, especially fixed production lines, comprise the workplace and transmission system that take a developing part to finish through a series of tools. The factory automation setup portrays the whole collection of buildings, equipment, utilities, procedures, and products needed to create a particular item or wide range of products.

In this article, we are giving you a complete guide through factory and manufacturing automation. Continue reading to find out more about the nature of both of these groundbreaking processes that have changed the industry approach toward production forever.

## **The Significance Of Automation In Manufacturing**

Companies use automation in manufacturing to execute repetitive and mundane tasks and processes with almost no human intervention. It relates to placing new products into high volume production while ensuring their parts for the accessible manufacturing process.

It demands creating an integrated modeling environment, whereby part specifications, relations, reliance, and manufacturing processes can be determined using features or equivalent kinds of attributes.

### **Factory Automation And Its Applications**

The term factory automation characterizes the approaches or systems that utilize extensive electronic and mechanical automation to control processes or tasks that have limited human interference within factory facilities. Factories must work under the restrictions of regulation, security, competition, cost efficiency, and quality. Factory automation eases the challenges of these restrictions by offering many tasks with effective and practical solutions.

Some of the main industries that produce factory-automation output include the: Consumer goods, Energy, Communication equipment, Food and beverage, Robotics Automotive, Packaging, Semiconductors and electronics, Pharmaceutical and medical industry.

### **What Are the Benefits of Manufacturing Automation?**

Today, the benefits of manufacturing automation come both in social and economic forms. For instance, with decreased birth rates and an aging population in countries like Japan, automation is the only solution to maintain the current stage of productivity.

Manufacturing's contribution to the U.S. economic state it's simply something the country can't neglect either. According to the NAM, for every \$1 spent in manufacturing, another \$2.74 are added to the economy. Just for the record, that's the highest multiplier effect of any economic sector.

# Faculty Achievements

**FDP/STTP/CONFERENCE/WORKSHOP ETC. ATTENDED**

<b>Sr. No</b>	<b>Title</b>	<b>Name of Faculty</b>	<b>Organised By</b>	<b>Duration</b>
01	"OBE and NBA Process in Technical Education"	Mr. N.B. Devi	Government Polytechnic, Awasari	14-02-2022 to 19-02-2022
02	Impact of NBA Process in Quality And Capacity Building of Polytechnics	Mr. N.B. Devi	KIT College of Engineering Kolhapur	26-03-2022
03	Impact of NBA Process in Quality And Capacity Building of Polytechnics	Mr. S. G. Sherkar	KIT College of Engineering Kolhapur	26-03-2022
04	Effective Generation of E- Teaching and Learning Resources	Mr. P.V. Zore	YSPM, Satara	12-03-2022



# Students Accomplishments

Paper Presentation/Project/Quiz Participation Etc

Sr. No	Title	Name of Students	Organised By	Duration
01	"Techno Spark 2K22" A Technical quiz	Khan Zeeshan Zuber	PVPIT Bavdhan, Pune.	28-02-2022.
02	"Techno Spark 2K22" A Technical quiz	Varadraj Mahesh Umardand	PVPIT Bavdhan, Pune.	28-02-2022.
03	3rd Prize in APCOER Technothon 2022	Omkar Abaji Dange	Anantrao Pawar College of Engineering, Pune	06,07-05-2022
04	3rd Prize in APCOER Technothon 2022	Sahil Suresh Gaikwad	Anantrao Pawar College of Engineering, Pune	06,07-05-2022
05	3rd Prize in APCOER Technothon 2022	Sejal Nilesh Homkar	Anantrao Pawar College of Engineering, Pune	06,07-05-2022
06	National Level Project Competition- BVPROTECH-2022	Sahil Suresh Gaikwad	College of Engineering, Pune	21 May 2022

# MSBTE Exam Summer 2022 TOPPERS



**Varadraj Mahesh  
Umardand**  
94.87 %



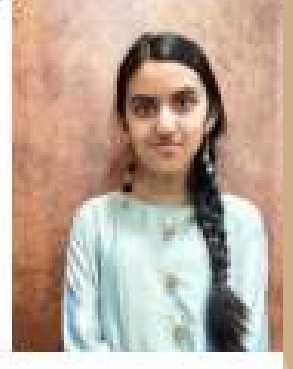
**Khan Zeeshan Zuber**  
94.26 %



**Kotibhaskar Om  
Amod**  
87.95 %



**Dixit Malthili Nitin**  
86.36 %



**Dixit Manasi Amol**  
84.62 %



**Bugde Kaustubh  
Ravindra**  
83.85 %



**Raje Yash Mahendra**  
83.23 %



**Salunkhe Aniket  
Sachin**  
82.21 %



**Kulkarni Saket  
Dnyaneshwar**  
80.77 %



**Dange Omkar Abaji**  
80.56 %



**Rathod Yash Ramesh**  
80.26 %



**Gonjare Omkar Amol**  
81.54 %



**Bagwan Junaid Javed**  
80.69 %



**Ingale Rudra Parag**  
80.23 %



**Yadav Harsh Amol**  
80.00 %



**Mulani Palak  
Shafiuddin**  
78.83 %



**Salunkhe Atharv  
Govind**  
77.52 %



**Bhandirge Omkar  
Balasaheb**  
70.07 %

# PLACEMENT RECORD

## Mechanical Engineering (2021-22)

1	Dhonde Aniket Shailendra	Kirloskar Brothers Limited
2	Umardand Varadraj Mahesh	Tata Cummins / Bajaj Auto/ Cooper corporation
3	Khan Zeeshan Zuber	
4	Raje Yash Mahendra	Tata Cummins / Cooper corporation
5	Chavan Aditi Bhaskar	Cooper Corporation Pvt. Ltd.
6	Dabade Amit Ramesh	
7	Salunkhe Aniket Sachin	
8	Pawar Deepanshu Jalindar	
9	Patukale Isha Mahendra	
10	Dixit Maithili Nitin	
11	Dixit Manasi Amol	
12	Jadhav Mayur Subhash	
13	Ruikar Nikhil Satish	
14	Sabale Rushikesh Jitendra	
15	Gaikwad Sahil Suresh	
16	Pawar Sairaj Sunil	
17	Bhilare Sanika Jeevan	
18	Korde Shubham Deepak	
19	Shinde Soham Krishna	
20	Andhalkar Suyash Sashikant	



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## A Word from the Newsletter Team

Reporting of departmental activities and events is the main objective of this newsletter. It will be as good as your contribution and participation in helping us in collecting and organizing data and information pertinent to your portfolio. We hope you would appreciate this endeavor of ours and enrich us with your valuable feedback, comments and suggestions.

*Please write us at or contact: [hodme@kbppoly.edu.in](mailto:hodme@kbppoly.edu.in) or [zoreprathamesh@kbppoly.edu.in](mailto:zoreprathamesh@kbppoly.edu.in) (OR) Editorial Board*

# THANKYOU

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