

Mechanical screw

**MECHANICAL DEPARTMENT
NEWSLETTER**

Vol.VII, 12 jan 2025

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Teacher day celebration
Parents Meet
Tree Plantation

From HOD's Desk



Dr. Vishwajit bhagwat
PhD Mechanical,ME Heat power

Teacher day Arranged by the MESA Students

September 06, Pune: Mechanical Engineering Department celebrates a teachers day on 5th sep 2018. Teachers day function was organized by the MESA (Mechanical Engineering Students Assosiation), Chief Guest of the event is Hon. Principal Prof. S.S. Kande. The program has Start with the felicitation of Respected Principal sir and all respective Professors of Mechanical Department. The event has successfully done by the motivational speech of S.S. Kande and Mrs. P.S. Mitkari H.O.D. of Mechanical department.



After completion of the guest speech students share their experience in Mechanical Department of BSCOER Narhe.

immense pleasure, that I am HOD of BSCOER Mechanical Dept, the new year issue of the Newsletter that has an interesting topic "Educational Institutes-are they churning centers for lucrative student's careers" as the theme.

**TSSM's
Bhivarabai Sawant College of Engineering
and Research (IInd Shift) Polytechnic,
Narhe, Pune**

Mechanical Engineering Department

VISION:

Produce comprehensively trained socially responsible, invotive mechanical engineers to contribute to the techno-economic development.

MISSION:

1. Provide sound technical foundation in Mechanical Engineering through comprehencive curriculum and application-oriented learning.
2. Provide ambience for professional growth and lifelong learning for adapting to challenges in rapidly changing technology.
- 3.

PEO's

1. Provide socially responsible, environment friendly solutions to Mechanical engineering Related broad-based problems adapting professional ethics.
2. Adapt state-of-the-art Mechanical engineering broad-based technologies to work in Multi-disciplinary work environments.
3. Solve broad-based problems individually and as a team member communicating Effectively in the world of work.

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Parents Meeting Conducted in Mechanical Engineering Department of Bhivarabai Sawant Polytechnic

14 Sep, Pune: A parents' meeting was held on **13th September 2024**. The meeting was chaired by **Mr. Kashid P.D**, the class teacher, and **Mrs. Abnave S.M**, the Guardian Faculty Member of the class. **Mr. Kasbe K.N** provided details about the college, as this was the **first parents' meeting for second-year students' parents**. He also shared information regarding the various activities conducted by the college for the **welfare of students and society**. Additionally, **Mr. Kadam A.B.** guided parents on **boosting their children's confidence**, emphasizing that this is key to achieving success in life. He also advised parents on ensuring **regular study habits** for their children.



Tree Plantation Programm Organised by MESA in TSSM's Bhivarabai Sawant College of Engineering and Research (IInd Shift) Poly Narhe

August 16, Pune:

A **Tree Plantation Program** was conducted at **TSSM's BSCOER** through the **Mechanical Engineering Students Association (MESA)** on **14th August 2024**. Students from the **Mechanical Engineering Department** actively participated in the event under the guidance of **H.O.D Mr. Vishwajit bhagwat** and **MESA Co-Ordinator**.

Prof. A.S.Patil (Principal), **Mr. Vishwajit bhagwat (HOD, Mechanical Engineering)**, faculty members, and students collectively planted saplings on the **college premises**.

The event was a success, with **100 trees** planted at various locations, including **in front of Bhivarabai Sawant Polytechnic A & B Building, Jaywant Multistate Bank, and Cynet School**.



We had planted various types of plants some of them being **Jacuranda (niligul mohar)**, **Indian laburnum**, **Copper pod (tamrashirebi)**, **African Tulip tree**, and **jurul tree**. Teachers had also explained about the trees and the importance of tree plantation.

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Future Trends in Mechanical Engineering

Mechanical engineers over the next two decades will be called upon to develop technologies that foster a cleaner, healthier, safer and sustainable global environment. According to the ASME report, 2028 Vision for Mechanical Engineering, mechanical engineers will need to collaborate with partners worldwide in order to apply innovative solutions and best practices to improve quality of life for all people.

"Mechanical engineers can be at the forefront of developing new technology for environmental remediation, farming and food production, housing, transportation, safety, security, healthcare and water resources," says the report, which is based on the proceedings of The Global Summit on the Future of Mechanical Engineering, held April 16-18, 2008, Washington, D.C. The summit, hosted by ASME at the U.S. National Academy of Engineering, convened more than 120 engineering and science leaders from 19 countries for the purpose of defining the elements of a shared vision that will keep the profession at the forefront of grand challenges and great contributions over the next 20 years.

Among the challenges, sustainable development, says the ASME report, will be a shared vision in the worldwide technical community, involving collaboration tools that allow "mechanical engineers to tap into the collective wisdom of an organization or network of stakeholders." Collaboration also will facilitate the development of innovations in nanotechnology, biotechnology, and large-scale systems. According to the report, "Engineers will be able to act as independent operators interacting with colleagues around the world," the report says. "Engineers can design at home with advanced CAD systems or in collaboration with their global colleagues in virtual worlds.

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They will be able to use home-based fabrication technology to test many of their designs." The report said "As mechanical engineering looks to 2028, leaders will value people with diverse expertise and experience. They will bring this global profession together to keep the promise of technology serving people. They will inspire men and women everywhere nanotechnology and biotechnology will dominate technological development in the next 20 years and will be incorporated into all aspects of technology that affect lives on a daily basis. "Nano-bio will provide the building blocks that future engineers will use to solve pressing problems in diverse fields including medicine, energy, water management, aeronautics, agriculture and environmental management."



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Toyota Prius II hybrid powertrain

Toyota Prius II hybrid powertrain (Courtesy of Toyota Motor Co.) To be employed in electric and hybrid vehicles, a variety of electric motors are developed in recent years. More than 100 different electric motors can be found in modern vehicles. Most common types of electric motors available in the market are DC motors, multi-phase AC induction motors, permanent magnet (PM) synchronous motors (or brushless AC motors), switched reluctance (SR) motors and brushless direct current (BLDC) motors (Hashem Nia & Asaei, 2008; De Santiago et al., 2012; Yildirim et al., 2014; Kumar & Jain, 2014).

The choice of electric motor type is critical. In order to compete against the fossil fuel vehicles, a FEV has to successfully satisfy the following criteria: High torque value, Minimum torque ripple control, Low speed hill climbing, Overload and fault tolerant capability, Instant acceleration, High speed

Students Speak



Hello every one this is Wagaskar Mahesh very happy to be selected as newsletter coordinator, being in this committee I am happy that my enter personnel skills will be developed as well as this will also help me in my personality development also my hobby related to journalism is also getting a great vogue.

Nisha walhekar

Nisha walhekar, Student of SY Mechanical Engineering



Aryan marne

I am student of Third year mechanical department it gives me immense pleasure to be selected for newsletter coordinator, where I explored my presentation and communication skills.

Aryan marne, Student of TY Mechanical Engineering



Tejas Rathod

I am very happy to be elected as newsletter coordinator also assures all of you that each and every progress of mechanical department will be highlighted with all of your support and motivation.

Tejas Rathod Student of TY Mechanical Engineering

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cruise, High efficiency over a wide torque-speed range, Regenerative braking system, Operational controllability, Temperature management, Evaluation of electric motors used in the vehicle industry.

