



Name: Mr. B. S. Hajare

PhD (Pursuing) from COEP Tech, Pune.

M.E. in Heat Power

B.E. in Mechanical Engineering

GATE qualified 5 times (2014, 2015, 2016, 2024, 2026)

Email: hodmech.vacoe@gmail.com

Designation: Assistant Professor and HOD in the Mechanical Engineering Department.

Experience: Teaching- 11 Years

Areas of Interest: Thermodynamics, Heat Transfer, Refrigeration and Air Conditioning, CAD/CAM, Fluid power, Operations Research etc.

Patent:

1) “Metal Printing Machine”, Journal No. 29/2026 Dated 17/07/2026

Conferences/Publications:

- 1) “Efficiency and Accuracy Comparison of Indian Energy Consumption by using Machine Learning”, Technische Sicherheit, Volume 26, Issue 2, 2026
- 2) “Structural Integrity And Optimization Of Railway-Mounted Modular Skids Under 3g Inertial Loading Per ASME Section VIII Div 2”, Volume 13, Issue 4, Apr 2026
- 3) “A Review on Weight Optimization of Industrial Lift Platforms Using Composite Sandwich Structures”, IJSRMME, Volume 10, Issue 2, March 2026
- 4) “Design and Vibration Analysis of Hybrid Natural/Synthetic Fibre-Reinforced Composite Automotive Drive Shaft”, IJRSET, Volume 15, Issue 5, May 2026
- 5) “Design and analysis of Lightweight Composite Control Arm”, IJRSET, Volume 15, Issue 5, May 2026
- 6) “Experimental Investigation and Multi-Parameter Optimization of Compression Ignition Engine Performance Using Cottonseed and Other Biodiesel Blends through Taguchi and Grey Relational Analysis”, IJSRMME, Volume 10, Issue 1, Feb 2026
- 7) “Design and Development of a Cost-Effective Hydraulic Screw Jack-Based Punch-Die System for Small-Scale Manufacturing”, IJRASET, Volume 13, Oct 2025

- 8) “Design and Strength Optimization of Steering Tie Rod Using Different Materials: A Review”, IJSRSET, Volume 13, Issue 2, 2026
 - 9) International Conference on “Recent trends in Management, Engineering and Technology (ICMET)” Organized by Department of Mechanical Engineering, VACOE, Ahilyanagar. 2025
 - 10) “Experimental Investigation of Cascade Refrigeration System with PCM”, IJARST, Volume 7, Issue 2, July 2020
 - 11) “Design and Analysis of a Two Wheeler Shock Absorber Coil Spring”, IJARST , Volume 7, Issue 2, July 2020
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NPTEL/SWAYAM:

- 1) Basic Mechanical Engineering – 1
 - 2) Basic Mechanical Engineering - 2
 - 3) Teaching and Learning in Engineering (TALE)
 - 4) Sustainable Power Generation Systems
 - 5) Research Methodology
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FDP/ Workshops/ Seminar:

- 1) Organized ‘One day workshop on Data science and AIML’ – 17 April 2026.
- 2) Innovative Practices in teaching learning process – 18th March to 22nd March 2024.
- 3) Blended Learning – 6 Jan 2024.
- 4) 3D Printing Workshop – 24th Feb 2023 to 26th Feb 2023.
- 5) Completed 7 days ‘AUTOCAD DRAFTING’ online certified course – 20th June 2021 to 27th June 2021
- 6) FDP on ‘Energy Audit And Management’– 3 days – 30th Jan 2020 to 01st Feb 2020
- 7) Training on ‘Advance Techniques in Quality Control’ – 5 days – 24th sep 2018 to 28th sep 2018
- 8) Training on subject ‘Power Engineering’ at Kopergaon – 5 days – 5th feb 2018 to 9th feb 2018
- 9) Seminar on Green Technology at VACOE Nagar – 1 day – 28th jan 2017