We shape the leaders, thinkers, and change-makers of tomorrow.

VISION

To be a centre of excellence by producing high calibre, competent and self-reliant mechanical engineers, who possess scientific temperament and would engage in activities relevant to industries with ethical values and flair to research

Scan me!

CONTACT US

Head, SoME
Phone: 01991-285634 Ext.: 2346
Email: hod.dme@smvdu.ac.in
99061-64242

Welcome to SMVDU!

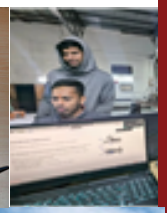
SCHOOL OF MECHANICAL ENGINEERING

WHO WE ARE

Established in 2005, School of Mechanical Engineering at SMVDU fosters innovation and progress to train B.Tech, M.Tech, and Ph.D. students for dynamic industrial and societal needs. We offer specialized programs in areas like 3D Printing, Robotics, Sustainable Energy, and Smart Manufacturing, with curricula updated in consultation with industry experts.

We provide an exceptional learning environment supported by state-of-the-art labs and advanced manufacturing training facilities, offering hands-on experience in modern processes. Our dedicated team of faculty and technical staff ensures top-quality academic and technical guidance. Our strong alumni network excels globally in prestigious companies and institutions.







PROMINENT PLACEMENTS

and many more...

PROGRAMS

B. TECH. WITH HONORS IN:

3D Printing Technology
Robotics and Automation
Biomechanical Systems
Sustainable Energy Engineering

M.TECH.

Smart Manufacturing

Ph. D

LOCATION

The University is situated in the lap of the Trikuta Hills, the abode of Shri Mata Vaishno Devi at about 2700 feet above the mean sea level. The pyramidal type of architecture merges beautifully with the valley like ambience of the surrounding serene hills. The slight incline of the campus provides an ideal place for endurance exercises.The spiritual influence of the Divine Mother and Holy Shrine is palpable on the campus, which helps add spiritual dimension to the quality of education and life on the campus

CLIMATE

The surrounding green hills and the perennial stream of Jhajjar in the east minimize the effects of hot and cold winds and produce a pollution-free atmosphere on the campus. The average day temperature in summer is around 35-40 ℃elsius while in winters is about 10-12 ℃elsius. A moderately high hill full of vegetation on the Western side of the campus shields the campus, particularly the residential zone, from the long summer afternoons

Faculty Members

Dr. Yatheshth Anand
Associate Professor and Head

Dr. Eswarmoorthy Muthusamy
Professor

Prof. Raghvendra Kumar Mishra
Professor

Prof. Balbir Singh
Professor

Prof. Ankush Anand
Professor

Dr. Varun Dutta
Associate Professor

Dr. Sanjay Sharma
Associate Professor

Dr. Sanjay Mohan
Associate Professor

Dr. Mir Irfan Ul Haq
Associate Professor

Dr. Kapil Chopra
Assistant Professor

Dr. Amit Kumar Sinha
Assistant Professor

Dr. Ankush Raina
Assistant Professor

Dr. Rajiv Kumar
Assistant Professor

Dr. Sanjeev Anand
Associate Professor

Staff Members

Mr. Deepak Byotra

Workshop Superintendent

Mr Sugal Kishore

Senior Technical Assistant

Mr Karan Vohra

Technical Assistant

Mr. Arjun Kotwal

Laboratory Assistant

Mr. Anil Kumar

Laboratory Assistant

Mr. Sudesh Kumar

Laboratory Assistant

Mr Bodh Raj

Workshop Operator

Mr Gurbat Raj

Workshop Operator

Mr. Sunil Mehra

Workshop Operator

Mr.Chandan Sharma

Workshop Operator

Mr Kewal Krishan

Workshop Operator

Mr. Om Prakash

Workshop Attendent

PROGRAMES OFFERED

B. Tech (Mechanical Engineering) with honors in:

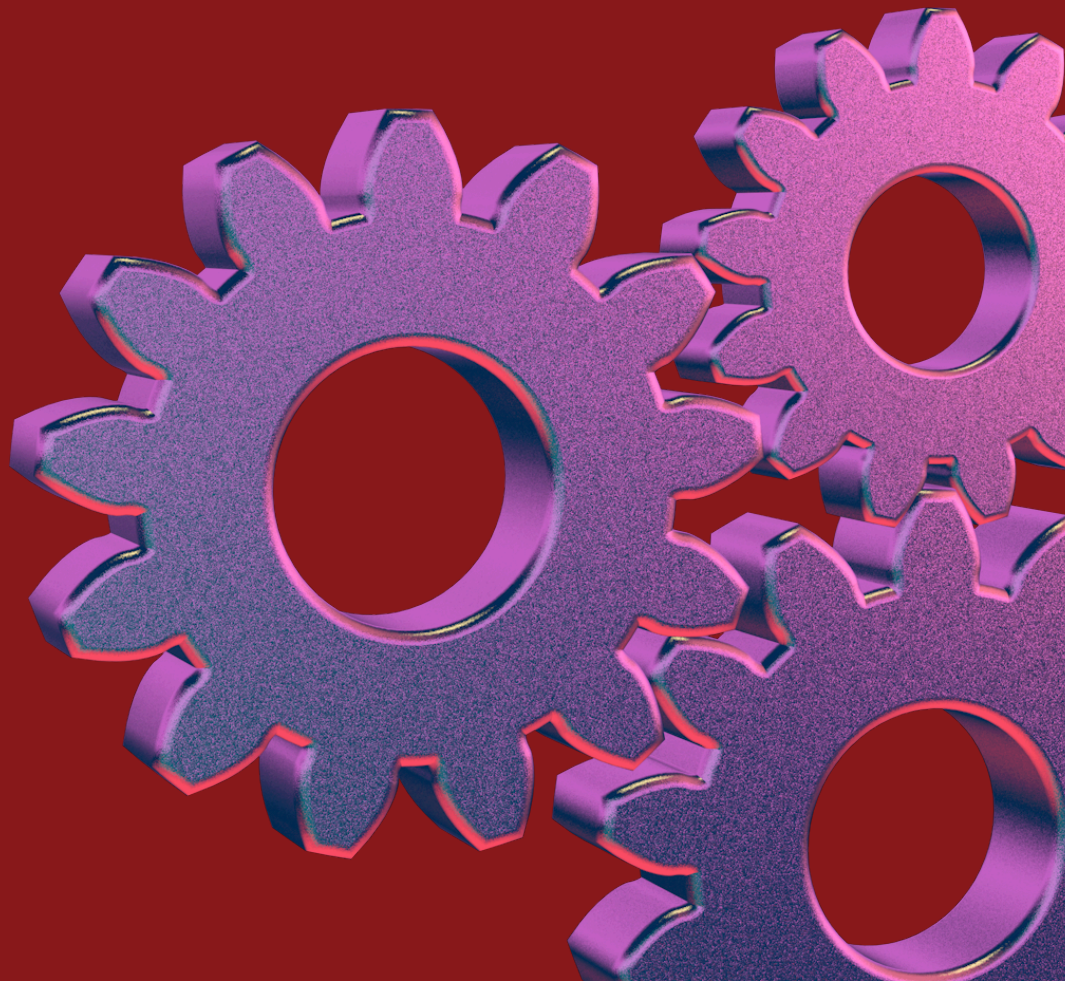
- 3D Printing Technology
- Robotics and Automation
- Biomechanical Systems
- Sustainable Energy Engineering

M.TECH :

- Smart Manufacturing

Ph.D:

- Regular/ Part-time



LABORATORY INFRASTRUCTURE

CENTRAL WORKSHOP

RESEARCH LAB

THEORY OF MACHINES LAB

STRENGTH OF MATERIALS LAB

THERMAL ENGG. & I.C ENGINE LAB

REFRIGERATOR &
AIR CONDITIONING LAB

HEAT AND MASS TRANSFER LAB

AUTOMOBILE LAB

MEHCANICAL VIBRATION LAB

LABORATORY INFRASTRUCTURE

PRODUCTION ENGG & CIMS LAB

FLUID MACHINERY LAB

CAD LAB

METROLOGY & MEASUREMENTS LAB

MATERIAL SCIENCE LAB

The Mechanical Engineering department features state-of-the-art labs that provide hands-on experience in core areas like thermodynamics, fluid mechanics, material science, manufacturing, and robotics. These labs support both learning and research, fostering innovation and problem-solving to prepare students for careers in mechanical engineering.

FLUID MECHANICS LAB

Mechatronics Lab

Campus Amenities at SMVD University

The University promotes a healthy lifestyle with a gym, sports courts, athletic tracks, and a stadium for events and recreation.

SMVDU offers a fully residential campus with separate hostels for boys and girls, along with on-campus J&K Bank with ATM services, a fully-equipped post office, and a comfortable Guest House for visitors.

SMVDU provides comprehensive medical support with OPD services, a clinical lab, dental and physiotherapy units, and a 24/7 ambulance. SMVDU features the state-of-the-art "Matrika" auditorium with 1,000 seats and seminar halls. Diverse student clubs foster holistic growth, ensuring academic and professional excellence.

Career Development & Knowledge Hub

SMVDU's Training & Placement Cell facilitates seamless campus placements with top recruiters like Maruti Suzuki, L&T, Bosch, TCS, and Infosys.

The Technology Business Incubation Centre (TBIC), the first in J&K and Himachal, supports 43+ startups under the Startup India initiative, disbursing ₹2.35+ crores in funding and driving innovation in AI, agriculture, and manufacturing.

Central Library

SMVDU's 36,000 sq. yd. Central Library offers extensive resources, including 46,409+ online journals, 2,695 conference proceedings, and dedicated sections for diverse needs. With ₹1.25 crores spent on subscriptions in 2023-24, it ensures seamless access to knowledge, complemented by school-specific libraries.

Sponsored Projects

Project Title	Funding Agency	Amount (INR)	Status
To study the synergism of grapheme and diamond nanoparticles in enhancing the Tribological performance of PAO oil for automotive application,	J&K Science Technology & Innovation Council, Department of Science & Technology, Govt. of J&K	5,75,000	Ongoing
Vertical Vermicomposting of Mule dung at Shri Mata Vaishno Devi Shrine, Katra.	RuTAG, IIT Delhi	2,95,000	Completed
Development of light weight material for snow clearance applications	Department of Science & Technology, Govt. of J&K	7,00,000	Ongoing
Study of mechanical behaviour of bioinspired 3D printed functionally graded structures for lightweight applications	Department of Science & Technology, Govt. of J&K	7,00,000	Ongoing
Design, development, theoretical and experimental study of smart tribological coatings for space applications	Department of Science and Technology (DST), Govt. Of India (In Collaboration with NIT Srinagar)	51,70, 282	Ongoing
Development and tribological characterization of self-lubricating Aluminium alloy (AA6061)/nano-ceramic composite	CRS-TEQIP-III scheme	1,328,000	Completed

Sponsored Projects

Project Title	Funding Agency	Amount (INR)	Status
Solar PV- Thermoelectric Generator with Composite PCM	SURE scheme DST – ANRF (Erstwhile SERB)	26,00,000	Ongoing
Ergonomic Apple Harvesting System	PRISM-DST	2,00,000	Completed
Design and Development of Renewable Energy Powered Bakery Unit for Skill Development and Employment Generation in Himalayan Region	Ministry of Environment, Forest and climate change (RE Division) Govt. of India	48,00,000	Ongoing
Abatement of clinically investigated allergies through improved IAQ for UT of J&K	J&K Science Technology & Innovation Council, Department of Science & Technology, Govt. of J&K	8,00,000	Ongoing
Solar PV- Thermoelectric Generator with Composite PCM	Charging infrastructure deployment in view of electric vehicle infusion: A survey of UT of J&K	6,80,000	Ongoing

List of Patents (Submitted/ Awarded)

- Selective coating for solar absorption with high thermo- mechanical stability and material obtained thereof (Published).
- Multitasking Mop Handle. Patent No. 508337. Patent granted by Indian Patent Office, Govt. of India.
- 3D printed bite blocker with detachable tongue retractor, Application No: 202411058382 (filed at Indian Patent Office, August 2024).
- Solar Cooking Pot - Encapsulation of Latent Heat Storage Material in Longitudinal Dome Container
- AI-Powered Energy-Efficient Waste Compaction Device. Design no: 427361-001.
- 3D Printed bite blocker with grooved lock mechanism for improved dental procedures.
- Reinforced aluminum matrix composites and method of preparation thereof. filed on 02-12-2020 bearing application no. 202011052574.

List of Books and Monographs Published

- Tribology and Sustainability, 1st Edition (2021) CRC Press (T&F Group) ISBN 9780367551469.
- Nanomaterials for Sustainable Tribology, 1st Edition (2023) CRC Press (T&F Group) ISBN 9781032306902.
- 3D Printing and Sustainable Product Development, 1st Edition (2024) CRC Press (T&F Group) ISBN 9781032306803.
- Engineering Mechanics, Kirti Publishers (India) 2019, ISBN: 9789389411010.
- Advancements in Natural Fibre Composites for Industrial Applications, Global Academic Excellence (M), SDN BHD, Malaysia EISBN:978-967-2426-46-2.
- Effect of Finite Element Mesh Orientation - Subjected to Torsion Problems. A monograph from VDM Verlag, Germany.

Recent Placements

Mr. Gokul Jandial placed at Planet Spark with CTC of 7.5 LPA

Mrs. Harsimrat Kour placed at Bosch with CTC of 7 LPA

Mr. R. Bany Enosh placed at Planet Spark with CTC of 6.5 LPA

Mr. Aryan placed at Planet Spark with CTC of 6.5 LPA

Mr. Shivesh Raj placed at Forbes Marshal with CTC of 6 LPA

Mr. Parth Fotedar placed at Ceasefire Pvt. Ltd with CTC of 5.16 LPA

Mr. Taranpreet Singh placed at Ceasefire Pvt. Ltd. with CTC of 5.16 LPA

Mr. Ayush Aarya placed at IFB Industries Ltd. with CTC of 5.5 LPA

Mr. Hriday Vasudevaplaced at IFB Industries Ltd. with CTC of 5.5 LPA

Ms. Sakshi placed at Asahi India Glass Ltd with CTC of 4 LPA

Mr. Prince Kumawat placed at Jindal Saw Ltd. with CTC of 4 LPA

Mr. Praman Pandey placed at Jindal Saw Ltd. with CTC of 4 LPA

and the list goes on...

Prominent Alumni

Vikas Singla, currently working as senior Account Manager at ITC infotech.

Mr. Arnab Lahiri is currently working as a scientist at ISRO

Mr. Sumit Ratan, is presently employed as a scientist at ISRO.

Mr. Dhananjay Singh, is the CEO of FrameInn, a private limited company.

Sajal Dixit specializes in Supply Chain Transformation Procurement, and Sourcing Strategy at American Airlines.

Yogesh Tyagi is an experienced Production Specialist in the oil & energy industry with expertise in AutoCAD, 3D Printing.

Saquib Rouf Currently pursuing PhD at the Laboratoire Interdisciplinaire Carnot de Bourgogne – UMR CNRS 6303, working closely with the Microfluidic Innovation Center in Paris and EPFL Switzerland.

Rahul Bakaya Chief Growth officer at Property Dollar

Tawqeer Nasir Postdoctoral fellow at John Hopkins Whiting School of Engineering

Shobit Kotru working as senior Architect at : MES-MOM-Industry 4.0

Nishant Raman is a Management Consultant at Berlin, Germany.

and the list goes on...

Events Organized by School

1. An interactive Lecture Series by External Experts for Bachelor of Design Students with prominent speakers from renowned institutes
2. One-day Awareness Program in collaboration with JKSTIC, Udhampur focusing on "Empowering Climate action: Strategies for Sustainable Future"
3. A Week Long Training on 3D Printing in partnership with Microsoft's India Development Center (IDC).
4. One-Day Awareness Program on Clean and Green Energy Technologies in collaboration with JKSTIC, Udhampur.
5. National One Day Workshop on Energy Efficiency and Renewable Energy Ends at SMVDU in collaboration with J&K Science Technology and Innovation Council (JKSTIC), Udhampur.
6. Printcarft- The 3D Printing Showcase-A Journey Into innovation.
7. Introductory Session on 3D Printing.
8. Online Webinar Kick Start Career After PhD with Dr. Elena Hoffer, Scientist, Co-Founder, and CEO of Alma
9. Two Weeks Refresher Course on Emerging Engineering Technologies
10. One day workshop On 3D printing for entrepreneurs.
11. Skill Development Programme/ Short Term Course on Fundamentals of 3D Printing and New Product Development.
12. School of Mechanical Engineering Organizing Webinar on "Electric Vehicle Dynamics and Design Calculations.
13. Two-Days Workshop On Electric Vehicles.
14. DST SERB-sponsored National Workshop on Green Hydrogen Generation: Research Issues and Opportunities
15. National Seminar on Essentials of Product Development
16. Talk on Hydrogen Management in a Nuclear Reactor Containment by Prof. Kannan N. Iyer, IIT Jammu.
17. One-Day Webinar On Overview of Smart Manufacturing Systems.
18. Faculty Development Program (Online) on "Sustainable Product Design and Manufacturing".
19. Webinar: Numerical Heat Transfer and Fluid Flow For Industrial Applications.
20. 2nd Virtual International Tribology Research Symposium in collaboration with SRM Institute of Science and technology, Tamil Nadu and several other national and international institutes.
21. One Week Online STC: on Introduction of CFD Problems on Fluid Flow and Heat Transfer.
22. International Tribology Research Symposium on Impact of Tribology on Society in collaboration with SRM Tamil Nadu, Center for Advanced Studies Lucknow and several other national and international institutes.
23. ATAL Faculty Development Program (Online) on Clean Energy Conversion Technologies.
24. One Week STC on Tribology for Sustainable Development with Dr. SudhanrajJeganmohan Faculty of Informatics EötvösLoránd University, Hungary
25. Webinar: Industry 4.0/ Smart Factory Automation
26. National Workshop on Developments and Prospects of Thermoelectric energy Conversion Device and its Applications.
27. TEQIP- III Sponsored Short Term Course on Engineering Optimization (EO-2019).
28. TEQIP III Sponsored Workshop on 3D Printing for New Product Development.
29. TEQIP-III Sponsored One Week FACULTY DEVELOPMENT PROGRAM On BEST MANUFACTURING PRACTICES IN INDUSTRIES.
30. TEQIP-III Sponsered: International Conference on Mechanical Engineering and Allied Sciences joined by Wenzhou University China and Samara National Research University Russia
31. FDP on Sustainable Design and Manufacturing.

SAE BAJA Club SMVDU

SMVDU actively promotes participation in SAE BAJA competitions through its SAE Baja Club. The university has a strong history in events like SAE BAJA 2014, 2018, and ECO KART 2017, encouraging students to design and fabricate vehicles for national-level competitions. The club continues this legacy with students working on the SAE BAJA Vehicle 2025, showcasing SMVDU's commitment to fostering innovation and practical engineering skills

DRONE DEVELOPMENT

Students from SMVDU's Mechanical Engineering and Electronics & Communication departments have collaboratively developed an autonomous quadcopter drone.Guided by faculty mentors, the project integrates mechanical design with advanced electronics.

The drone features a dual-computer setup: a Raspberry Pi for mission planning and visionand a Pixhawk controller for precise flight. Equipped with GPS, IMU, and altitude sensors, it supports autonomous navigation, including in GPS-denied areas, and carries payloads up to 2 kg, demonstrating innovative engineering and practical application.