



DEPARTMENT OF MECHANICAL ENGINEERING

“NO TECH WITHOUT MECH”

The department of Mechanical Engineering, Swami Vivekananda University offers state of the art education, well equipped classroom, high end laboratories and cutting-edge research facilities for the students to create, enable, apply and spread knowledge in the advanced field of Mechanical Engineering. In addition to curriculum courses, the department contributes to value added courses, guest lecture by industry experts, industrial visits and various add on activities for the students to make them future ready technocrats of academia & industry. We are committed to work in emerging areas and to develop sustainable technologies & innovations pertaining to mechanical engineering and its allied sectors.

WHAT'S NEW

- Achievements of the Mechanical Engineering Faculty in NPTEL
- Participation in Workshop on Cybersecurity and Its Recent Issues
- Participation in Rabindra Jayanti Celebration
- Patent published
- Edited Book published

EDITORIAL

In pursuit of Swami Vivekananda University's vision of excellence, innovation, and entrepreneurship, the Department of Mechanical Engineering is committed to contribute the best possible and feels immense pleasure to share this newsletter with all of you. The department has a vision to emerge as an excellent center of skill-based learning in Mechanical Engineering to develop professionals who are technically competent, ethical and capable of addressing the changing societal needs with credibility. The department has focused to continued enhancement of its facility to cater the overall anticipation of industry and academia. We are thrilled to announce several exciting developments at our department. Department of Mechanical Engineering of Swami Vivekananda University continues to shine with recent accomplishments. This month, the Mechanical Engineering faculty excelled in NPTEL. Students and faculty participated in a workshop on Cybersecurity and Recent Issues and the university's Rabindra Jayanti Celebration. The department also celebrated the patent publication for "Solar-Powered Go-Kart" and "Modular Submersible Vessel". Additionally, Dr. Ranjan Kumar, Head of the Department, edited two books: "Innovations Across Disciplines: Advancements in Engineering, Technology, and Sustainability" and, with Dr. Arnab Das (Assistant Professor), "Multidisciplinary Perspectives in Mechanical and Applied Sciences". For all these achievements, I express my sincere thanks to our students and faculty members for their invaluable contributions and countless efforts. We conclude with a commitment to pursuing excellence and look forward to sharing an enhanced version in the next issue.

HOD (Mechanical Engineering)

Mechanical Engineering Faculty Shine Through NPTEL Achievements

The Mechanical Engineering Department is proud to announce that our faculty members have successfully completed a total of 12 NPTEL courses this semester. This achievement highlights their dedication to continuous learning and staying current with evolving engineering trends. Equally commendable is the enthusiastic participation of our students, who have actively enrolled in and completed various NPTEL courses alongside their regular curriculum. Their commitment to broadening their knowledge base reflects a proactive approach to learning and professional development. The combined efforts of faculty and students in embracing such initiatives not only enrich the overall academic environment but also strengthen the department's pursuit of excellence. Together, we are building a future-ready university driven by innovation, academic rigor, and a deep commitment to quality education.

Participation in Workshop on Cybersecurity and Its Recent Issues

Swami Vivekananda University successfully organized a two-day workshop on "Cybersecurity and Its Recent Issues" on May 14-15, 2025. The event took place in Block-6, Hall-1 of the university campus and brought together leading experts from academia, industry, and law enforcement to share insights into current trends, challenges, and advancements in cybersecurity. The workshop was inaugurated by Shri Hari Kishore Kusumakar, ADG & IGP, Cyber Crime, West Bengal Police.

The workshop featured eminent speakers, including Prof. Bimal Roy, Prof. Mridul Nandi, Prof. Debdeep Mukhopadhyay, and others, who addressed key areas in cybersecurity, including cryptographic systems, AI-based security frameworks, cybercrime prevention, and data privacy challenges. Faculty members from the **Department of Mechanical Engineering** actively participated in the workshop, demonstrating strong interdisciplinary engagement and adding valuable perspectives to the discussions.



Participation in Rabindra Jayanti Celebration:

Swami Vivekananda University celebrated Rabindra Jayanti on May 8, 2025, with music, dance, drama, and recitation inspired by Rabindranath Tagore's works, honouring his cultural legacy.

Faculty and students from various departments participated. The **Department of Mechanical Engineering** was represented by **Assistant Professor Sri Debashis Majumdar**, who delivered a soulful Tagore poem recitation. The celebration fostered cultural pride, creative expression, and reverence for Tagore's enduring legacy.

Patent Publications

The Mechanical Engineering Department of Swami Vivekananda University has recently published two patents, reflecting its commitment to innovation and research. The first patent, titled **“A Solar-Powered Go-Kart”** (Application No. 202531040467 A, published on 02/05/2025), focuses on eco-friendly and sustainable transportation solutions. The second patent, **“Diving Bell-Integrated Modular Submersible Vessel with Autonomous and Adaptive Control Systems”** (Application No. 202531040468 A, published on 02/05/2025), highlights advancements in marine and autonomous technologies. Both patents were developed through the collaborative efforts of the department’s faculty members. These achievements demonstrate the department’s dedication to practical, future-focused engineering innovations.

(12) PATENT APPLICATION PUBLICATION	(21) Application No.202531040072 A
(19) INDIA	
(22) Date of filing of Application :25/04/2025	(43) Publication Date : 02/05/2025

(54) Title of the invention : Driving Bell-Integrated Modular Submersible Vessel with Autonomous and Adaptive Control Systems

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(12) PATENT APPLICATION PUBLICATION	(21) Application No.202531040467 A
(19) INDIA	
(22) Date of filing of Application :26/04/2025	(43) Publication Date : 02/05/2025

(54) Title of the invention : A solar-powered go-kart

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Publication of Edited Volumes

Swami Vivekananda University's Mechanical Engineering Department is pleased to announce the publication of two edited volumes that reflect the institution's strong focus on interdisciplinary research and innovation.

The first volume, **“Innovations Across Disciplines: Advancements in Engineering, Technology, and Sustainability,”** has been edited by Dr. Ranjan Kumar (Head and Associate Professor, Mechanical Engineering) and Mr. Ashes Banerjee (Assistant Professor, Civil Engineering). This book is published by **Inspira** and brings together diverse research aimed at promoting sustainability and technological progress.

Following this, the department has also published **“Multidisciplinary Perspectives in Mechanical and Applied Sciences,”** edited by Dr. Ranjan Kumar and Dr. Arnab Das (Assistant Professor, Mechanical Engineering). Published by **S Sharda Global Research Publications**, this volume presents cutting-edge research in areas such as micromachining, advanced materials, and energy systems.

