



VISION

To contribute for teaching excellence to generate human resource to cater the needs of industries and hospitals for affordable healthcare through research and innovation .

MISSION

To bridge the engineering, science and healthcare sectors for indigenous development and to impart community services for mass healthcare through continuous research.

MESSAGE FROM HEAD OF DEPARTMENT

“Biomedical Engineering at SGSITS continues to blend engineering with medicine to create solutions for a healthier future. This edition celebrates our recent strides in research, innovation, and student excellence.” - Dr. R Khatri, HOD,BMED

DEPARTMENT HIGHLIGHTS

- ☀ MoU with NICT Technologies for student internships and projects.
- ☀ Mr. Mayur Patil received a ₹3.5 Lakh Ignition Grant for a groundbreaking innovation in Neonatal Care Technology.

VALUABLE CONTRIBUTORS

Dr. Rajesh Khatri (HOD), Mrs. Vibha Bhatnagar (Prof In-charge),
Ms. Gauri Gupta(Editor in chief), Mrs. Avni Jain (Executive Editor)

ACADEMIC UPDATE

• **Biomedical Engineering Course Now Open to Biology Students!**

We are excited to announce that the Biomedical Engineering (BME) program at SGSITS will be accessible to students from a biology background.

Recognizing the interdisciplinary nature of healthcare innovation, this move aims to welcome aspiring students with a passion for biology, medicine, and life sciences into the world of engineering-based healthcare solutions.

Students from PCB (Physics, Chemistry, Biology) backgrounds can pursue BME from session 2026. The curriculum is tailored to support non-mathematics students with foundational training. Opens pathways to careers in medical device design, clinical research, diagnostics, AI in healthcare, and more

• **Open Electives Added from Current Academic Year**

Students will also have the opportunity to select from a range of Open Electives designed to foster cross-disciplinary exposure, creativity, and industry alignment.

These curriculum enhancements reflect SGSITS BME's commitment to developing future-ready biomedical engineers with both scientific depth and regulatory awareness.

• **New Courses Introduced in Biomedical Engineering for Batch admitted in year 2025**

To stay aligned with the latest advancements in biomedical science and industry expectations, the department has introduced several new core and elective courses in the updated curriculum.

Newly Introduced Courses:

- **Molecular Biology** : Study of cellular structures, DNA/RNA function, and molecular mechanisms in living systems.
- **Analytical Instruments** :Covers techniques like spectrophotometry, chromatography, and electrophoresis used in biomedical and pharmaceutical analysis.
- **Bioinformatics** : Introduction to data-driven biological analysis, including gene sequencing, protein modeling, and use of tools like BLAST and Clustal.
- **Novel Drug Delivery Systems** :Focus on cutting-edge drug carriers such as nanoparticles, transdermal patches, and targeted delivery mechanisms.
- **Pharmaceutical & Biomedical Jurisprudence** :Exploration of Pharmaceutical & Biomedical Jurisprudence: including FDA and CDSCO guidelines.

STUDENTS SECTION

Sports Achievements

Our students displayed remarkable athleticism and team spirit in inter-college and state-level competitions:

Anushka Sharma, a final-year student of Biomedical Engineering, has showcased exceptional sportsmanship and versatility throughout the academic year.

Volleyball

- Winners of the RGPV Nodal Volleyball Competition – November 2024
- Runner-up in the Inter-Branch Volleyball (Girls)

Yoga

- Runner-up in both RGPV Nodal and State-Level Yoga Competitions – Dec, 2024

Gymnastics

- Runner-up in the RGPV State Gymnastics Championship
- Selected to represent RGPV at the All India University Gymnastics Championship

Mallakhamb

- Runner-up in the RGPV State Mallakhamb Competition

Kabaddi

- Boys' Team: Winners – Inter-Branch Kabaddi Competition
- Girls' Team: Runner-up – Inter-Branch Kabaddi Competition



Athletics

- Kritika Patidar (II Year) won Bronze Medal in the 10,000m Marathon at the RGPV Nodal Athletics Meet, JIT Borawan

Badminton

- Shelly Juneja (I Year) emerged Winner in Inter-Branch, Nodal, and State-Level University Badminton Tournaments – Oct–Nov 2024

Academic & Leadership Achievements

Divyanshi Sharma (III Year)

Selected among the Top 60 Finalists at the Goldman Sachs Possibility Summit 2025 held in Bangalore – March 21–22, 2025

Abhijeet Solanki (IV Year)

Represented SGSITS at the AICTE TechFest 2025 at AICTE Headquarters, New Delhi – March 7, 2025 (Selected among students from 200+ top colleges in India)

BIS Club Events -BME

The BIS (Bureau of Indian Standards) Student Club, BME Department, organized a Standard Writing and Biomedical Quiz to promote awareness of national standards in healthcare and engineering.

🏆 Winners (BME 3rd Year): Abhijeet Solanki, Palash Punde, Sanidhya, Muskan, Ritu
Congratulations to all the winners for their outstanding performance

Innovation Highlight

Mr. Mayur Patil Awarded ₹3.5 Lakh Ignition Grant for Neonatal Care Innovation

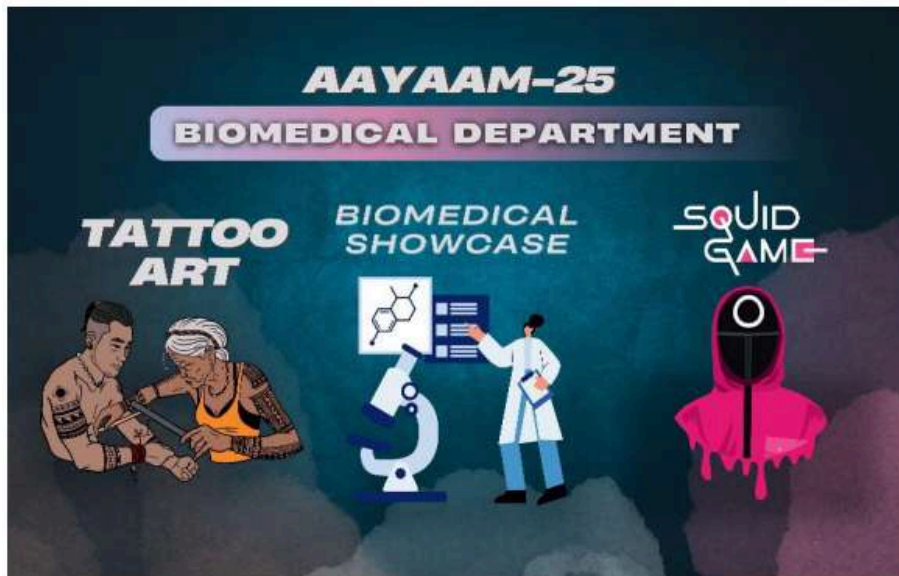
We are proud to announce that Mr. Mayur Patil, a student/researcher from the Biomedical Engineering Department, SGSITS, has been awarded an Ignition Grant of ₹3.5 Lakh for his groundbreaking work in the field of Neonatal Care.

Alumni Talk – Mr. Mahesh Kumar Rathore

The department welcomed Mr. Mahesh Kumar Rathore (BME Batch 2008–2012), Co-founder of MedPrime Technologies, for an insightful alumni session. He shared his journey from SGSITS to entrepreneurship, highlighting opportunities in med-tech, innovation, and interdisciplinary learning.



CULTURAL EXTRAVAGANZA – AAYAM 2025



AAYAM-25

BIOMEDICAL SHOWCASE & FUN ACTIVITIES

Biomedical Department | 28 Feb & 1 March

The objective of the event was to cater to the students' technical development along with some entertainment.

We introduced the spectators to some healthcare instruments from "Udgam Healthcare" and innovative projects created by students of the department. To make the event more colorful the students organized some fun activities like "Squid Game" and "Tattoo Art" to enhance their creative outlook and presentation skills, which the audience wholeheartedly enjoyed.



RESEARCH SPOTLIGHT

Non-Invasive Continuous Glucose Monitoring System

A Collaborative Innovation with NICT Technologies

Under a collaborative MoU between the Biomedical Engineering Department at SGSITS and NICT Technologies, our team is developing an advanced Non-Invasive Continuous Glucose Monitoring (CGM) System designed to revolutionize diabetes care. This innovative project aims to develop a compact, skin-interfacing patch that uses a microneedle-based sensor and electrochemical detection to continuously measure glucose levels in the interstitial fluid (ISF)—eliminating the need for painful finger pricks.



**Mou Signing between NICT
And BMED, SGSITS On
14th-JAN, 2025**

Upcoming Events – Biomedical Engineering Department

SGSITS | Academic Year 2025–26

The BME Department continues to foster academic excellence, innovation, and industry connection through a range of impactful events. Here are the highlights of what's coming up:

Alumni Lecture Series – 02

Topic: Insights into Medical Imaging Research & International Biomedical Careers

Resource Person: Mr. Shasvat Bargale Medical Imaging Research Scientist, Carle Health, Illinois (USA)

Date: 13th-Sep-2025 Venue: Online (Hybrid)

TechFest 2025 – Departmental Events

Escape Room: Device Down – The Final Pulse

A biomedical-themed escape challenge combining clinical logic, device knowledge, and team problem-solving.

Dates: 23rd – 24th August 2025

BioAssist Design Challenge

A week-long design competition to conceptualize and prototype assistive biomedical technologies aimed at real-world patient needs.

Dates: 8th – 13th August 2025

"Together we learned, together we grew — shaping the future of healthcare, one innovation at a time." 2025"



DEPARTMENT OF BIOMEDICAL ENGINEERING