Report on

SDG 9: Industry, Innovation and Infrastructure

Year 2024

Table of Contents

SDG 9: Industry, Innovation and Infrastructure

Payload Was Successfully Deployed in to Orbit on 30th December 2024

The Centre for Excellence in Astrobiology at Amity University Mumbai, Maharashtra, has undertaken a pioneering initiative in space biology through the development of a specialized biological payload the Amity Plant Experimental Module in Space (APEM). This innovative module was designed with the objective of exploring the feasibility of sustainable food and nutrition systems for future space missions. In collaboration with the Indian Space Research Organisation (ISRO), the payload was successfully deployed into orbit the PSLV-C60 launch vehicle on 30th December 2024, as part of the SpaDeX mission, utilizing the POEM-4 platform. This groundbreaking experiment marked the first real-time monitoring of a biological payload in space from AUM and has offered promising insights into the potential for cultivating plants in extraterrestrial environments, a crucial step toward enabling long-term human space exploration. The project has positioned India as a significant contributor in the global quest for understanding astrobotany and life-support systems in space. The Centre is also engaged in active international collaborations with leading organizations including NASA, the European Space Agency (ESA), and research institutions in Australia, among others, to advance research into the possibility of life beyond Earth.

Complementing its space research endeavours, AUM currently leads 37 fully funded research projects, supported by different national and international funding agencies,

along with three consultancy-based research engagements, further reinforcing its stature as a hub of interdisciplinary innovation and scientific excellence.

Institutional Innovation Council (IIC) & E-Cell

The Corporate Resource Centre (CRC) at AUM serves as a pivotal bridge between students and the professional world by facilitating valuable internship opportunities and final placements. Strategically located in India's financial hub, AUM has cultivated robust partnerships with a wide spectrum of industries, resulting in an impressive placement record. The CRC has consistently demonstrated success in securing employment for students aspiring to enter the workforce. Beyond placements, AUM extends comprehensive support to its scholars through the provision of recommendation letters and personalized guidance for those pursuing higher education both domestically and internationally. To nurture the entrepreneurial spirit among its student community, AUM has established the Entrepreneurship Cell (E-Cell), Amity Innovation and Incubation (AII) centre, and the Institutional Innovation Council (IIC). These platforms offer mentorship and expert guidance, fostering entrepreneurship through dynamic initiatives such as Start-Up Week and Business Plan Competitions. AUM's unwavering commitment to excellence has earned it a stellar reputation among both academicians and employers. Compared to other emerging universities in the Asian region, AUM has proactively implemented a range of initiatives that highlight its remarkable achievements in research, academic delivery, student employability, and a student-centric approach.

SDG and Publications

Fig. Distribution of Publication as per Sustainable Development Goals

Over the past decade, Amity University Mumbai (AUM) has placed a strong emphasis on formulating policies and strategic frameworks that embed environmental, social, and economic sustainability into the fabric of its institutional culture. The university has launched a dedicated mission to foster sustainable thinking and translate it into meaningful action among students—encouraging them to meet present needs without compromising the ability of future generations to do the same. To support this vision, AUM has appointed specialized personnel to oversee sustainability initiatives in both research and education. The university houses a dedicated research centre for sustainability and an Ethical Compliance Committee to ensure adherence to global standards and practices. In addition, AUM has developed a Sustainability Literacy and Knowledge Assessment Tool, designed to evaluate and enhance the awareness of sustainability principles among students and staff. The institution has also implemented a suite of forward-thinking governance policies, including a Sustainable Procurement Policy, an Anti-Bribery and Anti-Corruption Policy, and a Sustainable Investment Policy, further reinforcing its commitment to ethical conduct and responsible institutional practices.

National Innovation and Start-up Policy

AUM has instituted a comprehensive set of inclusive and progressive policies aimed at fostering a safe, equitable, and respectful environment for all members of its community. The university has implemented robust measures to protect individuals from discrimination, including women, transgender persons, and whistleblowers reporting instances of bias or injustice. In its efforts to promote gender equity in STEM, AUM has adopted a positive discrimination policy to enhance the representation and participation of women in science, technology, engineering, and mathematics disciplines. To advance its commitment to Equality, Diversity, and Inclusion (EDI), AUM has developed a formal EDI policy, constituted a dedicated committee, and delivered capacity-building training programs for faculty and staff to promote awareness and inclusive practices across the institution. Since 2020, the university has been actively contributing to the United Nations Sustainable Development Goals (UN SDGs) through a variety of educational initiatives and community outreach programs. AUM has documented and published detailed reports reflecting its contributions to all 17 UN SDGs, underlining its dedication to global sustainability objectives.

In alignment with its broader vision for sustainability, AUM has also introduced key policies such as the Smoke-Free Campus Policy, Lifelong Learning Access Policy, Sustainable Climate Action Plan, and the National Innovation and Start-up (NISP) Policy to cultivate a culture of environmental responsibility and innovation. The university has articulated a clear pathway toward achieving net-zero carbon and greenhouse gas (GHG) emissions, encompassing Scope 1, 2, and 3 emissions. A comprehensive GHG Emissions Report has been prepared to inform strategic planning, with the university setting a target to attain net-zero emissions by the year 2050.

https://www.amity.edu/mumbai/pdf/innovation-start-up-policy.pdf

Reports on Interdisciplinary Science Research

https://www.amity.edu/mumbai/wur-ranking.aspx

Measures of Interdisciplinary Research Success

https://www.amity.edu/mumbai/pdf/measures-of-interdisciplinary-research-success.pdf

Specific Physical Facilities for Interdisciplinary Research Teams

https://www.amity.edu/mumbai/pdf/specific-physical-facilities-for-interdisciplinary-research-teams.pdf

Specific Administrative Support for Interdisciplinary Research Teams

https://www.amity.edu/mumbai/pdf/specific-administrative-support-for-interdisciplinary-research-teams.pdf

Research and Innovation for Young Entrepreneurs

Date of Event:	25TH January 2024
Venue:	City Office, Kurla.
Organized by:	Department of Mechanical Engineering, ASET & AIT
Total Participation:	80

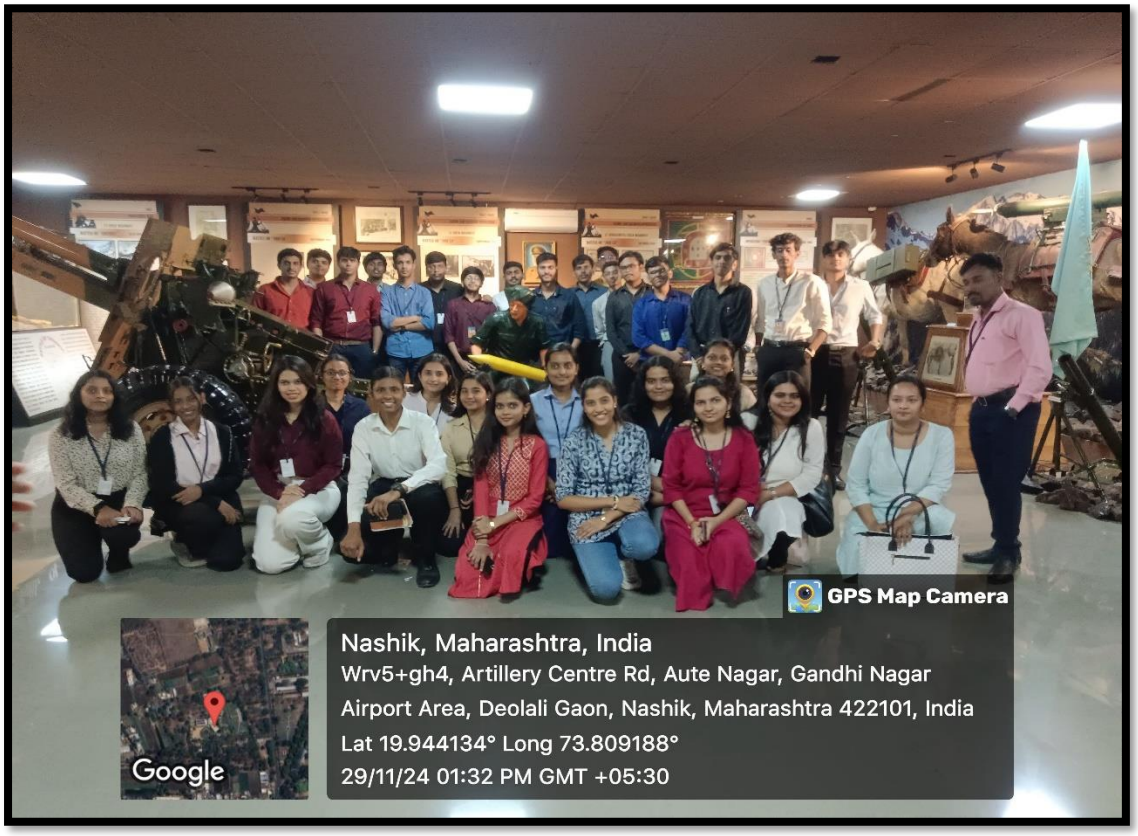
The seminar was organized for 10th and 12th standard students, and the main inspiration was to imbibe a sense of research and innovation as well as motivate the young students towards entrepreneurship. The objective of this seminar was to imbibe a sense of research and innovation as well as motivate the young students towards entrepreneurship. The other objective of this event was marketing of courses taught at Amity University Maharashtra.

Industrial Visit to Artillery Camp, Nashik

Date of Event : 29.11.2024

Venue : Artillery Camp, Deolali, Nashik
Organized by : Department of Aerospace Engineering
Total Participation : 32
Expert Name: Ms. Jasmin
Organization: Artillery Camp, Deolali, Nashik
Designation: Field Expert, Artillery Camp
Specialization: Guns, Canons, etc.

Students took the information about the missiles used during war or real time situation in borders. Students got an experience of real models of cannon and missiles made in Japan and Russia. The World War cannons were described in detail to understand the mechanism.



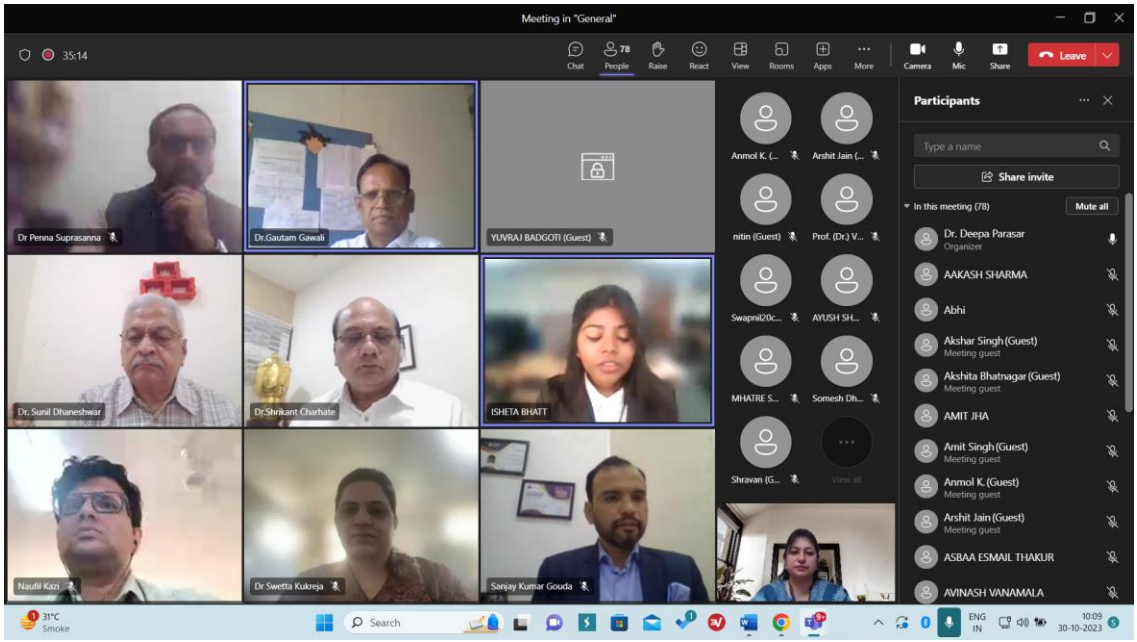
AUMCTF Capture the Flag 2023

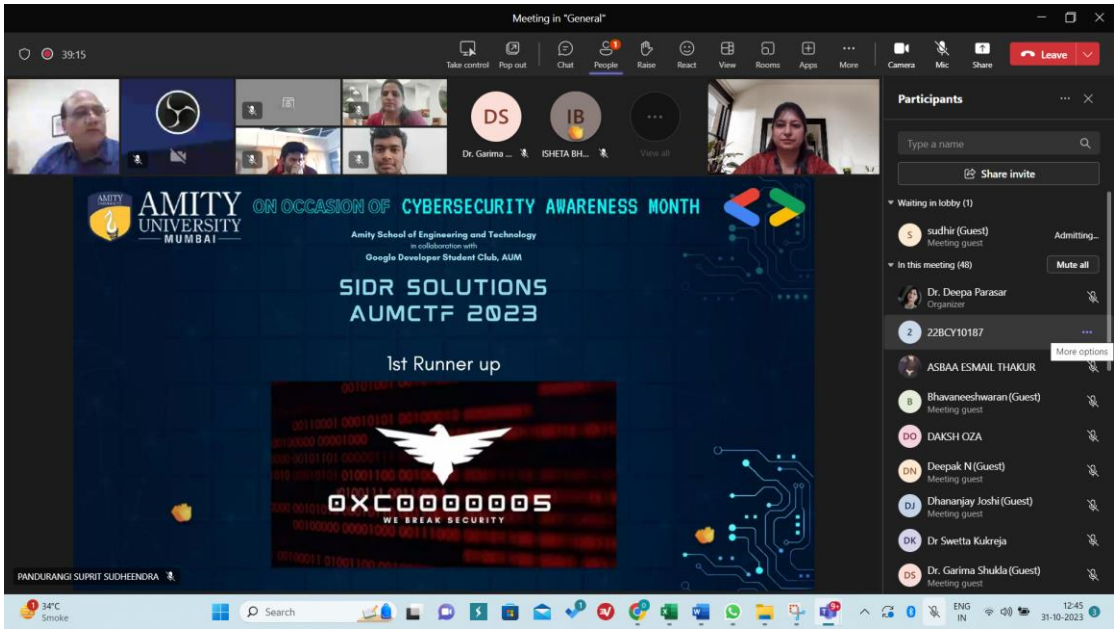
Date of Event: 30th & 31st October 2023
Venue: MSTeams Online
Organized by: Computer Science and Engineering, ASET & GDSC AUM

Total Participation: 160

The SIDR Solutions AUMCTF '23 aimed to foster logic, problem-solving, teamwork, and creativity to tackle real-world cybersecurity challenges and discover new concepts and groundbreaking solutions. The event was attended by students from a variety of courses such as B. Tech, M. Tech and many others. The total number of registrations reached 160, signifying the enthusiasm and interest of students in the cybersecurity domain.

Identify and exploit vulnerabilities: Teams aim to uncover security weaknesses in systems or applications and exploit them to gain access or control. Solve puzzles and riddles: CTF challenges include cryptographic puzzles, steganography, or other types of puzzles that require teams to decipher and solve. Capture flags: The primary goal of CTF challenges is to capture flags or tokens, which are hidden or protected within the target system.
Secure systems: In some CTFs, teams also need to secure their systems or protect against the exploitation of vulnerabilities. Improve cybersecurity skills: CTF challenges served as a platform for teams to enhance their cybersecurity skills, learn new techniques, and gain practical experience. Teamwork and collaboration: Collaboration and effective communication among team members are essential to tackle complex challenges within the time frame of the competition. Win the competition: Ultimately, the main objective is to accumulate points and achieve victory in the CTF competition by completing challenges and outperforming other teams.

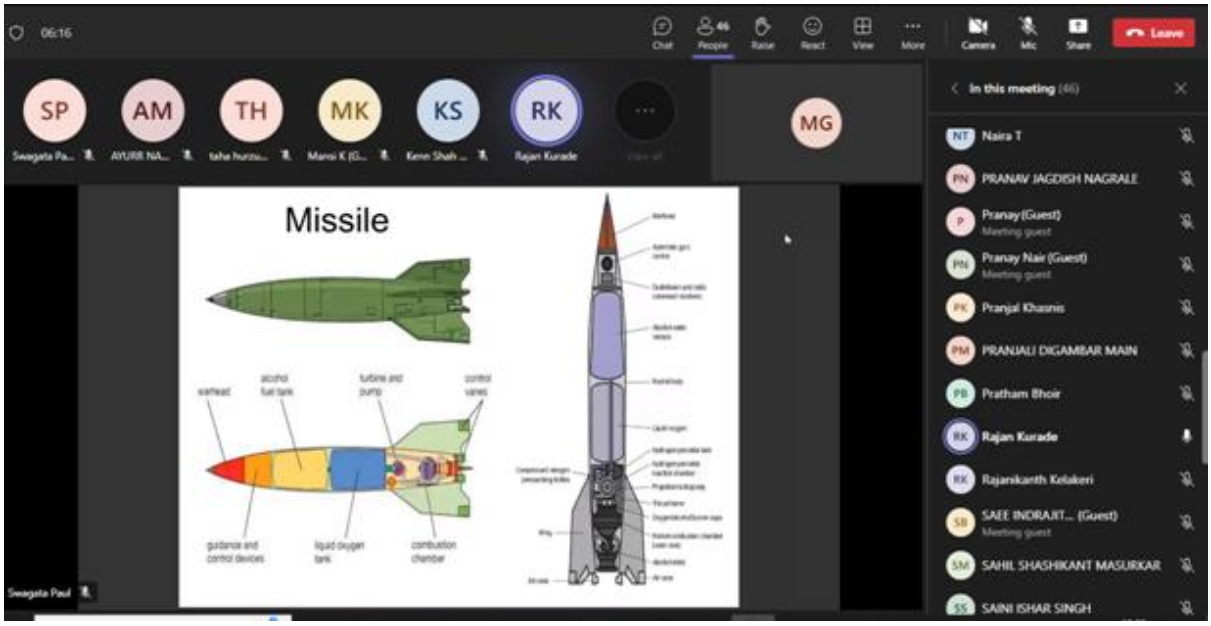




Guest Lecture Session

Date of Event:	13th May 2024
Venue:	Online
Organized by:	Aerospace Engineering, ASET
Total Participation:	55

Fulfillment of course curriculum for B.Tech. AE. Exposure of students in real world applications as well as scope of advance studies and opportunities in the field of Aerodynamics, Aircraft structures and Aircraft materials. Understanding the research work going on in industries, different challenges faced during practical applications and how researchers came up with a solution to those practical problems. Introduction of the students to basic and advanced computational techniques, mathematical modeling of physical phenomenon and advanced experimental techniques. Increased Understanding: The students gain a better understanding of the principles of aerodynamics and fluid mechanics demonstrated through the wind tunnel experiment. They grasp concepts such as air flow, pressure distribution, and lift and drag forces more effectively. Improved Practical Skills**:** The presentation included experiments with the wind tunnel or data analyzing techniques collected from experiments for their better understanding of practical experiments. Enhanced Critical Thinking: By discussing the results of the experiment and its implications, students may develop critical thinking skills. They learn to analyze data, identify patterns, and draw conclusions based on evidence. Inspiration for Further Study**:** Students got an inspiration to pursue further study or careers in fields related to aerospace engineering, fluid dynamics, or physics. It can ignite curiosity and passion for science and engineering.



Poster Competition-Innovation Week 2023

Date of Event : September 27, 2023

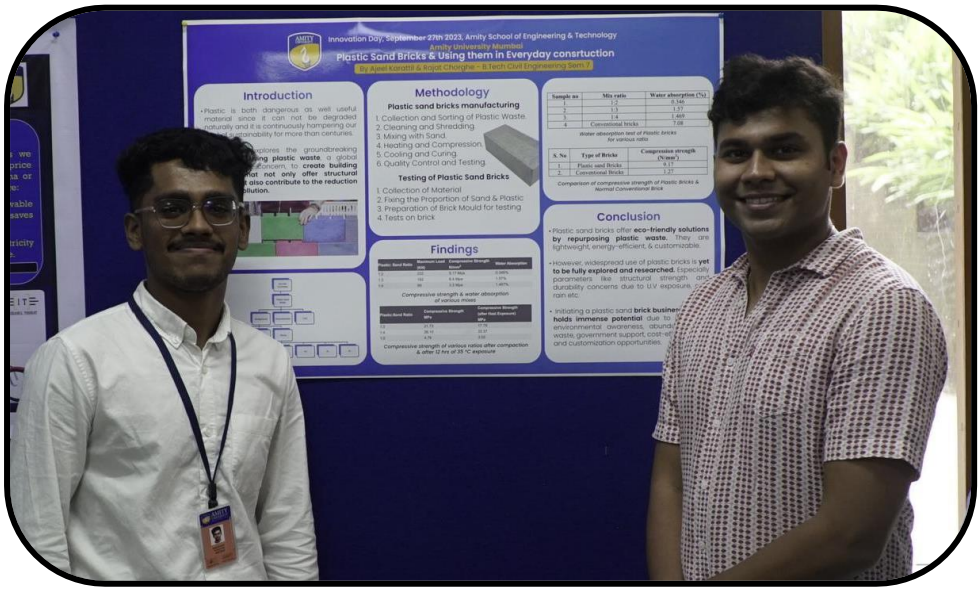
Venue : Old Canteen Area, A2 Block, AUM, Mumbai

Organized by : Amity school of Engineering and Technology

Total Participation : 15

Poster Competition helped students to showcase their research work findings, encouraged innovation, develop skillset and interdisciplinary networking & collaboration. It also promoted the research culture and community engagement. 15 teams from various background of engineering & technology presented their research findings and advance technologies during this Poster Competition. **Objective of the Program** : Amity School of Engineering & Technology, AUM offered a platform to all student to present their posters during Innovation Week 2023.

Benefit in terms of learning/Skill/Knowledge obtained : Concise Communication: Posters require presenters to condense their research or project information into a concise and visually appealing format. This encourages clarity and helps attendees quickly grasp the key points.
Visual Impact: Well-designed posters can have a strong visual impact. They allow presenters to use graphics, charts, and images to enhance understanding and engage the audience. Visual elements can make complex information more accessible. **Interactive Discussions:** Poster sessions often involve one-on-one or small-group interactions. Attendees can ask questions, seek clarification, and engage in in-depth discussions with the presenter. This interactive format fosters a more personalized exchange of information. Honourable Vice Chancellor, Amity University Maharashtra, Dr. A. W. Santosh Kumar sir and respected Dean Academics & Director, Dr. Shrikant Charhate sir visited each presentation deck along with respected Registrar Sir, Dy. Pro-VC sir, Dean Research and Dean IQAC. All interacted with participated teams and gave valuable suggestion to all teams. Also, they appreciated the efforts taken by ASET team.



Internal Smart India Hackathon 2023

Date of Event:	27th September 2023
Venue:	Computer Lab 1
Organized by:	Computer Science and Engineering, ASET
Total Participation:	60

The 2023 Internal Smart India Hackathon was motivated by a strong desire to encourage student innovation, problem-solving, and teamwork. With the ultimate goal of bringing about constructive change in society, the event aimed to inspire attendees to think creatively and propose useful answers for everyday problems. It encouraged students to investigate novel concepts and persist in their search for useful solutions by celebrating the spirit of inquiry and the tenacity of innovation.

NIRMAN 2024 HACKATHON

Date of Event:	2nd May – 3rd May 2024
Venue:	Amity University Maharashtra, Mumbai
Organized by:	Computer Science and Engineering, ASET
Total Participation:	34 teams

NIRMAN aims to transcend national borders, aspiring to attract participants from universities worldwide. The inclusion of participants from various regions highlights Nirman's national impact and the diversity of its talent pool. A total of 82 teams registered for NIRMAN Hackathon 2024's round 1. Students from diverse Indian states like Karnataka, Gujarat, Rajasthan, and Maharashtra joined the event, underscoring its national impact and diverse talent pool. In the online round, 35 teams were shortlisted to proceed to round 2. Mr. Pankaj Attarde, Co-Founder at Cufront Healthcare Technologies Pvt Ltd, and Ms. Sneha Basu Roy, VC & Startup Partnerships, Google India, honored NIRMAN 2024 with their presence, providing invaluable guidance to participants. A notable presence included twelve members from Hackingly, contributing to the vibrant atmosphere of innovation. Across two rigorous rounds, the hackathon witnessed the blossoming of creative solutions. The hackathon rounds were judged by co-founder of Virtual and Beyond, Armtech, Community Manager of Motilal Oswal. Round one meticulously sieved through diverse ideas, funneling toward the most promising concepts. During Round 1, emphasis was placed on ideation, as teams showcased their solutions and underwent evaluations. Each team was allocated 4 minutes to present their projects and an additional 3 minutes for Question & Answers. This segment encompassed discussions on five problem statements: HealthTech Solutions, Traditional Web Development, Web 3.0 Development, Smart Innovation with AI/ML, and Smart City Infrastructure Services. Jury members meticulously assessed presentations and posed domain-specific questions to the participants. Participants enjoyed a one-hour jamming session, offering a refreshing break from coding, uplifting their spirits, and fostering camaraderie among them. During Second round teams presented their solutions for final evaluation. The teams were given 10 minutes to present their solutions. Criteria included functionality, user experience, uniqueness, and technical skills. Winners were selected based on innovation, execution, and presentation.

DRONE SHOW

Date of Event : 29th September 2023

Venue : Amity University Maharashtra

Organized by : Amity School of Engineering & Technology and Amity Institute of Technology, Amity University Maharashtra

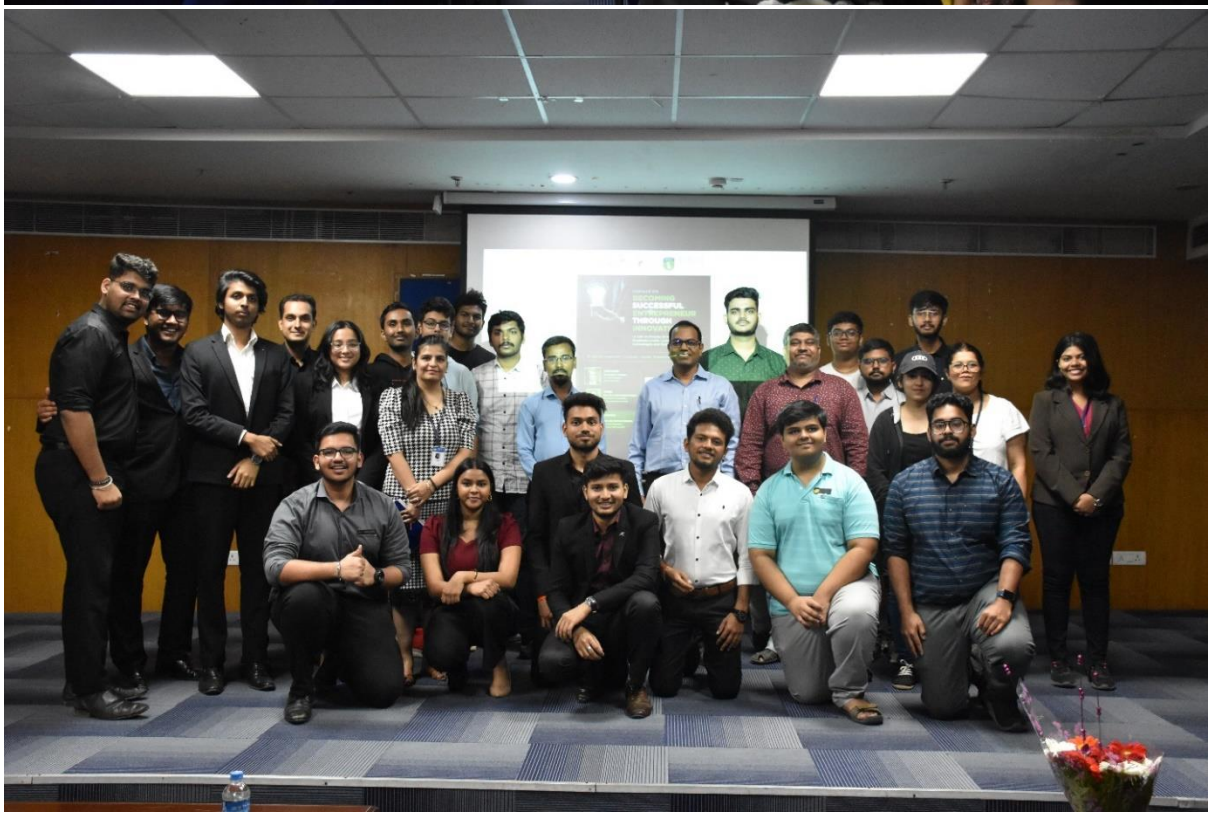
Total Participation : 300 Spectators

Amity School of Engineering and Technology & Amity Institute of Technology, Amity University Maharashtra organized Drone Show during the Innovation Week 2023. Drone show was organized to motivate students enter the evolving area of drones. This event was a precursor to the connected planned events to be held later like design and manufacture of custom drones as well as delve into the research and development of UAV's.

Seminar On Becoming Successful Entrepreneur Through Innovation

Date of Event:	16th February 2024
Venue:	Seminar Hall, A2 Block, Ground Floor.
Organized by:	Amity School of Engineering and Technology and E-Cell, Amity University Mumbai
Total Participation:	190

The seminar on "Becoming Successful Entrepreneur Through Innovation" was aimed to motivate our students and faculty towards entrepreneurship and giving them understanding of how important innovation is for successful entrepreneurial journey. The event was attended by students and faculty members of all schools including ASET, ABS, AIB, etc. The total number of participants was around 190. The main objective of the seminar was to encourage participants to take up entrepreneurial journey as their profession. The seminar also gave participants an opportunity to understand the steps in starting-up their Start-Up and how the mentors at AUM would provide the hand-holding support to the budding Entrepreneurs.



Seminar on "Entrepreneurship and Job Opportunities in Environmental Management "

Date of Event:	25th September (11:00am to 01:00pm)
Venue:	Seminar Hall (Block-2)
Organized by:	ASET & AIT
Total Participation:	150

The seminar on "Entrepreneurship and Job Opportunities in Environmental Management" aims to explore the growing demand for sustainable business solutions and environmental stewardship. It will highlight how entrepreneurship in green technologies, waste management, and renewable energy can drive economic growth while addressing climate challenges. Attendees will gain insights into emerging career paths, business opportunities, and skills needed in environmental management sectors. This seminar seeks to inspire individuals to create innovative solutions that promote both economic and environmental sustainability.

Short Term Training Program

"Next Gen Engineering: Advanced CFD tools, Avionics and AI/ML applications in Mechanical and Aerospace Engineering". The STTP was a 5 day event with total of 6 lecture sessions. Topics for each session were chosen by keeping in mind certain specific objectives which are as follows:

We feel that in Mechanical and Aerospace field, experimental procedure cannot be always an economical way to do research. So, definitely we need to rely on computational results which in turn make us dependent fully on commercial softwares which are very expensive to a single

person to buy many modules. So, we need to know the use of Open Source codes for advance research in CFD and we know the most popular open source codes are Open FOAM.

The inspiration behind taking up the subject of "Advancements in Avionics Technology" for the STTP session stemmed from the pivotal role avionics plays in modern aerospace systems. As aviation technology continues to evolve, the reliance on sophisticated avionics systems for navigation, communication, and control has become more significant than ever. It's clear that the future of aerospace is moving towards smarter, more efficient, and safer aircraft operations. This progress presents a growing demand for skilled professionals who understand these systems and can contribute to their further development.

The inspiration behind choosing the subject of "Fluid-Structure Interaction (FSI)" for the STTP session was driven by the growing significance of this field in various engineering applications. FSI is at the core of understanding how fluids interact with solid structures, a phenomenon that is critical in industries such as aerospace, automotive and civil engineering. This opens up new possibilities for designing more efficient and resilient structures, optimizing performance, and preventing failures. By introducing this subject in the STTP session, We aimed to provide participants with insights into the research going on in this field, enabling them to solve real-world engineering problems more effectively.

The inspiration behind offering "Introduction to Python Programming" in the STTP for aerospace and mechanical engineering students stems from the growing relevance of programming in modern engineering disciplines. Python, with its intuitive syntax and powerful libraries, has become a critical tool for solving real-world engineering problems. In aerospace and mechanical fields, Python is widely used for automating tasks, performing data analysis, conducting CFD simulations, and enabling design optimizations and data analysis. By introducing this course, the goal is to provide students with a strong foundation in Python that help their technical knowledge, allowing them to develop custom solutions for engineering challenges, enhance their computational abilities.

AI and ML are transforming traditional engineering processes by enabling predictive maintenance, optimizing designs, automating simulations, and analyzing large datasets with unprecedented accuracy and speed. These technologies are becoming essential in applications such as aerodynamic modelling, structural health monitoring, manufacturing processes, and autonomous systems. By offering this course, the goal is to expose students for the future of engineering, where AI/ML techniques are integrated into workflows to improve efficiency, innovation, and performance.

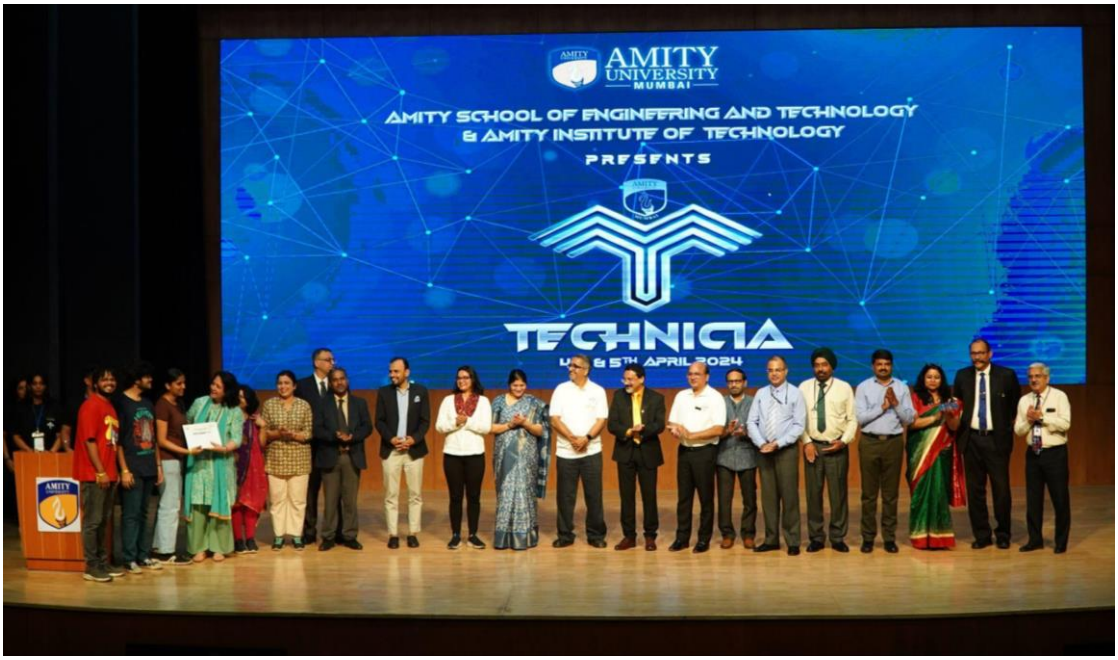

IQAC
Internal Quality Assurance Cell
AMITY UNIVERSITY MUMBAI
AMITY UNIVERSITY MUMBAI
SHORT TERM TRAINING PROGRAM
Next-Gen Engineering: Advanced CFD tools, Avionics and AI/ML Applications in Mechanical and Aerospace Engineering
Date: 9th-13th September, 2024
Mode: Hybrid
(Inauguration and first Lecture Session - Offline mode;
Second Lecture Session Onwards - Online
Venue: Inaugural Session - Seminar Hall, A2 Block,
Date: 9th September, 2024
Time: 1:30 PM - 2:00 PM
First Lecture Session: Room No. 118, A2 Block
Date: 9th September 2024
Time: 2:00 PM - 3:00 PM
Registration link: https://forms.gle/W7HBzHycD2w4wLkv8
QR For Registration:

TECHNICIA 2024

Date of Event : 4th & 5th April, 2024
Venue : Amity University Maharashtra
Hon'ble Guest of Honour : Dr. Gopal Rai
Organisation : Dhinendra Group of Companies, India
Designation : Chief Executive Officer (DGC)

The inspiration behind organizing this event was to give a platform to students all over the country to showcase their talent in 24 different events including Technical Events such as Tech-Chronicles, RoboSoccer, Drone Racing, Float-On, and AI Doodle War, among many others, as well as Non-Technical Events such as Shark Tank, Ad Mad Show, Junkyard, Chess, Room of Dilemma, etc. Amity School of Engineering & Technology and Amity Institute of Technology, Amity University Maharashtra, Mumbai organised TECHNICIA 2024 on 4th & 5th April 2024. The Banner Drop Ceremony for Technicia 2024 was conducted on 3rd April 2024, in the presence of Hon'ble Vice Chancellor Prof. (Dr.) A. W. Santhosh Kumar, Pro Vice Chancellor, Amity University Mumbai and Director In-Charge Amity School of Engineering & Technology and Amity Institute of Technology, Prof. (Dr.) Shrikant Charhate. The ceremony was held, *for the first time*, in the Auditorium, and included an impressive **3D Laser Show** and a Banner Drop that was **Live-Streamed** to the Auditorium screen, along with versatile Music & Dance Fusion Performances, and the day ended with a **Drone Show**, followed by a **Dance Face-off** powered by RedBull. The Inauguration Ceremony was conducted on 4th April 2024, with **Dr Gopal Rai**, founder & CEO of Dhinendra Group of Companies as Guest of Honour. The ceremony started with the Saraswati Vandana and Lighting of Diyas in the presence of the Hon'ble Vice-Chancellor, Pro Vice Chancellors, Deputy Pro Vice Chancellor and Registrar. The audience was addressed by the Hon'ble Dr A. W. Santhosh Kumar, Dr Shrikant Charhate and the Guest of Honour, Dr Gopal Rai. Following the Welcome Address, there were Cultural Fusion Performances, and the ceremony was concluded with a Vote of Thanks by Faculty Coordinators, Prof. Gunchita Kaur Wadhwa and Prof. Ameya J. More. The Technical Festival *TECHNICIA 2024* was attended by more than 8000 attendees, with more than **335 participants** in various events, 56 of whom were non-Amitians. Among the attendees were dignitaries, HOIs, HODs, faculty, staff members and students from various universities across the country. On 5th April, alongside continuing events, an immersive Interview was conducted with esteemed Guest of Honour, Lt. Cdr. Bijay Nair (retd.), 6-time TedX Speaker and a decorated Naval Officer from the Indian Naval Academy, where the guest shared his inspiring background, insights and expertise in the field of Defense Technology with a captivated audience. The audience also included 16 students and 4 faculty members of Arka International School, Hyderabad who travelled to the Amity University Mumbai campus especially to attend this event. After the successful culmination of all events on 5th April, prizes were distributed to the winners of the events by Hon. Vice Chancellor Prof. (Dr.) A. W. Santhosh Kumar, Pro Vice Chancellor, Amity University Mumbai and Director In-Charge Amity School of Engineering & Technology and Amity Institute of Technology, Prof. (Dr.) Shrikant Charhate during the Valedictory Ceremony. A Vote of Thanks was delivered by

the Core Committee members, with a concluding Address and a read-through of a comprehensive Event Report.



Industrial Visit- “High Energy Materials Research Laboratory (HEMRL), DRDO, Pune, Maharashtra”

Date of Event: 28th June 2024

Venue:	High Energy Materials Research Laboratory (HEMRL), DRDO, Pune, Maharashtra
Organized by:	Aerospace Engineering, ASET
Total Participation:	20

Objectives of Industrial Visit:

- Fulfilment of curriculum B.Tech. AE Sem 6 & 8.
- Industrial Exposure to students in areas of High temperature Materials, Propulsion, heat Transfer, Missile Dynamics and Explosives.
- Understanding propulsive contents, composition of its chemical bonding, the variation in missile designs, missiles range enhancement, Maintenance and Quality Assurance processes.
- Exposure to different labs and its function set in 800 acres land.
- Understanding of different bofors, howitzer, tank unit, missile launched via bofors, angle of elevation, criteria of functioning etc.

Outcomes of Industrial Visit:

- Students were able to understand the benefits of Industrial Visit.
- Students were able to explain varieties of shell launchers and its significance based on missiles significance.
- Students got aware with importance of preventive maintenance, designs and fabrication of models, repairing non-working static & rotary components.
- Students got exposure to big highly productive shells with explosive that are sent to IAF, Military and Navy.
- Students also got exposure to Solid Motors and its igniters such as Pyrotech Igniters which are installed inside the shell of projectile.

Industrial Visit- “Reliance Industries Ltd. Nagothane”

Date of Event:	7th March 2024
Venue:	Reliance Industries Ltd. Nagothane
Organized by:	Mechanical Engineering, ASET
Total Participation:	10

Objectives of Industrial Visit:

- Fulfilment of curriculum B.Tech. ME Sem 4.
- Industrial Exposure to students in areas of Polymer Processing Plants.
- Understanding Maintenance and Quality Assurance processes,
- Exposure to big manufacturing machines in centralized engineering workshop.
- Knowledge about Plant Automation, Baggage.

Outcomes of Industrial Visit:

- Students are understood benefits Industrial Visit.

- Students are able to explain varieties of polymers being manufactured at RIL Nagothane and their respective manufacturing processes.
- Students got aware with importance of preventive maintenance, respective maintenance scheduling, repairing non-working static & rotary components.
- Students got exposure to big highly productive special kind of industrial manufacturing machines.
- Students are able to explain automation of baggage filling of polymer pillets.

Workshop on Drone Making

Date of Event:	2nd & 3rd November 2023
Venue:	Tata Lab, A2 Block, Ground Floor.
Organized by:	Department of Mechanical Engineering, ASET & AIT
Total Participation:	41

The workshop on Drone Making was aimed to give our students, faculty as well as industry participants the know how of making drones. The event was attended by students from a variety of courses such as B. Tech, M. Tech and faculty members as well as parents. The total number of registrations reached **41**, signifying the enthusiasm and interest of students in the drones. Drones have become increasingly popular in various industries, from photography and cinematography to agriculture and surveillance. They offer exciting opportunities for innovation and creativity.

The main objectives of this "Drone Making Workshop" were to equip the participants with necessary skills and hands-on practice in following areas.

a) Drone Parts Assemble
b) Virtual Drone flying experience using simulators

c) Soldering Session

Internal Smart India Hackathon

Date of Event:	26th September 2024
Venue:	Computer Lab1

The main inspiration was to select student groups to participate in the Smart India Hackathon 2024 conducted by Ministry of Education. The event provided a platform for students to showcase their innovative ideas and projects from problem statements given by Smart India Hackathon 2024. The novel solutions proposed by students will be sent to the organizing body of Smart India Hackathon 2024 who will then be selecting groups for further rounds.

Workshop on “Converting Innovation into Start-Up with focus on IPR and Cloud Technology”

Date of Event: 22nd – 23rd August 2024

Venue: Amity University Maharashtra, Mumbai

A total of 58 students registered for Workshop on “Converting Innovation into Start-Up with focus on IPR and Cloud Technology” Students from all branches joined the event. Dr. Rajiv Iyer, Registered Patent Agent and Facilitator was the speaker during the event. The event was organized for the Undergraduate as well as Post graduate students of all branches and schools. The objective of the event was to ignite and kindle innovation and Start-Up mindset amongst Amity University Mumbai students. Emphasis was laid on the importance of IPR as well as ways of registering IPR. A session is dedicated on the Start-Up opportunities in Cloud Technology introducing Amazon Web Services (AWS) which offers numerous advantages for startups, making it an ideal cloud platform for new businesses looking to innovate and scale efficiently. The event was Inaugurated by Pro Vice Chancellor, Dean Academics I/C & Director I/C, Prof. (Dr.) Shrikant Charhate and Dean Research & Director AIB, AUM, Prof. (Dr.) Penna Suprasanna. Hon. Vice Chancellor, Prof. (Dr.) A. W. Santhosh Kumar and Pro Vice Chancellor, Dean Academics I/C & Director I/C, Prof. (Dr.) Shrikant Charhate were present for the valedictory function of the event. Ms. Gunchita Kaur Wadhwa delivered the vote of thanks.

Intra Poster and Project Competition

Date of Event: 26th September 2024

Venue: Glass Enclosure old canteen

The main inspiration was to give students exposure to their projects and ideas which can be converted to entrepreneurship opportunities. 47 project groups from Amity School of Engineering and Technology and Amity Institute of Technology of Amity University Mumbai attended the event. The event provided a platform for students to showcase their innovative ideas and projects which can be taken ahead as entrepreneurship opportunities. The projects have real life applications which has potential for research papers/patents.

Industrial Visit to "Gas Turbine Power Station, Uran"

Date of Event: 14th November 2024

Venue: Gas Turbine Power Station, Uran

An Industrial Visit was planned to Gas Turbine Power Station, Uran for the second-year students of B-Tech AE/ME/ AME and ANE. The main purpose of this event was to bridge the gap between the theoretical knowledge and practical Experience of power generation using gas turbines. The executive Engineer of Gas Turbine Power Plant, Uran Mr. Sonawane took us for the visit and explained the various parts and equipment available at Uran Plant.

Industrial Exposure to students in the areas of Thermal Engineering, Heat Transfer and Thermodynamics. Understanding the importance of scheduled preventive maintenance processes. Knowledge about Plant Automation. Students understood the working of Gas Turbine Power Plant and had the privilege to see the Gas turbine which was open for

maintenance. Understood the importance of preventive maintenance, maintenance scheduling, repairing of non-working static & rotary components.

Seminar on “Career Opportunities in the field of Cyber Security”

Date of Event: 18th September (11:00am to 01:00pm)

Venue: Seminar Hall (Block-2)

Organized by: ASET & AIT

The seminar aims to provide an overview of emerging career opportunities in Cyber Security, highlighting in-demand skills, certifications, and industry trends. It will explore various roles, from ethical hacking to security analysis, emphasizing the growing need for cybersecurity professionals. Attendees will gain insights into pathways for building successful careers in this critical field.