

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Daffodil International University

September 2023

SDG 9:

Sustainable Development Goal 9 is about "industry, innovation and infrastructure" and is one of the 17 Sustainable Development Goals adopted by the United Nations General Assembly in 2015. SDG 9 aims to build resilient infrastructure, promote sustainable industrialization and foster innovation.

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DIU's Contribution and progress:

Number of academic staff in STEM disciplines	350+
Number of academic staff in Medicine discipline	100+
Number of academic staff in Arts & Humanities / Social sciences disciplines	150+

DIU's Research Award Giving Ceremony: Recognizing Research Milestone



Daffodil International University (DIU) celebrated a significant milestone with 1000 Scopus/ISI indexed research publications and book chapters in 2022. They honored their faculty members, students, and alumni with certificates, crest and financial reward at the "Research Award Giving Ceremony 2023." The event highlighted the importance of research in contributing to Bangladesh's development goals and recognized researchers for their impactful work. Substantial funds were distributed to researchers, emphasizing DIU's commitment to research excellence and advancing the Sustainable Development Goals (SDGs).

Enhancing Research Capacity: Workshop on Journal Article Publication with PLS-SEM Analysis

The Department of Business Administration at Daffodil International University organized a comprehensive workshop aimed at building the research capacity of faculty members. Titled "How to Publish Journal Articles using PLS-SEM," this day-long event was held on July 20, 2022, at HRDI Conference Room, Daffodil Smart City (DSC). Dr. Muhammad Mehedi Masud, a Senior Lecturer from the University of Malaya, Malaysia, served as the resource person.



Through hands-on training with real research data sets, participants learned essential skills for conducting basic analysis using the Smart-PLS software and presenting their findings in scientific papers.

Fostering Multidisciplinary Collaboration: Highlights from the 1st DIU Multidisciplinary Conference

The inaugural DIU Multidisciplinary Conference, organized by the Department of General Educational Development (GED) at Daffodil International University, successfully promoted collaboration and knowledge-sharing across various fields. Researchers from diverse disciplines presented insightful posters, fostering a rich exchange of ideas and aligning

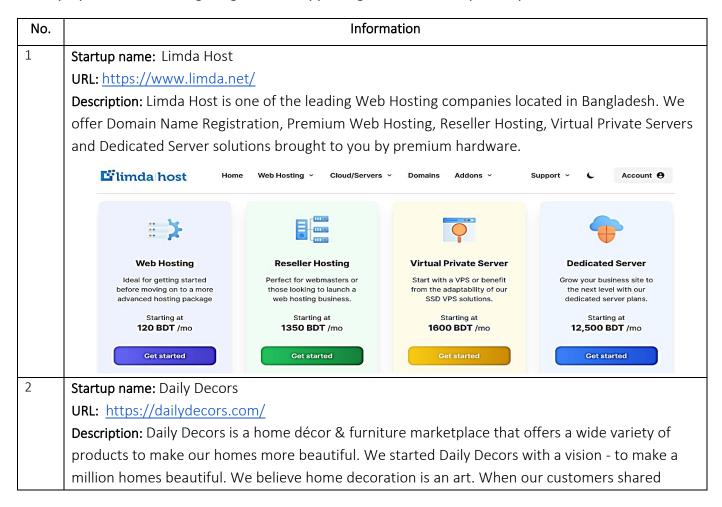


with SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals). The event showcased DIU's commitment to advancing education, research, and sustainable development through multidisciplinary synergy.

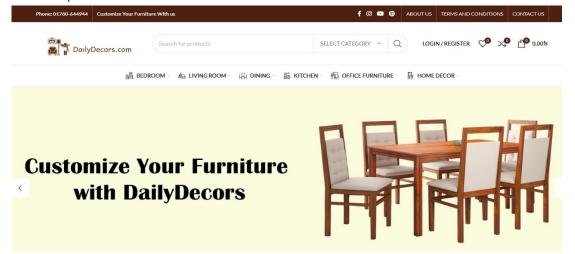
Nurturing Tomorrow's Innovators: The Daffodil Startup Market

Discover the "Daffodil Startup Market," a vibrant initiative by Daffodil International University's Department of Innovation & Entrepreneurship and the Office of the Director of Students' Affairs. Located at AB4 (GF) Daffodil Smart City, this student-led venture promotes entrepreneurship, enhances professional skills, and explores effective marketing strategies. By nurturing entrepreneurial spirit and practical skills, it aligns with Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure), offering a journey into the world of innovation and opportunity for young entrepreneurs.

Startup Spinoff and Training Programmes supporting local community startup



photographs of their homes, we saw they were remarkably distinct. The same table, the same chair was used differently by different people. People want their homes to be unique. We also realized that people are a lot happier creating things than they are buying things. We are a creative, imaginative, expressive species. And our homes are just one of the many canvases we have at our disposal



3 **Startup name:** Damez Digital

URL: https://damexdigital.com/

Description: Damex is a Toronto-based Digital Agency that specializes in Software Development, App Development, and Digital Marketing. We help small businesses actualize their digital goals. We take pride in ourselves for our client retention rate, and our ability to keep clients happy through every step of their journey



4 **Startup name:** Tylo

URL: https://tylo.com.bd/

Description: Tylo is a Bangladeshi e-commerce company. Tylo was established in 2016 with the aim of revolutionizing Bangladeshi e-commerce company. We are creating an online shop where

our goal is to create a trusted e-commerce brand where you can buy your products with utmost confidence



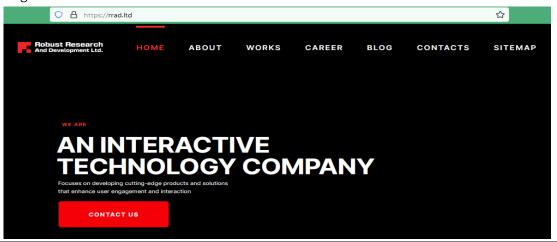
NEW ARRIVALS



5 **Startup name:** Robust Research and Development Ltd

URL: www.rrad.ltd

Description: Robust Research and Development Ltd. is a leading tech company based in Dhaka, Bangladesh. We are specialized in delivering innovative and user-friendly Augmented Reality, Virtual Reality, Games, Simulation, Cross-platform Mobile Applications, and business solution products and services. We believe in continuously researching and developing cutting-edge technologies ahead of the curve.



6 **Startup name:** Ghorer Bazar Bd

URL: https://ghorerbazarbd.com/new/

Description: Ghorer Bazar is ensuring natural and organic products to your doorstep with a hassle-free online shopping experience.



7 **Startup name:** Ichche Initiative

URL: https://icchehaat.com/

Description: People have many kinds of desires. If those desires are not fulfilled, we become emotionally frustrated. The ICCHE INITIATIVE is working to fulfill these desires. The ICCHE INITIATIVE is a combination of "ICCHE, ICCHE SCHOOL, ICCHE TECH and ICCHE Haat". Our job is to know people's hobbies and desires. Then, training them to implement their hobbies and aspirations through the "ICCHE SCHOOL". "Icche Haat". The work of Icchche Initiative revolves around this initiative of Ichche.

- Inspiring the importance of desire.
- Provide peace of mind to students and teach them to verify the right decisions.
- The right direction and training to turn a desire or hobby into a profession.
- Creating self-employment through technology.
- To preserve the heritage of Bangladesh.
- Use of technology to solve problems and build a quality of life through technology.



8 Startup name: UNIECH

URL: www.uniech.com

Description: Uniech is an Information technology services company that helps businesses harness the power of technology to improve their operations. We provide a full range of services, from

strategy and consulting to implementation and support. Our team of experienced professionals has a deep understanding of the latest technology trends and can help you use technology to achieve your business goals.



9 **Startup name:** Jilani Home

URL: https://www.jilanihome.xyz/

Description: Jilani Home has been providing services for the last 5 years. Jilani Home provides services keeping in mind the needs of the customers. Our customers are all tenants and landlords. Here are the services that tenants and landlords can avail from Jilani Home. Services available to the tenant:

- *Search for vacant houses in all areas.
- *Search for vacant houses in preferred area as per requirement.
- * House change service after house search.
- * New home wifi connection service Services available to landlords:
- * Quick rental of vacant houses.
- * Home septic tank cleaning service.
- * House painting service.
- *Home Interior Design Services.
- *Full house maintenance facility.



10 **Startup Name:** Craftiques

url: http://craftiquesbd.com/

Description: "Craftiques" is mainly lead by housewives and girls' rural areas. It usually markets the handcrafted jute goods nationally and internationally. Now it is focusing on the implementation of digitalization to bring diversity into the business.



11 Startup name: Tamasha Closet

URL: https://www.facebook.com/tamasacloset



12 **Startup name:** Choubacca

URL: https://www.facebook.com/Choubacca15

Description: This is a startup that deals in necessary items for households. It is primarily doing its business online through its Facebook page and group. It has been growing day by day.



13 **Startup Name:** The Wardrobe

URL: https://www.facebook.com/wardrobe1122

Description: This is a Facebook-based online clothing shop where quality products are provided at a very reasonable price. This is also a student startup.



14 **Startup name:** Monikanchan

URL: https://www.facebook.com/groups/1871600329672864

Description: This is a startup that deals in ladies wear. It is primarily doing its business online through its Facebook page and group. It has been growing day by day.



15 **Startup Name:** Green Garden Restaurant

url: http://greengarden.daffodil.university/

Description:

Green Garden Restaurant is a student run startup. The Green Garden Restaurant offers a Great tasting and Delicious Varieties foods menu to its Valued customers. The restaurant offers fresh, Organic & Hygiene food providing a pure green view along with a better professional service. Some students of the Department of Tourism and Hospitality Management of DIU run the restaurant. It is one of the IT friendly Restaurant in the country having strong WIFI availability. Green garden is an initiative by the students of DIU and is being used as a Lab of the Department of Nutrition & Food Engineering and Department of Tourism and Hospitality Management of DIU



16 **Startup name:** Meatcall

URL: https://www.facebook.com/meatcallcom

Description: The Meatcall is a student startup that deals in fresh, high-quality cuts of beef, poultry, mutton processed meat. Meatcall takes order both online and offline and delivers fresh and quality meat to its customers.



Mentorship and Training Organized for the local Startups:

1. Mentorship Program on Global Entrepreneurs Week for Startup Entrepreneurs

The Daffodil Entrepreneurs' Club of DIU organized a mentorship programme on Global Entrepreneurs Week for Startup Entrepreneurs. The visionary leader and successful entrepreneur of Bangladesh and Chairman of Daffodil International University, Dr. Md. Sabur Khan conduced a mentoring session based on his experience and learning to grow and sustain a startup. The Global Entrepreneurs Week 2023 will be a great opportunity for those entrepreneurs.



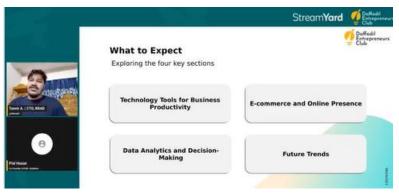
2. Training on Road to Entrepreneurship





Training on Road to Entrepreneurship organized by the Daffodil Entrepreneurship Club in collaboration with the Department of Innovation & Entrepreneurship of DIU for the young startup entrepreneurs. The training was conducted by Mr. Ahsan Rony, Founder & CEO at Travel Bangladesh, and Ms. Afsana Ferdousi, Founder, CEO and Creative Head at Afsana Ferdousi and Co-Founder at Art Artist Artisan. They shared their insights and expertise on entrepreneurship in tourism & hospitality management and entrepreneurship in textile & fashion designing, respectively. It was also an opportunity for them to network with other entrepreneurs, business professionals, and students. The participants got certificates after completion of the training.

3. Session on Unlocking the Potential of Technology for Business Growth: Exploring Tools and Strategies



The Daffodil Entrepreneurs Club of DIU organized an online session on Unlocking the Potential of Technology for Business Growth: Exploring Tools and Strategies. Mr. Tanvir Ahmed Khan, Cofounder & Chief Technology Officer, Robust Research and Development Ltd. was the Keynote Speaker. The entrepreneurs from students and local startups took part in the programme and learnt a lot from the expert.

4. Session on Startup Business and Bank Financing



The Daffodil Entrepreneurs' Club organized a Session on Startup Business and Bank Financing with a view of unraveling the Secrets of Startup Success and Bank Financing. The session was addressed by Mr. Md Kafi Khan, Company Secretary, The City Bank Limited. He highlighted the keys to unlocking their startup's potential and securing the bank financing they need to take it to the next level. Mr. Kamruzzaman Didar, Assistant Professor & Head, Department of Innovation & Entrepreneurship, DIU chaired the online session. Local startup owners took part in the session.

5. Session on "How to Start Export Business in SME Scale"

An online session on "How to Start Export Business in SME Scale" and unlock the secrets to international success was organized by the Daffodil Entrepreneurs' Club. Mr. Jahid Hussain, an experienced International Business Development professional in the field of Pharmaceuticals, Electronics and Food & Beverage sector was the trainer.

Learnings of the session were:

- ✓ New Export Market Identification
- Finding product opportunities
- ✓ Global market analysis process
- ✓ Pricing, marketing & promotional activities



6. Workshop on Unlock the Power of Content Marketing for Startups



- Content marketing strategies
- •Create content aligned with startup goals.
- •Track content impact effectively.

Daffodil Entrepreneurs' Club of DIU organized a workshop on "Unlock the Power of Content Marketing for Startups" to learn how to craft compelling content that drives growth and engagement. The workshop was addressed by Mr. Debabrata Bhowmik, Sr. Principal Officer, Brand Research & Development, Marketing & Communications, Walton Hi-tech Industries Plc.

Learnings of the workshop:

- The basics of content marketing
- How to create content that is relevant, engaging, and informative for your startup

7. Workshop on Fundraising for Startup

A workshop on **Fundraising for Startups** was organized by the Daffodil Entrepreneurs" Club in collaboration with the Department of Innovation & Entrepreneurship of DIU. The speaker of the workshop was Mr. Mahfijur Rahman, Investment Associate (Venture Capital & Private Equity), Bangladesh Venture Capital Limited.

Learnings of the workshop:

- 1. Crafting a compelling investor pitch.
- 2. Exploring different funding options.
- 3. Building valuable networking connections
- 4. Strategies for scaling with raised funds.
- 5. Overcoming fundraising challenges.



8. Online Session on Public Speaking



An online session on Public Speaking was held at Daffodil International University for the young entrepreneurs to discuss and train them to know how to deliver a compelling presentation that will be widely accepted by the audience. Mr. Md Monjur, Director, Mahtab's Care and Former President, Dhaka University Entrepreneurship Development Club.

Learnings of the session:

- 1. How to convey your ideas clearly and persuasively
- 2. How to boost your confidence
- 3. How to make your speech more engaging with audience
- 4. How to manage anxiety and nervousness
- 5. How to respond confidently to the audiences

Contributions to Knowledge:

The researchers of Daffodil International University conducted research and subsequently published the research results in reputed journals that contributed to the knowledge domain of SDG-9. Below is a highlight of such contribution:

SL	Article Title
1	Construction 4.0 Technologies and Decision-Making: A Systematic Review and Gap Analysis
	Development, Application, and Performance of Artificial Intelligence in Cephalometric Landmark Identification
2	and Diagnosis: A Systematic Review

3	Tuning the electronic, phonon, and optical properties of monolayer BX (X[dbnd]P and As) through the strain
3	Novel approach of anti-resonant fiber with supporting 64 orbital angular momentum modes for optical
4	communication
	Can Companies Make Green Innovation a Reality by Means of Corporate Environmental Responsibility? The
5	Mediating Role of Environmental Subsidies
	Can guava (Psidium guajava) leaf extracts develop an indigenous, simplified tool for a semi-quantitative
6	assessment of iron in groundwater?
	Coding Metamaterial Analysis Based on 1-Bit Conventional and Cuboid Design Structures for Microwave
7	Applications
8	Exothermic chemical reaction of magneto-convective nanofluid flow in a square cavity
9	Dosimetric characteristics of Gd-doped silica glass subjected to neutron and gamma irradiations
	The Strategy of Factors Influencing Learning Satisfaction Explored by First and Second-Order Structural
10	Equation Modeling (SEM)
11	Robotics in surgery: Current trends
	MANIAL 40. A walk yet alkallar va agreely tiegral was walk as to add to a farming a helation at only an anadical impagra
12	MNet-10: A robust shallow convolutional neural network model performing ablation study on medical images assessing the effectiveness of applying optimal data augmentation technique
12	assessing the effectiveness of applying optimal data augmentation technique
13	SkinNet-16: A deep learning approach to identify benign and malignant skin lesions
	Study of certain congenital malformations due to low-level radiation exposures from high background radiation
14	areas
15	Removal of Copper from spiked Aqueous Solution Using Activated Carbon of Rice Husk
16	A Blockchain-Enabled Distributed Advanced Metering Infrastructure Secure Communication (BC-AMI)
17	Overview of Different Modes and Applications of Liquid Phase-Based Microextraction Techniques
18	Magnet integrated fabric phase sorptive extraction as a stand-alone extraction device for the monitoring of benzoyl urea insecticides in water samples by HPLC-DAD
19	Transfer Learning for Sentiment Analysis Using BERT Based Supervised Fine-Tuning
20	A Proportional Scheduling Protocol for the OFDMA-Based Future Wi-Fi Network
21	Advanced Switching Sequences Based Model-Predictive Control for Single-Phase NPC Converters
22	Real-Time Obstacle Detection over Railway Track using Deep Neural Networks
23	Mouse Cursor Movement and Control using Eye Gaze- A Human Computer Interaction
24	A Deep Learning-Based Approach to Image Captioning in Bengali

25	Clustering-Based Under-Sampling with Normalization in Class-Imbalanced Data
	Effect of Dataset Size and Hidden Layers on the Stability Classification of IEEE-14 Bus System Using Deep
26	Neural Network
27	A Novel Compound Feature based Driver Identification
28	Prediction of Agoraphobia Disease Based on Machine Learning
29	Sentiment Analysis of Public on Social Media about Covid-19 origin theory using Machine Learning
30	Deep Learning Based Sentiment Analysis from Bangla Text Using Glove Word Embedding along with Convolutional Neural Network
31	Machine Vision Based Papaya Maturity Recognition
32	A Machine Learning Based Approach to Predict Online Gaming Addiction in the Context of Bangladesh
02	BanglaHandwritten: A Comparative Study among Single, Numeral, Vowel Modifier, and Compound Characters
33	Recognition Using CNN
34	Credit Approval Decision using Machine Learning Algorithms
35	ML-DP: A Smart Emotion Detection System for Disabled Person to Develop a Smart City
36	Parallelizing Image Processing Algorithms for Face Recognition on Multicore Platforms
37	Enhanced Thermal Stability and Synergistic Effects of Magnesium and Iron Borate Composites against Pathogenic Bacteria
38	Identifying optimised speaker identification model using hybrid GRU-CNN feature extraction technique
39	Testing React Single Page Web Application using Automated Testing Tools
40	SemEval-2022 Task 3: PreTENS - Evaluating Neural Networks on Presuppositional Semantic Knowledge
41	Detection of Copy–Move Image Forgery Applying Robust Matching with K-D Tree Sorting
42	Bangla Font Recognition using Transfer Learning Method
43	SCMA: A Lightweight Tool to Analyze Swift Projects
44	A Secured Peer-to-Peer Messaging System Based on Blockchain
45	Flower Recognition Using VGG16
46	Big Data Distributed Storage and Processing Case Studies
47	Medical Imaging a Transfer Learning Process with Multimodal CNN: Dermis-Disorder
48	Signal propagation parameters estimation through designed multi layer fibre with higher dominant modes using OptiFibre simulation
49	A Framework for Covid-19 Vaccine Management System Using Blockchain Technology
50	A Review on Disease Detection from Medical Images using Machine Learning

Activities and Events:

Empowering the Future: Navigating the Fourth Industrial Revolution with Enterprise CMS

Daffodil International University (DIU) took a significant step towards embracing the Fourth Industrial Revolution by organizing the seminar, "Unlocking the Power of Enterprise CMS in Omnichannel Business." In collaboration with Brain Station 23 Ltd., a prominent IT leader, DIU aimed to empower its CSE & IEE student branch with insights into Enterprise Content Management Systems (CMS). This event aligns with SDG 4



(Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure) by preparing students for the technological challenges of the future. Kudos to DIU and Brain Station 23 Ltd. for this transformative seminar!

DIU Excels at Robo-Tech Olympiad 2023, Showcasing Excellence in Robotics



Daffodil International University (DIU) achieved significant success at the Robo-Tech Olympiad 2023, organized by Mawlana Bhashani Science and Technology University in collaboration with Robotic Valley. DIU emerged as the overall champion and secured the first runner-up position in the "Robo Soccer" competition. They also clinched the fourth runner-up position in the "Project Showcase Senior" category. This success, among 250 students from 70 universities, reflects DIU's dedication to innovation and technological advancement, aligning with its commitment to

excellence in education and research in line with the SDGs.

Inaugural National Fintech Cybersecurity Hackathon 2022

Daffodil International University (DIU) and the ICT Division of Bangladesh joined hands to host the first-ever National Fintech Cybersecurity Hackathon. With more than 120 participants from across the nation, this event aimed to address cybersecurity challenges in the fintech industry, aligning with Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure). Notably, this hackathon also plays a role in the upcoming movie 'Antorjal (Internet)' directed by Dipankar Dipon. The participants showcased 40 innovative projects with the potential to enhance fintech cybersecurity. Senior Secretary Mr. NM Zeaul Alam from the ICT Division graced the event as the chief guest.



DIU Industry-Academia Lecture Series 2023: Fostering Synergy for Development

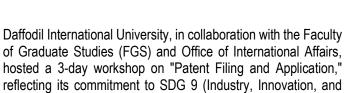
Daffodil International University (DIU) launched the second phase of its 'Industry-Academia Lecture Series,' reaffirming its commitment to fostering collaboration, a key aspect of the Sustainable Development Goals (SDGs). Sheikh Nasir Uddin, Chairman of Akij Group, served as the keynote speaker, acknowledging the contributions of private sector entrepreneurs in Bangladesh. The event, organized by DIU's Industrial Innovation Center, highlights the university's

dedication to bridging the gap between academia and industry. This initiative plays a crucial role in promoting economic growth, innovation, and sustainable development, aligning with the SDGs.



Empowering Innovation:





Infrastructure).

Led by Mr. Akarsh Sharma, a seasoned Business Analyst with twenty registered patents in India, this workshop empowered participants to navigate the intricate world of patent design and filing. By fostering innovation and safequarding intellectual property, the event reinforced SDG 4 (Quality Education) and contributed to the growth of a knowledge-based society.

Connecting Education with Industry: DIU's Industrial Visit:

students Daffodil The of University continue to bridge the gap between academia and industry, aligning with SDG 9 (Industry, Innovation, and Infrastructure). In their ongoing commitment to hands-on learning, a group of students embarked on an industrial visit to FM Plastic Industries LTD. in Narsingdi and Transcom Beverages Ltd. (Pepsi) in Gazipur, Bangladesh GrameenPhone Ltd.; Anwar Cements. This initiative (Quality underlines SDG 4 Education) providing by



students with practical knowledge and insights into the latest technologies in the plastic industry.

IoT Fest 2023: Fostering Innovation and Collaboration in Bangladesh

The IoT Fest organized by the IoT Lab at DIU's Department of Computer Science & Engineering showcased innovative IoT projects, promoting collaboration and innovation in line with SDG 9 (Industry, Innovation, and Infrastructure). Industry leaders shared insights, and the event highlighted Bangladesh's potential in the IoT landscape, contributing



to sustainable development goals. Stay tuned for more innovations from the next generation of IoT pioneers in Bangladesh!

Innovation for a Sustainable Future: Sheikh Naeem Hasan Moon's Triumph at 44th National Science and Technology Week 2023

Sheikh Naeem Hasan Moon, a student from Daffodil University's Department of Innovation & Entrepreneurship, achieved 1st Runner-up in the 44th National Science and Technology Week 2023 for developing an Al-based Hackerbot. This innovative solution aligns with Sustainable Development Goal 9 - Industry, Innovation, and Infrastructure, showcasing the power of technology to address global challenges. This accomplishment reflects the importance of nurturing innovation and entrepreneurship for a sustainable future and serves as an inspiration to all.





AWS Cloud Day Bangladesh 2023: Empowering a New Generation of Tech Experts

Amazon Web Services (AWS) is collaborating with local technology training partners, including Daffodil International Professional Training Institute (DIPTI), to train 50,000 cloud technocrats and cybersecurity experts in Bangladesh. This initiative aligns with the UN Sustainable Development Goals (SDGs) by promoting technology education and skill development.

DIU and DIPTI recently co-hosted the "Amazon Web Services Cloud Day" in Dhaka, featuring 10 AWS experts and attracting a diverse audience. The event provided deep insights into AWS technologies, fostering innovation and growth opportunities, and contributing to technology-related SDGs and Bangladesh's IT ecosystem.

Robotics Showcase: Nurturing Talent at Daffodil International University

Daffodil International University hosted an exciting line-following robot competition organized by Daffodil Robotics Lab. This event provided students with a platform to showcase their robotics skills and enhance their learning outcomes. Participants had to design and assemble personalized robot chassis using 3D design software and CNC machines, bringing their creations to life with robot software. With 40 enthusiastic teams, the competition highlighted the importance of hands-on experience in the field of robotics.



Empowering Innovation: Highlights from the Global Entrepreneurship World Cup National Final 2022



alignment with the Sustainable Development Goals (SDGs).

Daffodil International University, in collaboration with GEN Bangladesh, hosted the National Final of the Global Entrepreneurship World Cup. The event featured 79 teams from colleges and universities, with 21 teams advancing to the semi-finals. Team Westech, Ministry of Codes, and Robust Research & Development Ltd emerged as champions in the Idea, Early, and Growth Stages, respectively. These national champions will compete in the Global Final, promoting entrepreneurship and innovation in