

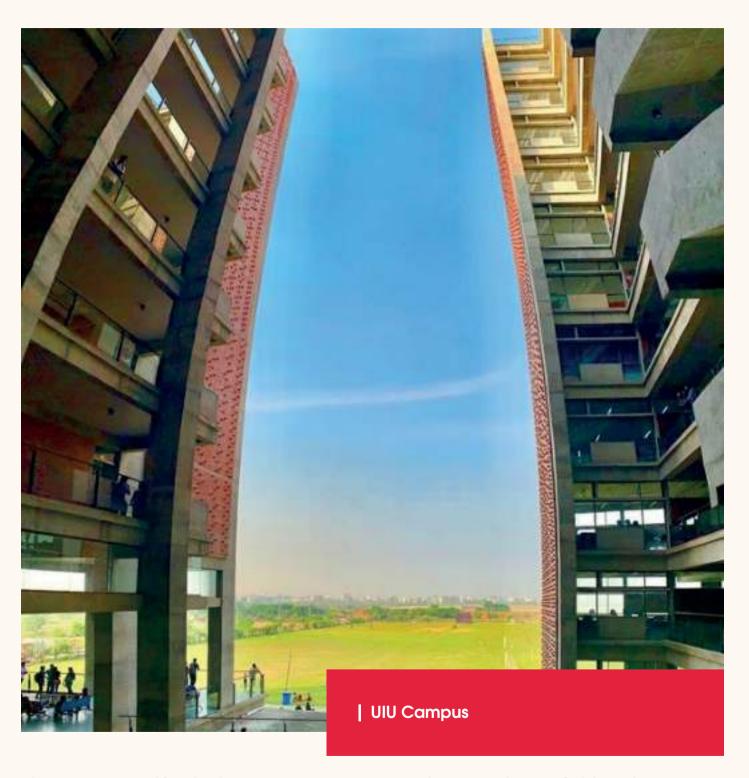
# SDG REPORT 2022



United International University

Dhaka, Bangladesh

United International University (UIU) aims at training the young people to be skillful problem solvers with critical thinking ability while serving the community with passion. Sustainability is the prime objective of the different programs run by UIU regardless whether it is environmental and developments studies, business or engineering programs.



The campus itself is the largest green campus with a vast playing field, and minimizes carbon footprint with renewable energy sources. UIU offers affordable education, accommodation, food and transportation for employees and students. It has established a culture of promoting research and innovation to help the local communities through employment, funds, training and counseling.

## SDG 1: No poverty

UIU is convinced that inclusive Economic Development is the key to providing sustainable jobs and promote equality. Our employment policy ensures equitable opportunities and benefits for the employees that contribute to addressing poverty. Our scholarship policy ensures economic support for the students, irrespective of gender and financial status allowing scope of higher studies. Our interdisciplinary research activities contribute to augmenting knowledge about approaches to poverty alleviation, which makes impact on policy processes of poverty reduction. In 2021, 104 students as Freedom Fighter's Children, and 237 students as talented but low-income family were awarded full free study grants and 1,087 students were awarded merit-based scholarships. Waiver of tuition fees was given to 1,209 students.

## **Policy and Actions**

- 01. We have an effective scholarship scheme to attract low income group students. Almost over 75% of students get scholarships and waivers every year.
  - . Scholarship scheme
  - . Scholarship Extra Meritorious
  - . Freedom Fighter
- 02. Targeting students from low-income groups. The admission office and PRO office will take necessary action.
- 03. UIU Always tring to help low-income group students to complete their studies. In 2020, out of 690 graduates, 398 students got scholarships/waivers.
- 04. The University shuttle services are completely free of cost. The transport service of UIU has a minimal fee in a trimester. UIU also provides both male and female hostels that are managed by UIU, and the fees are reasonable compared to its services.
- 05. UIU offers a 75% waiver for Somaville University students in Somalia in Africa in a distance-mode education. All foreign students get a 25% waiver if they physically stay in Bangladesh and take admission at UIU.
- 06. CER, CDIP, CISCO, IBER, VLSI, PETA will take necessary training programs for growing up with sustainable business and encouraging students to do so.
- 07. UIU always welcomes students to build a startup company. UIU Entrepreneur Forum regularly arranges programs on a start-up business.

- 08. All concerned departments must arrange continuous programs on Health (covering nutrition, child mortality) and Standard of Living (covering cooking fuel, sanitation, drinking water, electricity, housing, and assets).
- 09. IDSS will take necessary steps to participate in local, regional, national, and/or global policymaking to end poverty in all its dimensions.

## **Scholarships**

United International University provides the highest tuition fees waiver among all universities in Bangladesh. Every trimester, 15% of the top students in each class are automatically eligible for 100% scholarships that help them get a free education without paying any tuition fees. This year, a nominated student from an NGO called "Happy Home" got a 50% waiver on tuition fees to continue her educational journey with United International University.

### **Student Services**

UIU providies the following services to the students:

#### ■ Shuttle Service

A free shuttle service is offered by the university that provides five buses on different routes with 112 up and down trips per day to the nearest transportation hub, and, can carry up to 40 students per trip. If a student uses a local vehicle for that purpose, he has to pay at least 60 Taka for an up and down trip every day. So, the total subsidy on transport through the Shuttle Service is around 13,4400 Taka per day.



UIU students standing in line for the shuttle bus

## **Long Route**

Nearly 12% of total students in a year use transportation provided by UIU on a long route for 1,000 Taka per month, which is about 25% of the monthly cost from using public transportation. Therefore, United International University provides 75% of savings for transportation to the students.

UIU Double Decker bus for the long route



### Food

A standard lunch packet costs around 140 Tk to 150 Tk outside, whereas United International University provides it for only 60 Tk to 65 Tk. Students have to pay only 45% of the cost, and the university contributes nearly 50%-55% of the total.



UIU Food Court

#### **Accommodation**

A standard home nearby the campus area costs around 7,000 TK for a student to stay for a month, while the dormitory facility provided by the United International University is almost 25% less than that. This gap is filled by the university authority as a subsidy to promote educational equality regardless of income group. Apart from that, in the year 2021, due to the pandemic, the university has taken only 25% of the above mentioned amount from all the students, and the remaining 75% has been considered a social contribution to prevent families from falling below the poverty line.

#### Research Funds

United International University provides research grants twice a year to encourage social development through innovation and knowledge creation. In the year 2021, it provided around 1,79,98,114 Tk in research on multidisciplinary fields including Business, Economics, Science and Engineering.

Inauguration of Brain Computer Interface (BCI) Research Lab



## **Entrepreneurship Conference**

United International University has arranged 30 day-long seminars, conferences, and workshops in 2021 to encourage, promote, and guide local entrepreneurs and communities, including students, to think about their own start-up and how to become successful regarding entrepreneurial activities to create job opportunities for the society as a whole to fight against poverty.

Seminar on Entrepreneur Mind"



### **International Students**

United International University provides a 25% tuition fee waiver to all international students coming from lower and middle income countries like Somalia, Nigeria, and Bhutan. Also a merit based 100% tuition fees waivers are given to Palestinian students.



Foreign students of UIU

## **Local Startups**

United International University is supporting two startups. CMED and Edusoft working in the health and education sector. In addition to that progress is made to establish an Incubation Center (5000+sqft) with all support (seminar, lobby, workplace, networking, IT infrastructure) needed for the local startups to bloom with the support from the university.

## SDG 3: Good Health and Wellbeing

Ensuring students' healthy lives in the campus is our all-out sincere concern and attention, and we make it possible by making the campus environment healthy, we kept 40% space of the building open surrounded by two large playgrounds. We have adequate indoor games facilities, prayer rooms along with sufficient supply of safe drinking water to support an environment of wellbeing for the students and the staff. Furthermore, hygiene and sanitation levels are quite satisfactory, medical doctor's service is available to all concerned in this campus. Counseling by each and every faculty member is ensured as part of a holistic education system. Co-Curricular social and cultural activities are promoted for the students through various student clubs. Our scholarship program relieves the financial burden of the students contributing to their overall wellbeing. UIU is a non-smoking campus. UIU focuses on research and policy advocacy to serve all strata of people in the society as well as the underprivileged to ensure and promote wellbeing for all. There's an extensive range of projects and through partnerships with healthcare service providers and NGOs that bring greater levels of access to healthcare services for those with limited resources. The AIMS Lab at UIU illustrates and exemplifies this approach as it is serving 3.3 million people for improving their health and wellbeing in partnership with business organizations, CMED, and NGOs.

## **Policy and Actions**

- 01. UIU is a non-smoking campus. Immediate expulsion is carried out if possession of any trace of drug is found with any student.
- 02. UIU Medical Center will ensure the student sexual, mental and reproductive health-care services including information and education services. General events need to be arranged to grow awareness among the students.
- 03. UIU ground can be used by local schools/colleges/universities or general people by prior permission from the authority.

### **Local and Global Collaborations**

UIU established successful collaborations with 50+ national and international health organizations.

## Advanced Intelligent Multidisciplinary Systems Lab (AIMS Lab) BCI Lab:

This Brain-Computer Interface (BCI) Research Lab in Advance Intelligent Multidisciplinary Systems Lab (AIMS Lab) at United International University was established with funding from the Bangladesh Hi-Tech Park Authority (BHTPA), ICT Division. This Lab is playing a very effective role in enhancing the research and development capacity in the fields of Human-Computer Interface, Brain Machine Interface, Biomedical

and Rehabilitation Engineering in Bangladesh. This Lab ensures opportunities for Neural Engineering research and its applications in Bangladesh. The successful execution of research works in this lab will create new knowledge and interventions for impacting human lives with opportunities for commercialization in Bangladesh for the first time.

Inauguration of BCI Lab in UIU on 12 December 2021 by the state minister of Information and Communication Technology (ICT) Division.



#### Some of the projects going on between July 2021 to June 2022:

- Market brain
- Deep Depression
- Bolte Chai plus
- AIMScribe
- Smart Reception
- Adcare
- Virtual Eye Doctor
- Smart Autism Barta.

#### MarketBrain: An EEG-based intelligent consumer preference prediction system

Neuromarketing, a Brain-Computer Interface (BCI) based marketing research approach, uses brain signal recordings to analyze and predict consumer response to marketing stimuli. In developed countries, Neuromarketing is being vastly explored in academic research and it is successfully running as an industrial platform as an alternative to traditional market evaluation techniques. We are proposing to build the very first local Neuromarketing platform in Bangladesh by utilizing BCI and adapting industry 4.0 technologies. Our intelligent system will identify consumer engagement with the advertisements based on consumers' cognitive and emotional responses measured from neural and physiological signals. This platform will provide our local businesses cost-efficient customized solutions and will make our footprint in the world. The project is funded by UIU IAR (Institute of Advance Research)

The MarketBrain system is collecting consumers' cognitive and emotional responses on advertisements



## Deep Depression: Diagnostic Tool for Early Identification of Depression Biomarkers.

Depression is one of the most common mental illnesses that affects millions of lives every year and is expected to become a major cause of the devastating disease by 2022. According to World Mental Health Survey, every day we have seen almost 3000 suicide cases and about 60,000 cases have been found who may attempt to end their lives. So this mental health problem needs to be identified and eradicated immediately. To tackle this situation, a multidisciplinary team from different professions as such researchers, engineers, and psychiatrists are going to design and develop a screening system to determine the depression biomarkers within human brain by analyzing the brain signals with the help of BCI (Brain-Computer Interface) technology to identify depressed people more efficiently. Through this, proper identification will reduce the risk of death due to daily depression and it will help a person to lead a healthy and normal life.

#### **Bolte Chai Plus:**

In order to ensure that everyone may express their preferences, the founder and Director of AIMS Lab, Prof. Dr. Khondaker Abdullah AI Mamun investigated and createda solution for people who are unable to speak. He created a smartphone based app in accordance with their needs. 'Bolte Chai Plus' is an Android mobile application developed for verbally challenged ASD children. This Project is funded by the Information and Communication Technology Division (ICTD), in collaboration with AIMS Lab, UIU, Neuro-Developmental Disability Protection Trust (NDDPT), the Ministry of Social Welfare of the government of Bangladesh & Tauri Foundation.

#### AIMScribe: Automated and Intelligent Medical Scriber for Doctor Patient Conversation

According to WHO, there are only around 5 doctors available to serve the 10,000 population in Bangladesh which ranked this country second from the bottom among the south Asian countries. Hiring medical scribers who will be engaged in summarizing doctor-patient encounters to reduce the administrative load from the doctor might seem like an effective solution. But, it will increase the medical cost which is also a major problem for the LMICs (Low-Middle Income Countries) like Bangladesh. To build the bridge between increasing the practice of using Electronic Health Records (EHRs) and reducing cognitive loads from the clinicians, AIMSribe (Automated and Intelligent Medical Scriber) comes as a cost-effective solution. AIMSribe combines the technology of ASR to convert speech into text and Natural Language Processing (NLP) techniques.

### **Smart Reception:**

The overall objective of this system is to design and develop an Artificial Intelligence-based system that can interact with the target audience in banks, universities, and hospitals and answer their queries and questions where the main medium of communication is the Bengali language. The proposed system spans computer vision and natural language processing. Furthermore, two crucial aspects play a role in the overall functionality of the system. 1) A fully annotated face dataset of people in Bangladesh. 2) An annotated speech dataset around a human receptionist. The proposed system is the very first artificially intelligent-based system providing such assistance to its target audience (mainly schools, universities, and banks) in Bangla.

#### **ADCare:**

The ADCare system is a smart application for Alzheimer's disease (AD) screening, monitoring, increasing awareness and resource mapping. The main users of this system are 1) people of developing countries having no or limited medical services and professionals available for AD and 2) physicians and AD caregivers living in different location who can help the patients with screening as well as maintenance using an automated system. The system will show a list of AD caregivers and healthcare centers or, doctors with their location maps so that the patient can find out the nearest place to get help. This project will increase awareness among people about AD and gather the exact situation of AD in Bangladesh including prevalence and existing facilities like other countries in the world.

### **Virtual Eye Doctor:**

A Cloud Based Smart Application for Eye Care in Bangladesh.

In Bangladesh, blindness is a public health issue. Approximately 1.52 percent of the total population in Bangladesh is blind and 150 thousand people become blind every year. To resolve this problem, AIMS Lab created a smart mobile application known as "VirtualEyeDoc". This app has two main sections. The first one is eye related screenings and the second one is providing some basic knowledge about eye and eye disease symptoms. Besides that, the health volunteer has the ability to refer a potential patient to a specialist or to a hospital which can help to improve the overall eye care situation in Bangladesh. This project is funded by the Information and Communication Technology Division (ICTD) of Bangladesh Government.

A person with eyesight problem is being tested with VirtualEyeDoc app.

#### **Smart Autism Barta:**

If autism can be identifed at an early stage, it can be said for sure that children with autism will not be a burden to the society; they can also play a vital role in various activities in the society. 'Smart Autism Barta' is a mobile-based, interactive, community based screening tool used to diagnose and monitor autism. Parents, physicians, trained health professionals can use this app and website to learn about autism screening and what to do next. Smart Autism Barta is a a2i funded project. A MoU is signed between AIMS Lab, UIU and Neuro-Developmental Disability Protection Trust (NDDP Trust) of The Ministry of Social Welfare of the government of Bangladesh. Link to the website: https://www.smartautismbarta.org/. Newspaper coverage of this initiative: https://www.newagebd.net/article/166979/world-autism-awareness-day-today

The AIMS lab has signed MoUs with Neuro-Developmental Disability Protection Trust (NDDP Trust) and Tauri Foundation to work with the community in this regard. Also several other innovations regarding tools for disease screening brain computer interaction for identifying Depression and Suicidal Biomarkers using Neural Connectivity Analysis of Human Brain has been developed. These along with the innovations from CMED health which is a startup supported by UIU works directly into the community for quality life and well being.

CMED team in the fieldwork



## Centre for Biomedical Science and Engineering (CBMSE)

Furthermore, the Centre for Biomedical Science and Engineering (CBMSE), UIU is working in collaboration with different institutes to innovate and excel in education, training and research to translate knowledge and technologies that advance clinical medicine and promote medical physicists and biomedical engineering growth. The vision of the Centre is to be an internationally recognized, research oriented department and a top choice for undergraduate and graduate education. The CBMSE and AloBhubon trust jointly organize an accredited online e-learning program for developing cancer professionals for the updated technology (Therapy and diagnostic) used for cancer treatment. In this way UIU and Alo BT are working for patient health benefits specially for cancer patients for South Asia including Bangladesh. These ELPs usually cover all the branches of Medical Physics aiming to improve the quality of cancer care and eliminate cancer in the South Asia region. Most of these programs are attended by local and international participants (300+ participants from 22+ countries) and accredited by IOMP (International Organization for Medical Physics) and EBAMP (European Board for Accreditation for Medical Physics) respectively.

Prof. Dr. med Thomas Schrader Brandenburg University of Applied Sciences, Germany, conducting classes on Medical Image processing



## **Shared Sports Facilities**

UIU has a large field which accommodates two football playgrounds at the same time. We share our field with local schools, colleges and universities as well as the local community on a necessity basis. Also government and national level programs are held at the large green field which accommodates the participants from all over the society with free access. UIU has gymnasium facilities which are shared by students and employees.



Employees from other institutions organizing their annual sport events in the UIU playground

### **Sexual and Mental Health Services**

The Directorate of Student Affairs (DSA) and UIU medical center are working together to provide mental and sextual health care services to the students. UIU Medical center provides free regular service to the students in addition to the occasional awareness programs carried by the DSA. UIU is a non-smoking campus. Immediate expulsion is carried out if possession of any trace of drug-use is detected. A strong proctorial body is in place to help the students to refrain from such activities.

## **SDG 4: Quality Education**

The vision of UIU is to become the center of excellence in teaching, learning and research in the south asian region. Central aim of UIU's academic programs is offering ensured quality education towards shaping and reshaping our society knowledge-based to build a strong foundation towards improving people's lives and sustainable development. Our teaching is embedded in an interdisciplinary paradigm to ensure quality higher education at UIU towards building the young scholars, scientists, leaders, and educators to lead the society sustainably. Research is given priority in our teaching and we offer evidence/case study based teaching to augment skills and knowledgeability of UIU graduates. 'Life Skills for Success' is a compulsory course for all students of all academic programs at UIU contributes significantly in sensitizing our students towards their role, responsibility, and commitment to Sustainable Development. Practicum, both technical and social, as compulsory part of undergraduate and graduate programs, is to build the scope and opportunity of UIU students to learn and earn knowledge and skills of theory-policy-practice interface, which strengthen the overall capacity of our graduates.

## **Policy and Actions**

- 01. UIU does provide access to the computer labs, library educational resources for those not studying at the university. UIU has expanded its door in other disciplines and departments compared to the previous years. UIU has a recording studio for recording lectures on general subjects which will be given public access so that UIU students and non-UIU students can view and download the lectures.
- 02. University concerned department should organize public events regularly. During Covid 19, most of the events are public.
- 03. UIU offers various short courses through IBER,CDIP,CISCO,PETA,VLSI. Almost over 20 different short courses are offered in every trimester where anyone can join.
- 04. DSA/CCC/IQAC and University different institutes will be responsible to organize education outreach activities for the local school/college/Community.
- 05. UIU is committed to providing quality education without any discrimination such as gender, ethnicity, religion, and disability. All concerned departments should take proper steps to follow up and ensure it.

## **Life-Long Learning Opportunities**

United International University library is accessible by outsiders by a membership scheme. The campus and the other learning activities are accessible by the alumni even after their graduation. UIU has organized competitions for students from all over the country on Book Reading, English Language, Math skills. Throughout the year students from different sectors and levels visit UIU campus and engage in learning Page: 13

activities. The Directorate of Student Affairs arranges numerous activities and programs for communities and people can join these events regardless of their studentship at the university. UIU is also engaged in training the local school and college teachers on ICT and other skills.

UIU Students of the Life Skills for Success (LSS) course displaying their classwork



#### **Outreach Activities**

Dr. Suman Ahmed who is faculty member at the Department of Computer Science and Engineering and also director of the Bangladesh Digital Education Research Limited supported by UIU, offers various services for educational institutions from classes PG to XII to aid in developing students to be more responsible, caring and career oriented. They help design and develop practical, aesthetic and secure environments for students so that they feel the enthusiasm and interest that they need to come to school. They also provide interesting, pragmatic and digitized academic content appropriate for each class which is developed based on an ICT oriented pedagogical framework.

UIU faculty member organizing outreach program for the school teachers in the rural area



## **SDG 7: Affordable and Clean Energy**

Like many others, UIU is fully aware and convinced that energy is central to sustainable development, which is the major challenge of the moment. Our University follows the directives from the "Energy Efficiency and Conservation Master Plan" of the government. In order to reduce energy consumption for air cooling, our university building is designed keeping a large percentage of areas open to allow enough natural light and natural air flow to keep the campus naturally bright and cool. We ensure reduction of energy consumption through replacing the less efficient appliances by more efficient ones, e.g., replacing the non-LED lights or computer monitors by LED based appliances. Second is by conservation of energy by reducing pilferage. Most of our energy consumption (~75%) comes from air conditioners and attendants are assigned to make sure that the air conditioners are switched off when the rooms are not in use. We are already using automated switching off mechanisms using IoT in some places. Our university is one of the leading institutions involved in the research and promotion of renewable energy in the country. Our Centre for Energy Research offers courses on renewable energy technologies and provides consultancy services to the public and private sector. We are also involved in energy auditing of interested industrial or commercial installations and in design and implementation of large scale rooftop solar etc.. We have designed more than 70% of the solar mini grid facilities established in Bangladesh. We have already implemented the 128KW solar panel in the University rooftop to generate electricity for us.

### **Policy and Actions**

- 01. Our University is following the directives from the "Energy Efficiency and Conservation Master Plan" of the Power Division, Ministry of Power, Energy and Mineral Resources, Bangladesh. As such there is no national standard for energy efficiency.
- 02. All new buildings or any renovation area needs to follow the Energy Efficiency and Conservation Master Plan guideline from Power Division, Ministry of Power, Energy and Mineral Resources, Bangladesh as well as make higher energy efficiency.
- 03. The University already has 128 KW rooftop solar and is planning to extend it further. The whole building will have root-top solar PV systems to reduce the carbon-intensive energy such as coal and oil.
- 04. Reduction in energy consumption is done in two ways. First is the replacement of less efficient appliances by more efficient ones like replacing the non-LED lights or computer monitors by LED based appliances. Second is by conservation of energy by reducing pilferage. Most of our energy consumption (~75%) comes from air conditioners, and attendants are assigned to make sure that the air conditioners, lights, and fans are switched off when the rooms are not in use. We are already using automated

- switching off mechanisms using IoT in some places. All offices, classrooms and washroom facilities need to be under smart systems to reduce the energy consumption. 7.2.4
- 05. Smart systems are being planned (Few implemented) to reduce energy pilferage. We can also think of connecting submeters on each floor to identify which floor is consuming excessive power. Monthly billing and usage monitoring is done by the operation department.
- 06. Our university is one of the leading institutions involved in the research and promotion of renewable energy. Our Centre for Energy Research offers courses on renewable energy technologies and provides consulting services to the public and private sector. We are also involved in energy auditing of interested industrial or commercial installations and in design and implementation of large scale rooftop solar etc.. We have designed more than 50% of the solar mini grid established in Bangladesh.
- 07. Our faculty members are co-opted in different governmental policy making bodies and we provide our expert services in formulating Renewable energy friendly policy and regulations like net metering, smart grid, efficient clean cooking etc.
- 08. We provide advisory services to low carbon renewable energy based startup. Many of our students are involved in low carbon (i.e. renewable energy) based business.
- 09. As the country's leading renewable energy consultants, we are committed to divest from fossil fuels, and continue working with and supporting the energy industry through our education, research and consultation.

## **Energy and the Community**

The Centre for Energy Research (CER) of the Department of EEE, United International University (UIU) focuses on research and development of power, energy sector and different green initiatives pertaining to the sustainability of the environment and ecosystems. A world Bank funded state of the art Renewable Energy Research Laboratory has been developed under the research center. CER, UIU has been involved in different renewable energy related activities like designing low-cost high efficiency circuits for solar and electrical appliances, microcontroller based solar charge controller with maximum power point tracking, Smart AMI meters for distribution systems, smart solar irrigation system, etc. UIU performed the technical auditing of the SHSs (Solar Home Systems) installed all over Bangladesh under the IDCOL program for two successive assignments (2008 and 2011). CER,

UIU in collaboration with the Department of Electrical and Electronic Engineering (EEE), UIU regularly organizes a biennial International Conference on the Developments in Renewable Energy Technology (ICDRET, www.icdret.uiu.ac.bd). So far, 1st, 2nd, 3 rd, 4 th, 5 th and 6 th Conferences were held in 2009, 2012, 2014, 2016a 2018 and 2021, respectively. All these conferences were attended by a large number of national and international participants from home and abroad. Many of the organizations including GIZ (German Technical Assistance), DAAD (German Technical and Educational Exchange Program), IFC (International Finance Corporation), and IDCOL sponsored/supported the conference. Berkeley Rural Energy Group (BREG) and Renewable and Appropriate Energy Laboratory (RAL) of University of California, Berkeley, USA; Technical University of Berlin, Germany; The Energy and Resources Institute (TERI), Delhi, India; Virginia Tech University, USA, University of Oldenburg, Germany; Kathmandu University, Nepal were the co-organizers of the event. IEEE-PES was the technical co-sponsor.

A research lab dedicated to the smart power system has also been developed in 2021 under CER with the grant support from Bangladesh Energy and Power Research Council of Ministry of Power, Energy and Mineral Resources. CER, UIU has completed more than 200 Projects (Research, Study and Commercial projects) till date.

#### **Accolades**

Director, CER has owned several prizes for the contributions in this area: United Nations Momentum for Change Award 2016 (Marakkesh, Morocco): At UNFCC Climate Change Conference (COP 22) for Development of "Smart Solar Village" which includes energy trading among the connected households with or without SHS and the Smarter Europe Award 2022 (Munich, Germany): Team Leader and Principal Investigator of the Award Winning Project (Outstanding Solar Projects), Munich, Germany. Also he has got World Society of Sustainable Energy Technologies Innovation Award 2022 (Istanbul, Turkiye): Team Leader and Principal Investigator of the Award Winning Project (In the category of Renewable Energy Systems) and the Asia Pacific ICT Award, APICTA 2021 (Kualalampur, Malaysia): Team Leader and Principal Investigator of the Finalist Project.

Solar Project in the coastal area of Bangladesh



## **SDG 8: Decent Work and Economic Growth**

UIU believes in maintaining a decent working environment for all employees and economic growth for all its students, employees and the community. It is reflected in the curriculum, service rules, University policy and the administration. UIU recruitment policy and practice does not allow any discrimination in terms of race, gender, sexuality or age. The same applies to the working condition and agreement with the third parties while hiring the workforce.

## **Policy and Actions**

- 01. The salary structure of academic and non-academic staff is above the living wages of Bangladesh.
- 02. The Admin and Academic committee monitors the rights of the women and international staff. Overtime is given for extra work hours done by fourth class employees like attendants, drivers, supervisors. Medical allowance, conveyance allowance for all employees. Maternity leave with pay for female employees. Provident Fund, gratuity for all (retirement benefit) are available.
- 03. University never supports any kind of discrimination based on religion, sexuality, gender, race or age. The University Proctorial committee will monitor and take action against if any.
- 04. All full time employees of UIU are over 18 with unifrom office hour. UIU is committed to stop any kind of forced labour, modern slavery, human trafficking or child labour. The University Proctorial committee will monitor and take action against if any.
- 05. UIU always promotes equivalent rights of workers when activities are outsourced to a third party.
- 06. UIU from the beginning of its journey has established the pay scale equity policy and successfully eliminated any kind of gender pay gaps.
- 07. All kinds of promotions and increments are given following the Employee Service Rule. The Registrar office and IQAC will track the employee performance. Apart from that External members from Govt and UGC in syndicate (apex body to approve any recruitment and fixation of salary and fringe benefits) monitor any discrepancy.
- 08. All employees have the right to appeal for his/her rights/pay to Grievance committee, and can also send a complaint to UGC, regulatory authority of UIU.

## **Congenial Working Conditions**

The staff and faculty members at UIU enjoy the flexible working environment on campus. There are lots of opportunities for relaxing at the campus: lounge, playground, gymnasium, etc. They engage in various activities like sports (indoor and outdoor). The facilities and rewards are always encouraging for the staff and to meet their expectations from a workplace.

Students in the UIU sports room



## **Induction and Skill Development Programs**

Institutional Quality Assurance Cell (IQAC) of United International University organizes a regular induction program for the newly joined faculty members. In addition to that it organizes regular skill development programs for staff and training programs in teaching-learning for faculty members throughout the year. It also engages and tries to train the young faculty members for research and other activities.

## **SDG 10: Reduced Inequalities**

Combating inequalities is the built in policy, strategy and approach of UIU's operation of its academic, research, co-curriculum, and administration. UIU's policies are to ensure accessibility of the persons with disabilities, ethnic people, women, poor and the disadvantaged to its scope and opportunities of all forms. Our campus is disabled friendly. We have dedicated supporting staff to ensure smooth accessibility of disable people as well. All concerned people are helping them if needed. UIU works in collaboration with organizations such as ADD, CBM in augmenting the knowledge base and disabled friendly physical facilities at UIU campus. Our admissions policy is aligned with our approach to advancing disability, race, gender equality and intersectionality at UIU, which aims to increase our recruitment of students and faculty/staff from a range of backgrounds, to ensure that the UIU is reflective of a diverse wider demographic range.

### Policy and actions

- 01. UIU is committed to providing quality education without any discrimination such as gender, ethnicity, religion, and disability. All concerned departments should take proper steps to follow up and ensure it.
- 02. To track or measure applications and admissions of underrepresented (and potentially underrepresented) groups including ethnic minorities, low income students, non-traditional students, women, disabled students, the concerned department should always take surveys or get data from the student portal.
- 03. Among candidates having equal qualification and experience disabled/underrepresented candidates will be given preference.
- 04. The proctorial committee have a strong policy to handle any discrimination and harassment.
- 05. DSA/IQAC offices will take planned action to implement policies, programmes and training related to diversity, equity, inclusion and human rights on campus.
- 06. DSA/CCC/IQAC/Registrar office will provide mentoring/counseling/peer support programs to support students, staff, faculty from underrepresented groups.
- 07. University will ensure support services, access facilities and access schemes for the people with disabilities.
- 08. People with disabilities will get a special discount on accommodation. Discounted hostel facility and transportation is are available. Already 25% discount on hostel accommodation and transport cost are given regularly.

### **Diversity Matters**

UIU has distinct tuition fees waiver programs for the special ethnic groups from Chittagong Hill Tracts and also for the physically challenged or persons with disabilities. The entrance to the campus and the pathways are designed in accordance with the accessibility options for all inclusively.

## SDG17: Partnership for the Goals

UIU is convinced in 'collective actions' as a strategic means of putting bigger impacts of knowledge based work in the social change towards sustainability. UIU has been in partnerships with knowledge institutions at home and abroad, national and international NGOs, civil society forums and networks, business sector organizations, media, and global organizations in promoting collective initiatives of working for attaining the UN SDGs.

## **Policy and Actions**

- 01. UIU has involvement directly with the national government through CER, UIU; IDSS, UIU & AIMS Lab UIU.
- 02. Conferences like ICSD and ICDRET were hosted 9th time in total at UIU.
- 03. UIU is now a member of UN Sustainable Development Solutions Network to collaborate on gathering or measuring data for the SDGs.
- 04. Institute of Development Studies and Sustainability (IDSS) at UIU is collaborating and doing research to develop international best practices on tackling the SDGs.
- 05. Different student volunteering programs, research programs, and development of educational resources will be developed by IDSS, UIU with the collaboration of national/international NGO's to tackle the SGDs.

## Relationships to support the goals

#### **Cross-Sectoral Dialogue**

5th International Conference on Sustainable Development (5th UIU-ICSD 2022)

For knowledge generation, sharing and practices towards Sustainable Development, the Institute of Development Studies and Sustainability (IDSS) of UIU organizes several programs to mobilize collective initiatives of science-policy-practices interface and actions. As part of these initiatives, IDSS has been organizing 'International Conference on Sustainable Development (UIU-ICSD)' every year in February since 2017. Central aim of this international conference is to identify the pathways to sustainability and share the empirical knowledge based upon research, education and practices. The 5th International Conference on Sustainable Development (5th UIU-ICSD 2022) was held on 19-20 February 2022. Around 150 participants including high-level policy people, diplomats, academic scholars, government organizations, NGOs, universities, research organizations, private sector organizations, civil society, and university masters level students participated in this conference.

5th International Conference on Sustainable Development (5th UIU-ICSD 2022)

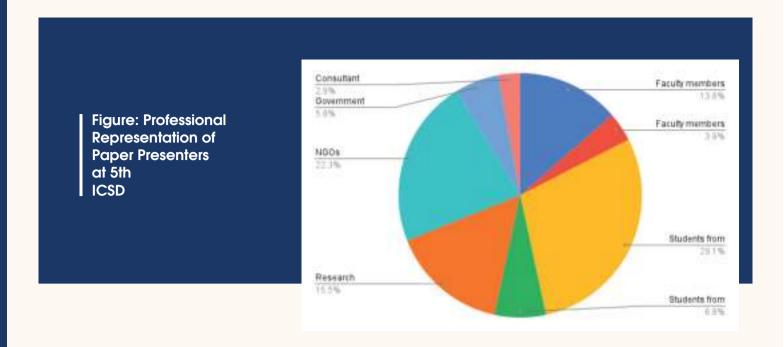


#### Notable National & International Speakers of the Conference:

Mr. Anderson Gitonga, Inclusive Development Director, CBM Global (Keynote Speaker of the Inaugural Session). Prof. Dr. Monowar Hossain (Chair of Plenary Session on Bangladesh Delta Plan: Challenges of Moving Forward Towards A Prosperous Bangladesh). Dr. Mizanur Rahman, ex ADG of Bangladesh Water Development Board (Keynote Speaker in the Plenary Session). Dr. Sultan Ahmed, Ex Secretary of Power Division of Energy Ministry (Panelists in the Plenary Session). Dr. Sara Nowreen, Associate Professor, Institute of Water and Flood Management (IWFM), BUET (Panelists in the Plenary Session). Dr. M R Seetharam of South Asia Water Alliance (Conference Closing Speaker at the Closing Ceremony). Prof. Dr. Abdus Shaban, Tata Institute of Social Sciences, Mumbai, India (Guest of Honor at the Closing Ceremony), Country Director of ADD International, Bangladesh, CBM, Max Foundation, and Head of DORP and JCP (Co-organizers of the 5th UIU-ICSD 2022), Prof. Dr. Md. Abul Kashem Mia (Vice Chancellor of UIU as the Chief Guest), & Prof. Dr. Hamidul Huq, Professor and Director, IDSS, UIU (Vote of Thanks at the Closing Ceremony)

The 5th UIU-ICSD 2022 invited papers on the following themes and received 130 papers from scholars of different fields:

- Poverty Alleviation
- Sustainable Agriculture & Food Security
- Sustainable Livelihoods
- Disability and SDGs
- Sustainable Delta Management
- Water Governance
- Green Energy
- Coastal Zone Management
- Green Cities and Human Settlement
- DRR: Inclusive Resilience
- Climate Change



Link to the conference website: https://icsd.uiu.ac.bd

## 2nd International Conference on Emerging Technology in Computing, Communication and Electronics (ETCCE 2021)

The 2nd International Conference on Emerging Technology in Computing, Communication and Electronics (ETCCE 2021), took place virtually on 21- 22 December 2021. The conference is technically co-sponsored by IEEE Bangladesh Section, and is jointly organized by the Department of CSE of United International University (UIU), Bangladesh, University of Wolverhampton, UK, and Fordham University, USA. ETCCE 2021 has received 95 Research Papers from 11 countries e. g. Bangladesh, USA, UK, KSA, Thailand, Malaysia, Japan, Oman, Iran, India, and China. Other than technical sessions, there are also keynote sessions and invited talks. Finally, only 21 Papers were selected for regular oral presentation in the conference out of 101 submissions. Out of these 21, 8 were student papers. This year's conference includes 03 keynote speeches and 02 invited sessions. In these two days, the conference continues with 05 technical sessions on scientific research of various topics.

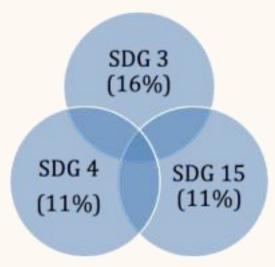


Figure: SDG coverage (percentage) by conference papers



Link to the conference call for papers: https://www.uiu.ac.bd/news/call-for-papers-etcce-2021/

#### 21st Asia-Oceania Congress of Medical Physics (AOCMP-2021)

The 21st Asia-Oceania Congress of Medical Physics (AOCMP-2021) was held in United International University (UIU), Dhaka, Bangladesh from December 10 to 12, 2021. AOCMP is the official yearly congress of the Asia-Oceania Federation of Organizations for Medical Physics (AFOMP). The congress was organized by the Bangladesh Medical Physics Society (BMPS). The congress has already been endorsed by the International Organization for Medical Physics (IOMP).

At a Glance: AOCMP-2021

Key Note Speakers- 6	Invited Speakers-26	Oral Presenters- 92	Mini Symposium-05
(IAEA, IOMP, AFOMP EFOMP, MEFOMP DFMP)	(IAEA, IOMP, AFOMP EFOMP, MEFOMP DFMP)	Asia-Oceania, Europe Middle East, Africa and the USA.	(IMPCB, AFOMP, EFOMP COVID-19, Women for Women,
E-Poster- 64	Sponsor Presentations- 06	Kiyonari Inamura Oration Lecture	Chair, Co-Chair- 26

Mr. Ziaul Hasan, ndc (Chief Guest), Secretary, Ministry of Science and Technology, People's Republic of Bangladesh; Professor Dr. Sanowar Hossain (Special Guest), Chairman, Bangladesh Atomic Energy Commission (BAEC); Professor Dr. A. K. H. Enayet Hussain (Special Guest), Director General, Medical Education, Ministry of Health and Family Welfare, People's Republic of Bangladesh; Dr. Kazi Anowarul Hoque (Special Guest), Additional Secretary (PRL), Local Government Division, Ministry of Local Government, Rural Development & Cooperatives, Bangladesh; Prof. Dr. M Iqbal Arslan (Special Guest), President, Swadhinata Chikitshak Parishad (SWACHIP); Prof. Dr. Chowdhury Mofizur Rahman (Patron), Vice-Chancellor, United International University; Mr. Anwarul Islam, President, BMPS; Prof. Dr. Hasin Anupama Azhari, Organizing Chairperson, AOCMP-2021; Prof. Dr. Arun Chougule (India), President, AFOMP; Prof. Dr. Eva Bezak (Australia), Vice President, AFOMP.



Link to the conference call for abstract - https://cbmse.uiu.ac.bd/21st-asia-oceania-congress-of-medical physics-aocmp-2021-will-be-held-in-united-international-university-uiu/

#### International Research Collaboration

United International University envisioned the importance of institutional and international collaboration for excellence in research and established the Institute for Advanced Research (IAR) in 2019 to provide substantial support for the quality research and development activities. IAR substantially financed multidisciplinary research projects and spent more than 3.5 crore since its inception. From 2020 onwards, UIU collaborated with other National and International organizations, and expedited jointly funded grants. Further, our faculty members are working with academicians from abroad on their research projects and publishing research articles in reputed journals.

#### **On-going IAR Funded Projects:**

Title of the Project	Name of the Institutes of Co-investigators from Abroad	SDG Alignment
Facilitators and Inhibitors of Digital Municipal Service System Using Behavior in Emerging Economics: The Case of Ban- gladesh	LUT University, Finland	6, 8, 11
Blood Glucose Prediction from Daily Food Intake and Activities	College of IT, United Arab Emirates University	3, 12
Design and Development of Brain Computer Interface (BCI) Based System for Identifying Suicidal Biomarkers using Neural Connectivity Analysis	Institute of Biomaterials & Biomedical Engineering, University of Toronto	3
Exploring the Black Box of Bangladeshi Universities in view of SDGs: Challenges, Opportunities and Beyond		4
Unpacking resilience capacities in relation to transformative leadership of youth: A case study of Coastal Bangladesh	Monash University, Australia	13, 15
Multiple ecosystem services and their links with sustainable utilization of biodiversity through traditional and local knowledge (TLK) in the coastal areas of Bangladesh	University, Japan Institute for Global	14, 15, 17

## International Collaborative Research Publication from IAR Funded Project:

Title of the Publication	Name of the Institutes of Coauthors from Abroad	SDG Alignment
Effects of food safety and perceived social support on mediating consumers' attitude toward organic food purchase  Name of the Journal: Food Research	Putra Business School, University Putra Malaysia (UPM), Malaysia	2, 3, 13
Listening Comprehension: The Role of Morphological Knowledge Name of the Journal: MEXTESOL Journal	Research Institute for Languages and Cultures of Asia, Mahidol Uni- versity, Nakhon Pathom, Thailand	4
Socially Responsible HRM, Employee Attitude, and Bank Reputation: The Rise of CSR in Bangladesh  Name of the Journal: Sustainability	School of Business & Law, Sydney Campus, CQ University, Sydney, Australia Kent Institute Australia, Sydney, Australia	8

Title of the Article	Name of the Journal	Coauthors' Affiliation	SDG Alignment
A Symmetry and Asymmetry Investigation of the Nexus Between Environmental Sus- tainability, Renewable Energy, Energy Innovation, and Trade: Evidence From Environmental Kuznets Curve Hypothesis in Selected MENA Countries	1	School of Economics and Management, Hubei Polytechnic University, Huangshi, China	4, 7, 9, 13
Do Access to Finance, Technical Know-How, and Financial Literacy Offer Women Empowerment Through Women's Entrepreneurial Development?		School of Economics and Management, Hubei Polytechnic University, Huangshi, China	8, 10
The Role of Remittances on Financial Development through Capital Formation and FDI Channels: A Symmetric and Asymmetric Investigation for Selected South Asian Countries	of Accounting and	Department of Commerce, Motilal Nehru College (E), University of Delhi, India	
Does Tourism Induce Sustainable Human Capital Development in BRICS Through the Channel of Capital Formation and Financial Development? Evidence From Augmented ARDL With Structural Break and Fourier-TY Causality	chology	School of Economics and Business Admin- istration, Chongqing University, Chongq- ing, China	4, 8
An Asymmetric Investigation of the Nexus Between Eco- nomic Policy Uncertainty, Knowledge Spillover, Climate Change, and Green Economy: Evidence From BRIC Nations	ronmental Sci-	Boston University Graduate School of Arts and Sciences, Boston, MA, United States	8, 13

#### Collaboration with NGOs

#### Reconstruction of Shabolombee Gram

Institute of Development Studies and Sustainability (IDSS) of United International University is currently working in collaboration with a leading NGO named Unnayan-Shahojogy Team (UST). IDSS has a commitment to the communities, especially towards the disadvantaged communities. With this commitment, IDSS has been working with the disadvantaged people to promote their lives and livelihoods. The IDSS is currently working on alternative approaches to microcredit and resilience to uncertainty to cope with the changing world. In this respect, the IDSS has initiated some small community associations in different villages of Nilphamari District in Northern Bangladesh. With the funding of the Institute for Advanced Research (IAR) of UIU, the Institute of Development Studies and Sustainability (IDSS), led by Prof. Dr. Hamidul Hug conducted a research project named 'Reconstruction of Shabolombee Gram' (15 October, 2019 ~ 14 October, 2022). The aim of this collaborative research project was to develop new discourses of Shabolombee Gram (Sustainable Village) grounded in villagers' practices in support of external development (project) services as well as to innovate and develop approaches of effective 'science-policy-practice interface' for sustainable development.

Glimpses of the project "Reconstruction of Shabolombee Gram"





small community associations

#### Collaboration to diagnose and monitor autism

Advanced Intelligent Multidisciplinary Systems Lab (AIMS Lab) of UIU has signed MoUs with Neuro-Developmental Disability Protection Trust (NDDP Trust) and Tauri Foundation to work on developing "Bolte Chai: Development of Digital Communication tools for Autistic and NDD non-verbal children" & "Smart Autism Barta" - mobile-based, interactive, community-based screening tool used to diagnose and monitor autism. This research will be supported by NDDP Trust for deployment. "Bolte Chai Platform" & "Smart Autism Barta" will be developed by AIMS Lab and the implementation and service delivery part of the project will be conducted by NDDP Trust. Analyzing the feasibility of the project was done in partnership between AIMS Lab, Tauri and NDDP Trust under the Ministry of Social Welfare of the Government of Bangladesh. The Project will be run in accordance with the narrative and financial proposal submitted by AIMS Lab, Tauri and NDDPT.

There are many collaborative projects currently managed by AIMS Lab, for further details please visit: https://aimsl.uiu.ac.bd/#/home

#### **Education for the SDGs**

#### Meaningful education around the SDGs at UIU

United International University follows a unique pedagogical platform that intends to address the 21st century's social issues for achieving sustainability and the SDGs. UIU has incorporated a few dedicated courses as well as elective courses into all programs to develop young leaders who will embrace sustainability and the SDGs into our society. In particular, UIU offers BSS in Environment and Development Studies and Master in Development Studies programs to build knowledgeable and skilled young leaders to lead the reconstruction of a knowledge-based sustainable society. These programs promise to build young professionals with capacity of interdisciplinary knowledge and skills in national and international spheres in tackling sustainability challenges like climate change catastrophes, which is a barrier to sustainable development.

Furthermore, our Department of Civil Engineering has designed its curriculum in such a way that the contents of the courses like Water Supply Engineering, Waste Water Engineering, Design of Water Supply, Sanitation and Sewerage Systems, Solid and Hazardous Waste Management, Environmental Pollution Management, Environmental and Sustainable Management, Transportation Planning and Traffic Engineering, Highway Design and Railway Engineering, and Urban Transportation Planning and Management will contribute in achieving most of the targets of SDG6, SDG11 and SDG13.

#### Dedicated courses at UIU (full degrees, or electives) that address sustainability and the SDGs

UIU offers full degrees that address sustainability and the SDGs. Furthermore, UIU has incorporated a few courses as compulsory and elective into other programs to address sustainability and the SDGs.

#### Full degree programs at UIU that address sustainability and the SDGs:

01. Master in Development Studies (MDS)

02. BSS in Environment and Development Studies

#### Some dedicated courses at UIU that address sustainability and the SDGs -

MDS 510: Sustainable Development: Policies & Tools

EDS 2301: Environment, Development and Sustainability

EDS 2401: Gender and Sustainable Development

SOC 2101: Society, Environment and Engineering Ethics [B.Sc in CSE & EEE]

EEE 4261: Green Computing [B.Sc in CSE]

SDV 1107: Introduction to Sustainable Development [B.Sc. in Civil Engineering]

#### **Some Elective Courses**

EEE 4223: Renewable Energy [(BSc) in Electrical and Electronic Engineering (EEE)]

BUS 3231: Business and Environment [BBA]

MKT 4315: Green Marketing [BBA]

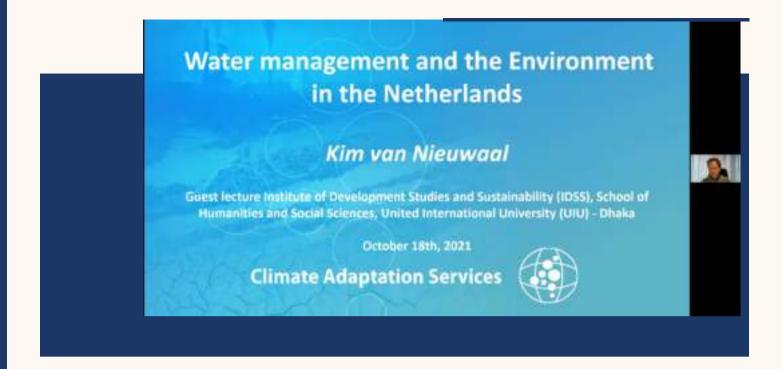
SCM 4314: Sustainable Operations and Humanitarian Supply Chains [BBA]

EDS 3507: Environment and Sustainable Development

EDS 4705: Sustainable Agriculture

#### International Guest lectures were arranged for EDS students of UIU:





#### Outreach educational activities for the wider community

#### SCMPCR e-learning program (ELP) for Medical Physicists

Cancer is the second-highest cause of death in the world. There are 13 to 15 lakh cancer patients in Bangladesh, with about two lakh patients newly diagnosed with cancer each year. It is expected to become a more significant source of morbidity in Bangladesh over the coming few decades. Due to the intake of contaminated food, a sedentary lifestyle, family traditions, etc., cancer rates are rising daily. In this aspect, the Centre for Biomedical Science and Engineering (CBMSE), UIU and the AloBhubon trust jointly organizes accredited online e-learning programs for developing cancer professionals through training on updated technology (Therapy and diagnostic) used for cancer treatment. Aiming to improve the quality of cancer care and eliminate cancer in the South Asia region SCMPCR arranged the following accredited programs jointly with CBMSE, UIU in this year. These programs were accredited by IOMP (International Organization for Medical Physics) and EBAMP (European Board for Accreditation for Medical Physics) respectively.

## Online Certificate Course in Medical Digital Image Procesing

**Duration: 23 March 2022 - 22** 

June 2022

Total no. of class: 12

Lecturer: 01 Participants: 35



SCMPCR ELP-05: Advanced Techniques in Radiotherapy

Duration: 1 October 2021 - 22

October 2021

Total no. of class: 8

Lecturer: 07 Participants: 67



SCMPCR ELP-06: Clinical Medical Physics in Modern Radiotherapy

**Duration: 01 July 2022 - 22 July** 

2022

Total no. of class: 08

Lecturer: 09

Participants: 103 (from 22 coun-

tries



SCMPCR ELP-07: Computed Tomography and Interventional Radiology

**Duration: 7th-28th October 2022** 

Total no. of class: 08

Lecturer: 08

Participants: 41 (from 17 countries)



Online Certificate Course on Photovoltaics

Duration: 10 May – 26 July

Total no. of class: 10

Lecturer: 01 Participants: 51



Link to Centre for Biomedical Science and Engineering (CBMSE) website: https://cbmse.uiu.ac.bd/about-us/

#### Harnessing Technology to build Human Capital in South Asia

Dr. Khondaker Abdullah Al Mamun, Founder, and Director of AIMS Lab and Professor, Department of Computer Science and Engineering, United International University, spoke on a program titled "Harnessing Technology to build Human Capital in South Asia" organized by World Bank. This program is focused on the potentials and challenges of leveraging technologies to build human capital and help South Asia manage risks and shocks: how can it overcome regional barriers, promote cross-country collaboration to support recovery from COVID and other shocks, and build human capital and adaptable resilience in the region?

#### Digital Healthcare to achieve Sustainable Development Goal in Bangladesh

Dr. Khondaker A. Mamun, Director, AIMS lab and Professor, Department of Computer Science and Engineering, United International University talked about Digital Health Activities on an online webinar 10th June 2021 organized by PKSF. He presented the CMED Health (a research commercialization of AIMS Lab, United International University) initiatives to show how we can improve primary and preventive Healthcare to achieve Digital Bangladesh and Sustainable Development Goal. It is worth mentioning that CMED Health is utilising Industry 4.0 Technologies for building Digital Healthcare platform for health inclusion for the people of Bangladesh.

#### The End









Chief Advisor:

#### Prof Dr. Md. Abul Kashem Mia Vice Chancellor (In-Charge) & Pro Vice Chancellor

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**SDG 17 Partnership for the goals:** 

Professor Hamidul Huq, Dr. Shantanu Kumar Saha

**Graphic Designer:** 

Shazzadul Alam Khan