



সিসিএন বিজ্ঞান ও প্রযুক্তি বিশ্ববিদ্যালয়

CCN University Govt. & UGC Approved
of Science & Technology

Proceedings of

CCN International e-Conference

on

INDUSTRIAL REVOLUTION 4.0

Shaping the Future Globally in the New Norm

(ICIRSFG2021)

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(ICIRSFG2021)

CCN University of Science & Technology (CCNUST)

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**CCN-UST PRESENTS
INTERNATIONAL e CONFERENCE
Industrial Revolution 4.0: Shaping the Future Globally in the New Norm**

ICIRSFG 2021

January 23-24, 2021

**CONFERENCE SCHEDULE
(BANGLADESH STANDARD TIME +6 GMT)**

AND

PROCEEDINGS

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Comilla is the ancient locality. From the earliest time it is a region of advanced people. Considering several facts, the habitation of this area is enriched.

Kotbari in Comilla is the center of civilization. Nearly 1400 hundred years ago, there built up many residential institutes from which ShalbanVihar is the exceptional one. Here search for knowledge and its cultivation have already been done. Still Kotbari is familiar as an educational area of Comilla. Various schools, colleges and Universities are set up here. And following this line, CCN University of Science & Technology is the last addition.

According to the approval of honorable prime minister of Government of the Peoples Republic of Bangladesh and the permission of education ministry it was established in 2014. After that, the University Grants Commission permitted academic activities from 18 May 2015.

In this context, UGC approved BBA, MBA, LLB, LLM, Bangla, English, Economics and Mathematics programs from September 2015: session and launches its academic activities. In November, 2017, UGC Approved B.Sc. in Computer Science & Engineering & B.Sc. in Electrical & Electronic Engineering. Subsequently, B.Sc. in Civil Engineering got approval from UGC on March 11, 2018. Facilitative learning with low-expenditure is also present in this campus.

The green and peaceful environment is framed in a pair. The campus surrounded by hills becomes well-sounding place through the uproars of students. Certainly CCN University of Science & Technology is the remarkable institute of the education journey of 21st century.

The ex-ministers of law, Justice and Parliamentary affairs and the presidium member of Bangladesh Awami League Advocate Abdul Matin Khasru M.P is the Chairman of Board of Trustees of this University. In this board, there are some education experts and specialists. Hence, the Board of Trustees are registered by the joint stock company.

Keeping its connection with the Act of Non-Govt. University, the University's Syndicate, Academic Council, Finance committee, Curriculum committee, Teachers' recruitment committee, Discipline committee, Complaint committee, Purchase committee, Admission committee, Education improvement committee etc. are working.

The Chief Executive Officer of CCN Education Family Mr. Md. Tariqul Islam Chowdhury is the founder of this university. He is the member secretary of Board of Trustees & playing the responsibility of honorary registrar.

With the grant by the Honorable president of people's Republic of Bangladesh and Chancellor of Universities appointed Prof. Dr. Md. Musharaf Hossen as Vice chancellor of this University & now he skillfully handles its activities.

With the decision of Board of Trustees, the ex- principal of Comilla Victoria College Prof. Dr. A. K. M. Asaduzzaman is playing the current charge of Pro-vice chancellor.

With the grant by the Honorable president of people's Republic of Bangladesh and Chancellor of Universities Appointed Dr. Ali Hossain Chowdhury as the Treasurer of this University.

With the ownership of land and self-expenditure here different faculties are set up that is located in Kotbari, an educated center surrounded by hills, and natural sceneries. In the meantime, Front office, Library, Academic building, Administrative building, Research center,

etc. are set up. According to necessities, there will also be other faculties by the decision of Board of Trustees.

There are theoretical and multi-media class rooms. To ensure qualitative and standard engineering learning, there are also 17 Science and Engineering labs.

There is a large library with a view to running the education and research activities effectively different kind of book and journal are present in the library. Besides, through the Broad-Brand Internet connection and online system the learners are taking help from reference books and journals from different corners of the world.

To increase sufficient research program, there is a Research Center at the lap of nature with green hills.

As the campus is set up in the large background of beautiful environment, it becomes easy to turn the learners as good citizens through knowledge, skill, attention, moral lesson along with the educational activities.

The students belonging to deprived section and freedom fighters lineage are taught with low-fees. In order to develop them as man of humane character and good citizens through the moral teachings, CCN Jame Mosque is set up. Other students from different religions have the opportunities to perform their respective religions. In order to pay due honor to the great contribution of language martyrs and freedom fighters, Shahid Miner is set up for the new generation who will come to know the glory of country's history.

In this campus, there are residential quarters and guest houses both for teachers and officers. There are separate hostels both for male and female students.

The free transport system is also present for both teachers and learners.

Under the guidance of a group of skilled and dedicated teachers, qualitative standard education is ensured. Through the teachings of skilled and experienced teachers both from public and private Universities, qualitative higher education is confirmed.

There are the initiatives of regular training, workshop, seminar etc. for increasing the skill of teachers, officers and office assistants.

The University receives its approval from Grant Commission through its international syllabus and curriculum.

As it is free from session jam, the University's calendar is made from the very beginning of the year and in according with it teachings, exams, publications of result etc. are usually done.

To ensure the learners' good abilities as citizens, the extra-curricular activities are conducted. Both indoor and outdoor games and different clubs are run to increase their talents, efforts and skills from their respective sides.

Participating in industry visit, study tour, debating, different competition, the learners' physical and moral growths are continuing.

All celebration of National Days and extra-curricular activities granted by Grant Commission are run precisely.

The initiators are trying their best from heart and soul to establish this campus as an International University enriched with hills and Natural beauties. Already the CCN UST Signed a Memorandum of Understanding with Malaysia University of Science and Technology. Now, CCN UST is doing work for collaborating with Binary University of Management and entrepreneurship, Malaysia.

We are hopeful that the experience and technical help from these Universities will develop the standard of education more and more.

We firmly believe that a new horizon of education in Bangladesh will be started by CCN University of Science & Technology.

MISSION OF CCNUST

- To provide philanthropic and qualified higher education across the nation's boundary in the field of Science and Technology.
- To accelerate the moral and productive capacity of people with academic knowledge and proficiencies.
- To expand research-based knowledge and education to improve the quality in the field of Business, Social Science and Engineering.

VISION OF CCNUST

- The CCNUST aims at to make skilled human being in the competitive work.
- To develop human conscience to build up peaceful Society.
- To coordinate the theoretical knowledge with practical work.
- To provide the best and quality education across the world.
- To standardize the modern education system.
- To upgrade the higher methods in Bangladesh.

FUTURE PLAN OF CCNUST

- To establish an international standard research-based university by providing quality education and collaboration with the best universities in country and abroad.
- To make excellence in the field of technology by research work.
- To build a technology facilitated residential university.

AIMS & OBJECTIVES

Aims

The aims of teaching and learning mathematics are to encourage and enable students to:

- recognize that mathematics permeates the world around us
- appreciate the usefulness, power and beauty of mathematics
- enjoy mathematics and develop patience and persistence when solving problems
- understand and be able to use the language, symbols and notation of mathematics
- develop mathematical curiosity and use inductive and deductive reasoning when solving problems
- become confident in using mathematics to analyze and solve problems both in school and in real-life situations
- develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics
- develop abstract, logical and critical thinking and the ability to reflect critically upon their work and the work of others
- develop a critical appreciation of the use of information and communication technology in mathematics
- appreciate the international dimension of mathematics and its multicultural and historical perspectives.

Objectives

Knowledge and understanding

Knowledge and understanding are fundamental to studying mathematics and form the base from which to explore concepts and develop problem-solving skills. Through knowledge and understanding students develop mathematical reasoning to make deductions and solve problems.

At the end of the course, students should be able to:

- know and demonstrate understanding of the concepts from the five branches of mathematics (number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics)
- use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations including those in real-life contexts
- select and apply general rules correctly to solve problems including those in real-life contexts.

Program Itinerary at a Glance

23rd January, 2021

Time	Venue	Program
09.55 AM – 10.00 AM		Recitation from the Holy Quran
10.00 AM – 10.09 AM		Welcome Speech - Prof. Dr. Md. Shah Jahan Dean, Faculty of Engineering, CCNUST Convener, Organizing Committee, ICIRSFG 2021
10.09 AM – 10.21 AM		Documentary of CCN-UST
10.21 AM – 10.30 AM		Opening Keynote by Dr Abdullah Rasheed, State Minister of Education, Maldives & GARA Fellow Chapter President, Maldives
10.30 AM - 10.40 AM		Keynote by Professor Dr. Mesbahuddin Ahmed, Chairman Bangladesh Accreditation Council
10.40 AM – 10.50 AM		Keynote by Ms.KorbalagaeKuawogai, Ministry of Education, Dubai , UAE and GARA Fellow Secretary General, Liberia
10.50 AM – 11.00 AM		Keynote by Adv. Abdul MatinKhashru, MP Chairman, BoT, CCN UST Former Minister, Ministry of Law, Justice and Parliamentary Affairs, GoB
11.00 AM – 11.30 AM		Technical Session – Prof. Dr. M. Moshiul Hoque, CUET, Bangladesh
11.30 AM – 11.40 AM		Keynote by Prof. Dr.Oo Yu , Asia e University, Malaysia and GARA Fellow Chapter President, Malaysia
11.40 AM – 12.55 PM		DAY-1 SESSION-1 Paper presentation
12.55 PM – 1.50 PM		SESSION BREAK
01.50 PM – 2:00 PM		Documentary of CCN-UST
2.00 PM – 2.10 PM		Key Note by Prof. Dr. Mooi Wah Kian, Infrastructure University of Kuala Lumpur, Malaysia
2.10 PM – 2.20 PM		Key Note by Prof. Dr Oscar Caria, Deputy Vice Chancellor, Cavendish University, Zambia
2.20 PM – 2.30 PM		Key Note by Prof. Dr Hafsa Jamsheed, Professor, National Textile University , Faisalabad , Pakistan
2.35 PM – 3.00 PM		Technical Session 2 on Cyber Security by Dr. Haitham and Dr.Badar , Adviser to Govt. of Sultanate of Oman and GARA Fellow Chapter Presidents of Oman.
2.30 PM – 3.45 PM		DAY-1 SESSION-2 Paper Presentation
3.45 PM – 3.55 PM		Key Note by Asst. Prof. Dr Allah Dad, Department of Textiles, NED, Pakistan, GARA Chapter President, Pakistan
		Closing of DAY-1 SESSION-2

Program Itinerary at a Glance
24th January, 2021

Time	Venue	Program
09.55 AM – 10.00 AM		Slide Show of CCNUST
10.00 AM – 10.10 AM		Key Note by Mr. Musharrof Hossain, Founder President, Federation of Bangladesh Human Resource Organization (FBHRO)
10.10 AM – 10.20 AM		Key Note by Dr.Muthukumar Rama, Adviser, Royal Court of Oman
10.20 AM - 10.30 AM		Key Note by Asst. Prof. Dr Nadia Farhana, Department of Business Administration, Stamford University Bangladesh
10.30 AM – 11.45 AM		DAY-2 SESSION-3 Paper Presentation
11.45 AM – 11.55 AM		Key Note by Dr. David Sothie, Risk Security Management Expert, Malaysia
11.55 AM – 2.00 PM		Session Break
2.00 PM – 2.10 PM		Key Note by Mr. Edward ProbirMondol, CEO, Global Academy of Holistic Leadership & Coaching Inc. & GARA Fellow Chapter President , Canada
2.10 PM – 2.20 PM		Key Note by Mr. Emmanuel Boone Waydon, Ministry of Education, Liberia, GARA Fellow Chapter President, Liberia
2.20 PM – 2.30 PM		Key Note by Dr. Ali Adan, Registrar, Research , Umma University , Kenya
2.30 PM – 4.00 PM		DAY-2 SESSION-4 Paper Presentation
4.00 PM – 4.10 PM		Key Note by Dr ChrineHapomwe, Assistant Professor, Cavendish University, Zambia

Closing Ceremony
24TH JANUARY 2021

Time	Venue	Program
04.10PM – 04.20 PM		Closing Session Key Note by Prof. Dr.Christime Phiri Mushibwe, Vice Chancellor, Unicaf University, Zambia
04.20 PM – 04.30 PM		Closing Session Key Note by Dr Bisi Akin-Alabi, Ola Up Foundation, Nigeria
04.30 PM – 04.40 PM		Closing Session Key Note by Prof. Dr. Asif Mahbub Karim, Dean, Binary University, Malaysia
04.40 PM – 5.00 PM		Summary of Conference by Md. Tariqul Islam Chowdhury, Founder and Member Secretary of BoT, CCNUST and Vote of Thanks and Unveiling of September 2021, International e Conference on Business, Innovation and Social Sciences 2021 (ICBISS 2021)

**Individual Presentation Schedule
2 Days, 4 Sessions**

No	Name	Title	Remarks
DAY 1 SESSION 1 – 23.01.2021			
1.	Mr. Abu ObidaRahid	Problems of SME Investment: A Guide to SME Financing of Trust Bank Ltd	11.40 AM – 11.55 AM
2.	Md. Ali Imran	Digital Competitiveness in Banking Sector in Bangladesh	11.55 AM – 12.10 AM
3.	Khalfan Al Suqri	The relationship among the ethical style of leadership and moral cognition in FM service providers in Oman (Knowledge sharing mediator and gym at workplace moderator)	12.10 AM – 12.25 AM
4.	Prof. Dr. Asif Mahbub Karim	IR4.0 and its Impact on Global Education in the Newly Accepted Norm: Global Perspective	12.25 AM – 12.40 PM
5.	Tomalika Roy	Automated Aeroponics System for Smart Farming	12.40 PM – 12.55 PM
DAY 1 SESSION 2 – 23.01.2021			
6.	Md. Mazharul Islam Bhuiyan	Assessing the Impact of Training and Development in Banking Sector: “A Case Study of Selected Banks in Cumilla	02.30 PM – 02.45 PM
7.	Noorjahan Begum	Green Banking: An Indispensable Step for the Bank to Save Our Environment	02.45 PM – 03.00 PM
8.	Narjes Ahmed	IR4.0 and Global Education: It’s time to re look into Education Delivery in the New Norm	03.30 PM – 03.45 PM
9.	Md. Nurul Ameen	Quest for Identity and decolonization in The Guide	03.15 PM – 03.30 PM
10.	Nushrat Hashmi	Excursion to the smart dimension through Mathematics: Significance of Outcome Based Education	03.30 PM – 03.45 PM
DAY 2 SESSION 3– 24.01.2021			
11.	Shariful Islam	Crisis of Nationhood and Diaspora in Amitav Ghosh’s novel The Shadow Lines	10.30 AM – 10.45 AM
12.	Dawood Hasan	Evaluation of Bio-Materials as Components of Concrete for Low-Cost Housing	10.45 AM – 11.00 AM
13.	Dr.ChrineHapompwe	Challenges and Opportunities for Loan Financing of Small and Medium Enterprises (SMEs) Through Citizens Economic Empowerment Fund, Lusaka-Zambia	11.00 AM – 11.15 AM
14.	Thong Lee Chong	Volunteerism and Disaster-Contingency Management in Industrial Revolution 4.0 Era	11.15 AM – 11.30 AM
15.	Ikbal Ahmed	Demand Forecasting in Online Retail: A big data-centric approach	11.30 AM – 11.45 PM
DAY 2 SESSION 4– 24.01.2021			
16.	Prof. Dr.Oo Yu Hock	Industrial Revolution 4.0: Reshaping Employment Choices and Career Development Opportunities	02.30 PM – 02.45 PM
17.	Nayan Kumar Sadhu	Profitability Analysis of Selected Financial Institutions in Bangladesh: Evidence from Dhaka	02.45 PM – 03.00 PM

No	Name	Title	Remarks
		Stock Exchange Limited	
18.	Afroza Islam	Online Bengali Handwritten Recognition System	03.00 PM – 03.15 PM
19.	Ali Salim Said AL Shekaili	Analysis Quality of Education System in Schools, Colleges, Universities in Sultanate of Oman from 1970 to 2020	03.15 PM – 03.30 PM
20.	Md. Mehedi Hasan Bappy	Colour Detection Model using Raspberry Pi: RGB Value Approach	03.30 PM – 03.45 PM
21.	S. M. Shahidul Alam	Design comparison between South facing and East-West facing Solar PV projects in Off Grid areas of Bangladesh	03.45 PM – 04.00 PM



Key Notes Speakers

No	Name	Designation
1	Dr Abdullah Rasheed	State Minister of Education, Maldives & GARA Fellow Chapter President, Maldives
2	Mr. Musharrof Hossain	Founder President, Federation of Bangladesh Human Resource Organization (FBHRO)
3	Prof. Dr Oo Yu Hock	Professor, Asia e University, Malaysia and GARA Fellow Chapter President, Malaysia
4	Prof. Dr. Mooi Wah Kian	Infrastructure University of Kuala Lumpur, Malaysia
5	Ms. Koralagae Kuawogai	Ministry of Education, Dubai, UAE, GARA Fellow Secretary General, Liberia
6	Prof. Dr Hafsa Jamsheed	Professor, National Textile University, Faisalabad, Pakistan
7	Prof. Dr Oscar Caria	Deputy Vice Chancellor, Cavendish University, Zambia
8	Dr Haitham Al Hajari	Adviser, Cyber Security, Government of Oman, Fellow Chapter President, Oman
9	Dr. Badar Al Moughri	Adviser, Cyber Security, Government of Oman, Fellow Chapter Secretary General, Oman
10	Dr. Yeop Ali Dopi	Senior Fellow Researcher GARA, Malaysia
11	Dr Chrine Hapomwe	Assistant Professor, Cavendish University, Zambia
12	Dr. David Sothie	Risk Security Management Expert, Malaysia
13	Asst. Prof. Dr Allah Dad,	Department of Textiles, NED, Pakistan, GARA Chapter President, Pakistan
14	Asst. Prof. Dr Nadia Farhana	Department of Business Administration, Stamford University Bangladesh
15	Dr. Muthukumar Ramaswamy	Adviser, Royal Court of Oman
16	Mr. Emmanuel Boone Waydon	Ministry of Education, Liberia, GARA Fellow Chapter President, Liberia
17	Mr. Edward Probir Mondol	CEO, Global Academy of Holistic Leadership & Coaching Inc. & GARA Fellow Chapter President, Canada
18	Dr. Ali Adan	Registrar, Research, Umma University, Kenya
19	Prof. Dr. Christine Phiri M	Vice Chancellor, Unicaf University, Zambia
20	Dr. Bisi Akin Alabi	Secretary General, Ola Up Foundation
21	Prof. Dr. Asif Mahbub Karim, FCGIA	Dean, Binary University of Management & Entrepreneurship and Honorary Chief Adviser, GARA
22	Prof. Dr. Md. Shah Jahan	Dean, Faculty of Engineering, CCNUST Convener, Organizing Committee, ICIRSFG 2021

PARTICIPATING INSTITUTIONS – 21 Institutions from 12 Countries

1. CCN University of Science & Technology

Bahrain

2. University of Bahrain, Bahrain

Bangladesh

3. Bangladesh Accreditation Council

4. Chittagong University of Engineering & Technology (CUET), Bangladesh

5. Stamford University Bangladesh

Canada

6. Global Academy of Holistic Leadership & Coaching Inc., Canada

Kenya

7. Umma University, Kenya

Liberia

8. Ministry of Education, Liberia

Maldives

9. Ministry of Education, Maldives

Malaysia

10. Al Aqsa Integrated School, Malaysia

11. Asia e University, Malaysia

12. Binary University, Malaysia

13. Infrastructure University Kuala Lumpur (IUKL), Malaysia

14. Global Academics Research Academy (GARA)

15. Onism Consultancy

Nigeria

16. Ola Up Foundation, Nigeria

Pakistan

17. Pakistan Institute of Fashion and Design, Pakistan

Sultanate of Oman

18. National Bank of Oman, Sultanate of Oman

19. Royal Court Affairs, Sultanate of Oman

United Arab Emirates

20. Ministry of Education, Dubai, UAE .

Zambia

21. Cavendish University, Zambia



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