

Annual Report, 2019

Department of

TEXTILE ENGINEERING



Photo-1: Group photograph of all faculty members of the Department

1. Overview of the Department

The Textile Engineering Department of Green University of Bangladesh started its journey from 2008. Since its inception, the Department has been playing a dominant role in offering quality education. At present, Department of Textile Engineering of the Green University is a leading Department for Textile Engineering education in Bangladesh.

The Bachelor of Science in Textile Engineering program is designed to give students the fundamentals of latest Textile Engineering to develop a broader view leading to a more intelligent approach to industrial and organizational problems. In addition to theoretical lectures, this program offers extensive laboratory practice, field trip, research project and an industrial internship facility in modern textile mills.

The major focus of the B.Sc. in Textile Engineering curriculum is on four major areas – Yarn Manufacturing, Fabric Manufacturing, Wet Processing and Apparel Manufacturing. Undergraduate students specialize in one of these groups without compromising fundamental knowledge in Textile.

The Department has eight well equipped laboratories and highly qualified and experienced faculty members having degrees from home and abroad. The Department has been offering regular B.Sc. in Textile Engineering courses of four year duration and B.Sc. in Textile Engineering courses (week-end program) for Diploma holders.

The Department has academic collaboration with leading Textile Departments at home and abroad to facilitate student exchange, scholarship, joint research and credit transfer.

The year 2019 was an eventful year for Textile Engineering Department. A summary of various events are included in this annual report.

➤ **Vision Statement**

The Textile Engineering Department of GUB aspires to be a center of excellence for making transformative impact on the socio-economic development of the country in general and textile sector in particular with outstanding education, research and eco-friendly innovation.

➤ **Mission Statement**

The Textile Engineering Department of GUB is dedicated in preparing competent graduates in the field of textile engineering through

- Adopting outcome based course curriculum,
 - Imparting quality.
 - Education by qualified faculty members,
 - Enhancing research culture and developing leadership quality
- to serve the society and industry as responsive and ethically driven citizens.

2. Conferences, Seminars and Workshops organized by the Department

2.1 **International Conference on Sustainable Technologies for Industry 4.0** was held on 24-25 December in the Permanent Campus of Green University of Bangladesh. There were a keynote session and a technical session for Textile Engineering. The keynote speaker of the session was Prof. Deng Zhongmin, Executive Vice-Director, Hubei Modern Textile Engineering Research Center, China. The topic of his talk was The Warp Knitting Technology on the Seamless Process Design Method. The technical session comprises of two invited talk and a conference paper presentation. The invited talks were given by Professor Dr. Ummul Khair Fatema, Professor and Head, Department of Environmental Science and Engineering, Bangladesh University of Textiles (BUTEX) on Industrial Wastewater Treatment and Solid Waste Disposal for Sustainable Textile Sector of Bangladesh and Prof. Dr. Lal Mohan Baral, Professor, Ahasanullah University of Science and Technology (AUST) on An Ingenious Approach of Incorporating Sustainability Issues within Textile Engineering Curriculum of Bangladesh. The conference paper was presented by Md Mutasim Uddin, Lecturer, Department of Textile Engineering, Green University of Bangladesh (GUB) on Salt Free Dyeing of Cotton Fabric with Reactive Dyes by Using Cationic Fixing Agent. This session was chaired by Prof. Dr. Nitai Chandra Sutradhar, Distinguished Professor & Chairperson, Department of Textile Engineering, Green University of Bangladesh (GUB) and Prof. Dr. Ismail Chowdhury, Professor, Department of Textile Engineering, Green University of Bangladesh.



Photo-2: STI Conference 4.0



Photo-3: STI Conference 4.0

2.2 A seminar on 'New Organic Compounds for Electronic Nano-Device and Medicine' was organized by the Dept. of Textile Engineering on December 05, 2019, chaired by Prof. Dr. Nitai Chandra Sutradhar, Distinguished professor and Chairperson, Department of Textile Engineering. Prof. Dr. Golam Samdani Fakir, Vice-Chancellor, GUB was present as the Chief Guest of the seminar. Moreover, Prof. Dr. Md. Abdur Razzaque, Pro Vice Chancellor, GUB was the Special guest of the seminar. Dr. Md. Shariful Alam, Assistant Professor, Department of Textile Engineering, GUB was the Keynote speaker of the seminar.



Photo-4: Seminar Arranged by the department

2.3 A Career Development seminar was held on November 28, 2019 chaired by Prof. Dr. Nitai Chandra Sutradhar, Distinguished Professor & Chairperson, Department of Textile Engineering about career development of Students where around 100 students were present. Our Chief Guest was Honorable Vice Chancellor, Green University of Bangladesh, Prof. Dr. Md. Golam Samdani Fakir and Special Guests were Prof. Dr. Abdur Razzaque, Pro Vice Chancellor, Green University of Bangladesh, Md. Shahid Ullah, Treasurer, Green University of Bangladesh and Md. Saiful Islam, Registrar, Green University of Bangladesh. Engineer Mir Mobasher Ali Shawpan, Managing Director & CEO, Horizon Group was present as the Keynote Speaker in the Seminar.



Photo-5: Seminar Arranged by the department

2.4 A seminar on "Information and Communication Technology in Textiles" Department of Textile Engineering of Green University of Bangladesh arranged a seminar on "Information and Communication Technology in Textiles", chaired by Prof. Dr. Nitai Chandra Sutradhar, Distinguished Professor & Chairperson, Department of Textile Engineering . The seminar was organized on December 26, 2019 at IQAC Auditorium (R#A302). Prof. Deng Zhongmin, Professor and Executive Vice-Director, Hubel Modem Textile Engineering Research Center, China was the keynote speaker of the seminar. Prof. Dr. Md. Golam Samdani Fakir, Vice-Chancellor, GUB was present in the program.



Photo-6: Seminar Arranged by the department

3. Award and Achievements

- a) Ms. Sanjida Afrin availed opportunity for pursuing PhD Degree (full funded) in Royal Melbourne Institute of Technology (RMIT University), Australia.
- b) Mr. Towhidur Rahman availed opportunity for pursuing PhD Degree (full funded) in Florida International University, USA.

4. Arrivals, Departures and Promotions

- a) Mr. Towhidur Rahman (Lecturer), Ms. Sanjida Afrin (Lecturer) of TE department have been on study leave to pursue their higher study in USA and Australia.
- b) Mr. Md. Shakil Ahmed (Lecturer) Joined the Department of Textile Engineering of GUB during Summer, 2019. And Mr. Mohammad Ashrafal Alam (Lecturer), Ms. Maksuda Parvin (Lecturer), Mr. Md Al Amin (Lecturer), Mr. Rafsan Hossain Mridha (Lecturer), Mr. Subrata Pal (Lecturer, Permanent Campus) and Mr. Mazharul Islam (Lecturer, Permanent Campus), Mr. Forkan Saroar (Lecturer, Permanent Campus) Joined the Department of Textile Engineering of GUB during Fall , 2019.
- c) Mrs. Farah Amreen departed from the Department of Textile Engineering of GUB in Fall 2019.



Photo-7: Farewell of Farah Amreen

5. Student Club Activities

5.1 Organizing Tex-Fest 2019

Tex-Fest 2019” was celebrated successfully on November 28 & 29, 2019 by Dept. of Textile Engineering.

✓ **Day 01:(Thursday, 28 November 2019)**

- Inauguration Program
- Seminar

The fest was started with the Inauguration Program on November 28, 2019 chaired by Prof. Dr. Nitai Chandra Sutradhar, Chairperson & distinguished Professor, Department of Textile Engineering. Our Chief Guest was Honorable Vice Chancellor, Green University of Bangladesh, Prof. Dr. Md. Golam Samdani Fakir and Special Guests were Prof. Dr. Abdur Razzaque, Pro Vice Chancellor, Green University of Bangladesh, Md. Shahid Ullah, Treasurer, Green University of Bangladesh and Md. Saiful Islam, Registrar, Green University of Bangladesh. Engineer Mir Mobasher Ali Shawpan, Managing Director & CEO, Horizon Group was present as the Keynote Speaker in the following Session.



Photo-13: Inauguration program and Seminar of Tex-Fest



Photo-14: Inauguration program and Seminar of Tex-Fest

✓ **Day 02:(Friday, 29 November 2019)**

- Alumni & Existing Student Get Together
- Round Table Discussion among Students, Alumni & Faculty Members
- Prize Giving Ceremony
- Cultural Program
- Fashion Show

The second day started with a Get together between Alumni & Existing Students, followed by a Round Table Discussion among Students, Alumni & Faculty Members.



Photo-15: Round Table Discussion

At the end of the round table discussion, a prize giving ceremony was held by the Textile Club. Prof. Dr. Md. Golam Samdani Fakir, Honorable Vice Chancellor, Green University of Bangladesh along with Md. Shahid Ullah, Treasurer, Green University of Bangladesh were present on the Prize giving Ceremony as the special guest. This session is also chaired by Prof. Dr. Nitai Chandra Sutradhar, Chairperson & distinguished Professor, Department of Textile Engineering.



Photo-16: Prize-Giving Ceremony

This was followed by The Cultural Program & Fashion Show, arranged by the Department of Textile Engineering, which was celebrated with a festive manner by the students of the department.



Photo-17: Cultural Program of Tex Fest 2019

5.2 Observation of International Mother Language Day and publication of Deyalika A discussion program & Rally was held for observing Language Martyrs Day and International Mother Language Day at Green University of Bangladesh where the speakers shared their opinions and paid tributes to the souls of the Martyrs. In the early morning, Green University brought out a rally from the university premises to Central Shaheed Minar and paid tribute through placing floral wreath to the martyrs of historic Language movement who sacrificed their lives for the recognition of Bangla as one of the state language of East Pakistan in 1952. Faculty members and students of the Textile Engineering Department took part in the discussion and rally.

A Deyalika was published on the brink of International Mother Language Day to pay tribute to the National heroes, who gave their life to save our mother tongue. There was also a prize giving ceremony during this program. Writers of best articles in Deyalika were rewarded by honorable Dean of the faculty of Science and Engineering.

5.3 Intra Departmental Quiz Competition :

Textile Engineering Club successfully arranged "Quiz Competition, Spring 2019" in 14th February and prizes are given to the winners on 18th April 2019. The purpose of the quiz competition was to enhance the knowledge of students & prepare them for different competitive exams. Honorable Pro Vice Chancellor Prof. Dr. Md. Fayyaz Khan was the chief guest of prize giving ceremony. The program was presided by our Honorable Chairperson of TE, Prof. Dr. Nitai Chandra Sutradhar.



Photo-8: Quiz Competition

5.4 Organizing Iftar Mahfil Textile Engineering Department always tries to facilitate and strengthen the bonding between present under-graduate student and Alumni association of Textile Engineering Department. Due to this reason an Iftar Mahfil was arranged in 2019 to cherish the spirit of Holy Month of Ramadan and to have a quality discussion about future career goal of each student. Organization of Iftar Mahfil Textile Engineering Department always tries to facilitate and strengthen the bonding between present under-graduate student and Alumni association of Textile Engineering Department. Due to this reason an Iftar Mahfil was arranged in 2019 to cherish the spirit of Holy Month of Ramadan and to have a quality discussion about future career goal of each student.

5.5 Departmental Picnic Annual picnic of Textile Engineering Department was held on 30 March, 2019 in Seagull Resort, Gazipur. Around 200 students and faculty members

including the chairperson of the department were present in the picnic. Various sports and lottery event were arranged in the picnic. Everyone enjoyed the occasion a lot.



Photo-9: Departmental Picnic

5.6 Intra Department Cricket Tournament Intra Department Cricket Tournament arranged by Textile Engineering Department held from 23 February, 2019 to 27 February, 2019. There were total 16 teams and each team consist of 9 players. Team Textile Hunter was the champion of the tournament.



Photo-10: Intra Departmental Cricket Tournament

5.7 Intra Department Football Tournament Intra Department Cricket Tournament arranged by Textile Engineering Department held from 16 November, 2019 to 25 November, 2019. The final match of the tournament was held on 25 November, 2019.



Photo-11: Intra Departmental Football Tournament

6. Presentation Papers/Attendance in the seminar/workshops etc.

students of the Department of Textile Engineering were attended a seminar on 'Textile Testing and Processing Equipment for Quality Improvement' which was organized by M.B. Trade Corporation on December 19, 2019 at Party Hall, Uttara, sector-7. Prof. Md. Abul Kashem, Vice-Chancellor, Bangladesh University of Textiles was present as the Chief Guest of the seminar. This was followed by an Exhibition of Textile Testing Equipment arranged by Refond Equipment Co. Ltd. Around 15 students from the Department of Textile Engineering, GUB were present in the program.



Photo-12: Departmental of Textile attended a seminar

7. Research and Publications

- a) Md. Mazharul Helal published a paper on Journal of Textile Science & Fashion Technology (ISSN:2641-192X, Year 2019, July), titled “Analysis of Physical & Chemical Properties of Cotton Jute Blended Denim after a Sustainable Industrial Stone Enzyme wash”.
- b) Maksuda Parvin Published a paper on Dhaka University Journal of Sciences (Volume 67(2), page 145-150, Year 2019, July), titled “Determination of Trace amount of Iron with *as*-Triazine containing Ferriin-Functional Group.”
- c) Rafsun Hossain Mridha published a paper on “Numerical Modelling of Fire and Evacuation in Typical Shopping Mall Fire in Bangladesh,” Journal of Mechanical Engineering IEB Volume: ME 49, NO: 02, June 2019.
- d) Md Mahbubur Rahman, Md Mutasim Uddin, Dr. Jagannath Biswas presented a conference paper in International Conference on Sustainable Technologies for Industry 4.0, titled “Salt free Dyeing of Cotton Fabric with Reactive Dyes by using Cationic Fixing Agent.”

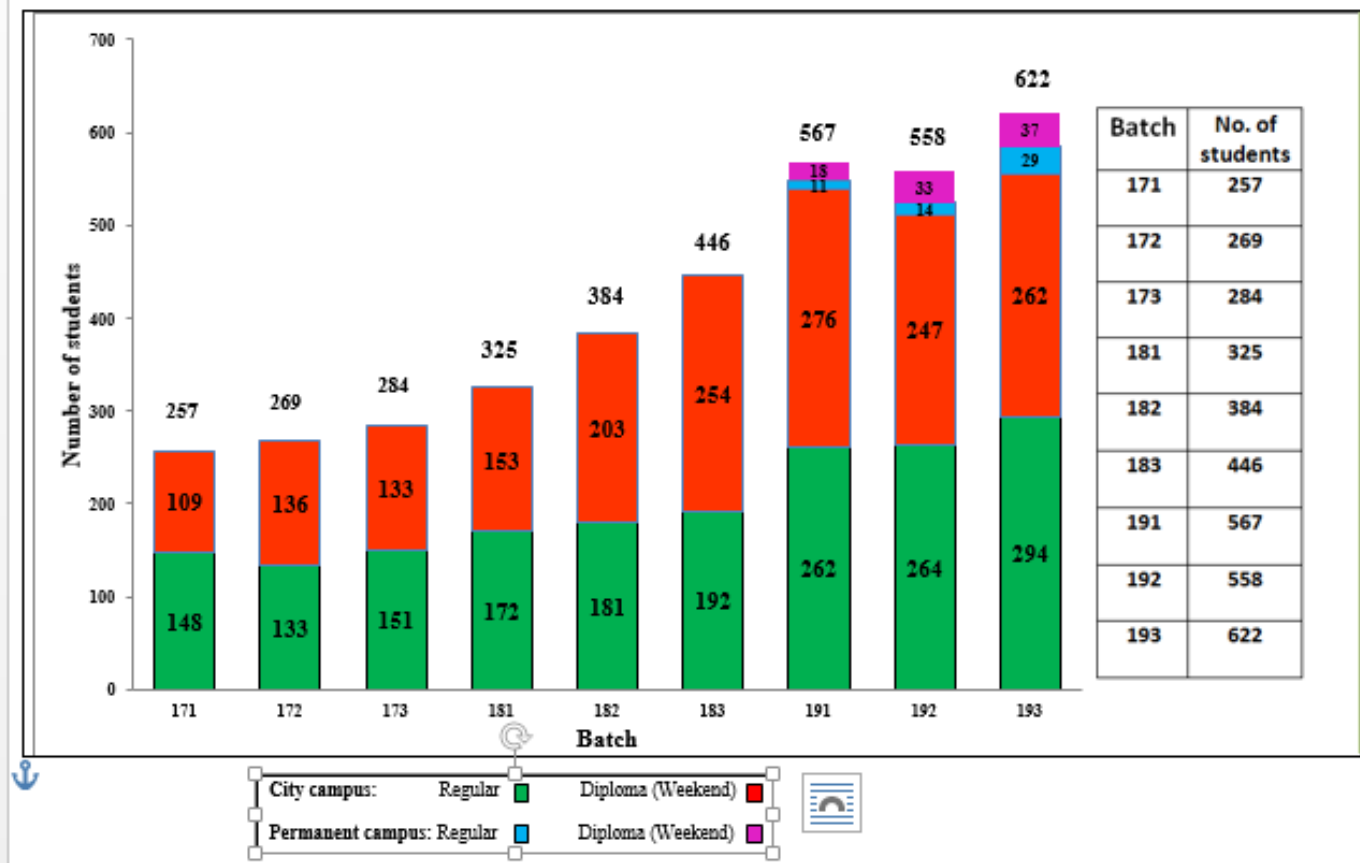
- e) Md. Al Amin Hossain presented a conference paper in ICME-2019 held in BUET, titled “Direct Simulation Monte Carlo Analysis of Subsonic Flow over a Rotating Circular Cylinder in Rarefied Conditions.”

8. Growth of the Department:

a) Semester-wise Increment of Registered Students

From 171 to 193 batch the number of registered students of the department has increased approximately 2.5 times. And the number of students is still increasing.

Semester-wise Number of Students (171-193 Batch)



9. Conclusion: The department is moving forward in implementing the OBE curriculum to ensure quality education. As the department is growing rapidly, more number of qualified teachers are recruited in 2019. The department was very vibrant throughout 2019 in terms of participation of students in various extra-curricular activities.