



# Bangladesh Accreditation Council

## Discipline/Subject Specific Requirements for Accreditation of Academic Program

### Discipline/Subject: Textile Engineering

#### Standard 1: Governance

Governance system must work in a manner that ensures better management of the program towards the achievement of mission and objectives of the HEI/PoE in a way that effectively benefits the stakeholders.

**Criterion 1.5:** The HEI/PoE has a documented class size policy and maintains class size that is appropriate for effective management of the teaching-learning-assessment to ensure better attainment of learning outcomes.

Class size (number of students in a theoretical class): Maximum 40 per section

Class size (number of students in a practical class): Maximum 20 per group

#### Standard 4: Curriculum

Curriculum must be outcome-based and consistent with the qualifications framework (QF) of Bangladesh for higher education. It should be comprehensive enough to guide the faculty and students towards systematic attainment of learning outcomes and fulfilment of mission and objectives of the PoE.

**Criterion 4.2:** Curriculum aims at producing graduates focusing on graduate attributes, that are defined following the identified needs of the stakeholders and learning domains in the QF of Bangladesh for higher education.

Graduate attributes for Bachelor Degree program are as follows:

1) A knowledge base for engineering	7) Communication skills
2) Problem analysis	8) Professionalism
3) Investigation	9) Impact of engineering on society and the environment
4) Design	10) Ethics and equity
5) Use of engineering tools	

6) Individual and team work	11) Economics and project Management 12) Lifelong learning
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Graduate attributes for Master's Degree program are as follows:

1) Problem analysis	7) Economics
2) Investigation	8) Ethics and equity
3) Design	9) Life-long learning.
4) Individual and team work	As per Washington Accord, Research &
5) Professionalism	Innovation, Creativity, Advance level of
6) Impact of engineering on society and the environment	Content should be mentioned

**Criterion 4.7:** In case of Bachelor degree program curriculum of the program includes minimum 25% of total credits for general education courses with clearly defined course learning outcomes and mapped with PLOs and learning domains of QF. In case of Master's degree program curriculum of the program includes minimum 10% of total credits for general education courses with clearly defined course learning outcomes and mapped with PLOs and learning domains of QF.

**List of a few general education courses but not limited to:**

1) Bangladesh Studies	11) Statistics
2) Bangla Language	12) Accounting
3) English Language and Communicative English	13) Management
4) Sociology	14) Marketing
5) Business Communication	15) Entrepreneurship
6) Economics	16) Human Resource Management
7) Ethics	17) Sustainability
8) Psychology	18) Modern ICT /Smart Technology
9) Physical Education	19) Industrial Revolution and Automation
10) Industrial Law	20) Governance and Human Rights
	21) Crisis and Disaster Management

*(Note: POE will select appropriate general education courses considering graduate attributes and program learning outcomes)*

**Criterion 4.9:** Provisions of internship/project/dissertation/field work/work integrated learning opportunities are included in the curriculum.

**For Bachelor Degree Program**

- a) Final year project (BSc) : Minimum 6 credits (In the semesters of final year)
- b) Industrial attachment/ Internship (BSc) : Minimum 3 credits (Minimum 8 weeks (42hrs/week) hands-on training at industry)
- c) Lab/ Practical course credits (BSc) : Minimum 25% of the total credits of the program

**For Masters Degree Program**

- a) Project/Thesis (MSc) : Minimum 6/12 credits.
- b) Lab/ Practical course credits (M.Sc): Optional

## **Standard 6: Student Admission & Support Services**

The HEI/PoE must set appropriate entry requirements and select the right candidates for a particular program under a fair and transparent admission policy. Students must have adequate and appropriate supports for better attainment of learning outcomes, exploring potentials, molding personality and preparing them for the real-life situation with sense of responsibility and integrity.

**Criterion 6.1:** The HEI/PoE maintains a clearly defined and well-communicated admission policy with transfer and withdrawal provisions, entry requirements that reflect the level of qualifications required to match with the nature of the discipline and mission of the PoE. Admission policy is effective to select students who have potentials and are able to afford the academic load to complete the program successfully.

**Requisite qualifications for admission in the Bachelor Degree (Undergraduate) program:**

HSC with Physics, Chemistry, Mathematics or Equivalent with Physics, Chemistry, Mathematics or Diploma from any branch of engineering

**Requisite qualifications for admission in the Master Degree (Graduate) program:**

Bachelor of Science in Engineering/Technology from any branch of Engineering / Technology/ Science

**Criterion 6.7:** PoE ensures and facilitates the participation of students in co-curricular activities and community services under the management of the HEI on a regular basis to promote creativity, social responsiveness, leadership qualities, values, molding personality towards holistic development.

**List of a few co-curricular activities to support the defined GA but not limited to:**

1) Indoor and Outdoor games	6) Innovation
2) Cultural events	7) Programming contest

3) Social services & volunteer activities	8) Societal Program
4) Scouting	9) Community development projects
5) Debating	

*(Note: The POE will select appropriate co-curricular activities and encourage students to participate)*

## Standard 7: Faculty and Professional Staff

The HEI/PoE must have a policy to ensure the availability of adequate qualified faculty and professional staff with reasonable teacher student ratio.

**Criterion 7.8:** The PoE maintains ideal combination of faculty with 10% Professor, 20% Associate Professor, 40% Assistant Professor and 30% Lecturer with reasonable teacher student's ratio, depending on the nature of discipline, as necessary for effective teaching learning in the academic program/discipline.

Teacher-Student ration: 1:15 maximum

## Standard 8: Facilities & Resources

The HEI/PoE must ensure availability and access to the appropriate and adequate facilities & resources necessary for effective teaching learning and research depending on the nature of discipline and program.

**Criterion 8.4:** Laboratory facilities, instructional technology & software, IT learning facilities that are identified through curriculum mapping as necessary to attain the defined learning outcomes of program and course(s) and to conduct research are in good condition with appropriate safety measures, appropriate, adequate and accessible when needed by the students and faculty members under a policy that ensures timely repair/replacement, supply and continuous improvement.

### List of essential Laboratories:

- 1) Yarn manufacturing lab
- 2) Advance technology lab
- 3) Fabric manufacturing lab
- 4) Computer & design lab
- 5) Wet processing lab
- 6) Textile testing & quality control lab
- 7) Garment manufacturing lab

8) Language lab

**Notes:**

In case of BSc. in Textile Engineering or Technology (Textile Fashion Design or Technology/ Textile Management or Textile Engineering Management/ Textile Merchandising/Apparel Merchandising/ Fashion Merchandising/ Industrial and Production Engineering/ Textile Machine Design and Maintenance/ Textile Chemistry or Dyes & Chemical Engineering/ Textile Materials and Product Development or any other very specialized programs related to textiles) the above-mentioned major criteria may be varied maximum 20%.