



NATIONAL TEXTILE UNIVERSITY FAISALABAD



Undergraduate
Prospectus
2016-17



شروع اللہ کے نام سے جو بڑا مہربان اور نہایت رحم والا ہے

**In The Name of ALLAH,
The Most Beneficent, The Most Merciful**

Welcome Message from Rector



Prof. Dr. Tanveer Hussain

Dear prospective students! I welcome your decision of considering National Textile University (NTU), for your future academic pursuits. NTU is one of the most rapidly rising universities in Pakistan. Its flagship programs in Textile Engineering & Technology are considered one of the best in the country in terms of quality, breadth and depth of the curriculum, with options to specialize in yarn manufacturing, weaving, knitting, processing and garment manufacturing.

Our increasingly popular Polymer Engineering program offers exciting opportunities in synthesis, characterization and application of polymeric materials with potential career prospects in fibers, plastics, rubber, paint and composite industries. Our Textile and Fashion Design programs are characterized by a unique blend of design and technology, which distinguish our graduates from those produced by other institutes. Our market-oriented Computer Science, Software Engineering and Business Management programs have been designed to offer wide scope of employability as well as bright potential for higher education in the relevant fields.

Our teaching philosophy at NTU is student-oriented and our focus is to develop professional competence as well as good character in our graduates. We offer plenty of curricular and extracurricular opportunities to enable our students to realize and actualize their physical and intellectual potentials. I am looking forward to your joining NTU to explore endless opportunities for your personal development and professional growth. I pray for your bright future and success in every walk of life.

Table of Contents

Welcome Message from Rector	2
University Introduction	4
Advisor Student Office	6
Facilities	7
IT Centre	7
Library	7
Academic Rules	10
Faculty of Engineering & Technology	15
• Department of Yarn Manufacturing	17
• Department of Weaving	19
• Department of Knitting	21
• Department of Textile Processing	23
• Department of Garments Manufacturing	25
• Department of Polymer Engineering	27
• Department of Materials & Testing	29
Faculty of Science	40
• Department of Applied Sciences	42
• Department of Computer Sciences	44
Faculty of Humanities and Social Sciences	50
• Department of Design	51
• Department of Management Sciences	59
Eligibility Criteria for Admission	67
• Engineering Programs	68
• Non Engineering Programs	69
Fee Structure	70
Procedure to Apply for Admission on Self Finance	71
Foreign Student	71
Refund Policy	71
University Merit Scholarships	72
How to Apply	72

History

The idea of establishing a Textile Institute of world fame was conceived by a group of visionary industrialists in 1954. To realize this idea the Government of Punjab joined hands with the leading textile industrialists to form an Institute of Textile Technology in Faisalabad (then Lyallpur) and provided sixty-two acres of state owned land free of cost. Kohinoor Industries, Colony Textile Mills, Dawood Foundation and Lyallpur Cotton Mills provided funds to the tune of Rs. 2.5 millions, which were utilized for the construction of building and provision of other infrastructure. The Government of U.K. provided the bulk of equipment and machinery, along with the services of experts under Colombo Plan. Field Marshall Muhammad Ayub Khan, the then President of Pakistan, laid the foundation stone of the Institute, on the 12th of October 1959.

A Board of Trustees, with the Minister of Industries as chairman and nominees of the donor companies as members was constituted to manage the affairs of the Institute. In order to meet the recurring expenses of the Institute a Cess was levied by the government on the Textile industry of Pakistan. Later, in 1965, the Institute was granted affiliation by the University of Engineering & Technology, Lahore, and it was renamed as "National College of Textile Engineering". The first batch of graduate engineers was passed out in 1966. In 1973 the administrative control of the Institute was transferred to Federal Government and it was renamed as "National College of Textile Engineering".

In 1992, the college received a comprehensive assistance worth 650 million yen from the Japanese Government, through JICA program, in the form of latest machinery and equipment for all the departments of the Institution. The Federal Cabinet on November 15th, 2002 has upgraded the college as National Textile University. The President of Pakistan is the Chancellor of the University.

Ever since its inception National Textile University has been the premier Institute of textile education in the country, meeting the technical and managerial human resource needs of almost entire textile industry of Pakistan. It always retained a close relationship with the industry and industrialists.



Aims and Objectives

The aim is to develop the Textile Industry and Human Resources of Pakistan and make Pakistan an active player in the world economy.

- NTU is committed to information revolution in every aspect of its activities.
- NTU will continue to strengthen its profile as a high standard University.
- NTU aims to collaborate with industry; produce high quality research and provide excellent educational services within the field of its mission.
- NTU is committed to launching and establishing facilities for postgraduate studies in textile and allied fields.
- NTU is committed to information revolution in every aspect of its activities.
- NTU will continue to strengthen its profile as a high standard University.
- NTU aims to collaborate with industry; produce high quality research and provide excellent educational services within the field of its mission.
- NTU is committed to launching and establishing facilities for postgraduate studies in textile and allied fields.



Advisor Students Office

The Advisor Students Office has been established to provide prospective and current students of National Textile University, Faisalabad with the necessary information in order to make them well informed about campus life. This is done through information and advisory services and the constant contact with the students.

The office performs a variety of roles for the student's community and its graduates and provides assistance in solving their day to day campus issues. The detail of the supporting services is as under:

General Services

- Coordination and supervision of Student Discipline, coaching, Student Sports, Hostel / Accommodation and other co-curricular activities.
- To represent student point of view on campus issues
- Preparation and distribution of student event calendar, student bulletins, magazines, etc.
- To coordinate and promote all kinds internal or external base healthy activities
- To handle the matters of students bodies / organizations / Societies and helping them in arranging their functions / extra-curricular activities

Student Societies

Technical Societies

- Spinning Society
- Weaving Society
- Knitting Society
- Textile Processing Society
- Garments Society
- Textile & Apparel Design Society
- Fashion Design Society
- Technical Textile Society
- Polymer Society
- Executive Forum
- Executive Society
- Textile Management Society
- Computer Science Society

- CS Scholars Society
- Engineering Scholars Society

Non-Technical Societies

- Character Building Societies
- Literary Society
- Debating Society
- Blood Donation Society
- Arts & Culture Society
- News Letter
- Kavish Magazine
- Working to Inspire & Nurture Girls

Student Sports

Sports have a universal appeal and a common language spoken all across the globe. It is said "A Healthy body is a promise of healthy mind", and combination of both can do wonders for students. Besides academics, sports are one of the important co-curricular activities, included in all educational institution as a part of the curriculum. Sports attribute positively to the academic performance of our learners.



National Textile University gives special emphasis to arrange indoor / outdoor sports activities for the students (Male & Female) to enhance their Physical & Mental growth. For this purpose, Student Advisor Office is continuously improving its sports infrastructure within campus to facilitate students in strengthening sports activities.

Two full time sports officers and gym trainer other then visiting international/national sports players are available for guidance/training of students.

Following sports facilities are available for students:

- A jogging track alongside the cricket ground for regular users
- Athletics
- Bad Minton

- Table Tennis
- Hockey
- Volleyball
- Boys Gym Club
- Cricket
- Football
- Girls Gym Club
- Indoor Hostel Games

Student Scholarship Schemes

The Advisor Students Office also performs the functions of Students Financial Aid Office (SFAO) and provides the student a central point of obtaining the information of different Scholarships / Financial Aid schemes. This office currently handling the following scholarships:

1. HEC Need Based Scholarship Scheme
2. University Merit Scholarships
3. Industry Scholarships (on availability)
4. PEEF Master Level Scholarships
5. PEEF Undergraduate Level Scholarships
6. Alumni Scholarships
7. MORA Scholarships
8. Faisalabad Development Trust Scholarships
9. Killa Gift Fund
10. Ihsan Trust, Karachi Qarz-e-Hasna Study Loan Scheme
11. National Bank Student Loan Scheme

Graduate Employment Services

This office also locates the jobs in market and places the employment opportunities for its graduates for all disciplines. This office manages the information regarding graduate employment opportunities, supporting students in finding employment, working with managers and acting as the liaison between graduates and prospective employers.

Students are encouraged to contact this office with questions regarding their employment issues after the completion of their study.

Facilities

Transport

The University provides pick and drop services to the students and staff from the campus to the different parts of the city according to the approved routes.

Student Accommodation

The University is a residential institution and has facilities to accommodate majority of students on the campus. There are two hostels for boys and an independent hostel for girls to accommodate about 450 students. Resident students are provided furnished accommodation comprising cubicles and dorms. Telephone lines are provided to every hostel.

Each hostel is provided independent mess and common room.

Health Care

A clinic supervised by a devoted medical officer has been setup on the campus to provide health care facilities to students, employees & their dependent family members.

IT Center

Established in 2008, IT Center is a centrally air-Conditioned building having 06 computer labs, Video conferencing room, meeting room and faculty/staff offices. Department has following infrastructure and responsibilities.

- Management of Datacenter
- Fiber optic sites connectivity
- Layer 03 Networks and Virtual LANs
- Active Directory Logins and Home Drives
- Controller bases Wireless LAN to Campus and Hostels
- Secure and high speed internet access through Firewalls
- WebApps like Faculty Profiles, Course Evaluation, Distributed Websites and Email Management
- Dreamspark Microsoft Software
- Printing Services for Students
- Video conferencing
- IT Training for university staff



NTU Library

NTU Library is housed in a two-story building and holds a unique collection of almost 20,439 information resources in textile engineering and allied disciplines. The library subscribed to twenty international and national textile

journals in print format and have bound archives of core textile and Applied Sciences journals, some of them starting from 1918 to date. Electronic access to more than 40,000 peer reviewed titles is also available through HEC Digital Library Program. The library acquires a variety of resources in print, audiovisual and electronic formats to support study and research in the university and has a wide range of services, including borrowing, reference, user advisory, information literacy (IL), OPAC, photocopying, indexing, TOC alert etc.

The library is one of the few in the country that has implemented standardized integrated software for library automation. Library World, Version 3.02 developed by CASPR Inc., is currently in use at NTU Library. The library provides electronic services through an electronic services lab that has ten computers, two scanners and three printers. The library web pages provide information about its staff, rules & regulations, information services, collection, NTU student's projects, CD Roms, virtual library links, etc. The Virtual Library contains categorized links to websites of textile and general media, product sourcing and trade associations, research centers and institutes, universities and colleges, trade directories, computer and technology for textiles, electronic resources and databases and open access journals and resources. Campus-wide access to a large number of electronic resources is available through HEC Digital Library.

Services

National Textile University Library is providing excellent knowledge resources, services and facilities to fulfill the teaching, learning and research needs of its faculty members, students, staff and a large number of users belonging to the textile community in Pakistan.

Information Literacy/ Continuing Education

The library is providing information literacy services to its patrons by organizing seminars and practical workshops to enhance the learning skills of students, researchers as well as faculty members. In this regard teachers/library community of different institutes has visited NTU library several times.

Library Hours

Library opens seven days a week according to the following schedule:

Monday – Thursday	8:30 a.m. to 9:00 p.m.
Friday	8:30 a.m. to 4:40 p.m.
Saturday & Sunday	2:00 p.m. to 9:00 p.m.



There will be one-hour Prayer/Lunch break, as notified by the administration.

Borrowing Privileges

- Students/ Staff Members/ Teaching Assistant and Research Associate can borrow three books for 21 days.
- Faculty Members can borrow fifteen books for a semester or 90 days.
- Borrowing facility is not available to NTU Alumni and students referred from other institution: however other library services are available accordingly.
- Some material, such as reference books, press clippings, CD-ROMs, current issue of periodicals, or any other publication marked as Reference/Reserved will not be circulated/issued.

Online Library

The library has uploaded its data (books, journals, CDs, thesis and reports) on web. Now the users can search their required title/material everywhere, even through their cell phones at university website www.ntu.edu.pk

Digital Library

National Textile University Library has subscribed more than 11,600 peer reviewed leading international journals and 40,000 online books available through National Digital Library Program of Higher Education Commission, Islamabad. Users can browse, search and link to find the exact information looking for, fast.

Memberships

- **The Textile Institute, UK**

In support of NTU Library mission, the library has acquired Corporate Membership of the Textile Institute since 2013 to facilitate our patrons in their academic activities. Corporate Membership allows organizations to keep up to date with what is happening in the textile industry locally, nationally and globally. This includes for potential partners for strategic alliances.

Through the TI's extensive global network members benefit from contacts with textile professionals worldwide. Corporate Members of the Textile Institute are afforded many diverse benefits as part of their membership making it useful to both industrial & Academic organizations.

- **World Textile Abstracts Database (Online)**

Since last few years the library has subscribed online research database namely "World Textiles" by EBSCO publishing for students, researchers and faculty members to help them in their research activities the access is available within the NTU campus.

World Textiles provides data from 1970 to present. Current coverage of over 340 international journals and provides archival coverages of several 100 additional journal titles, books and reports.

Post Graduate Students Section

Post Graduate student section has been functionalized for post graduate students with Wifi connection, for separate study, combine study in separate room with air-conditioned environment.



ACADEMIC RULES

1. SEMESTER DURATION

There shall be two semesters of 18 weeks each in a year. i.e.

Spring semester **Jan -May**
Fall semester **Aug - Dec**

The semester break up shall be as follows:

16 weeks teaching 2 weeks for examinations, declaration of results.

The semester break and summer session shall be observed in the University as promulgated by the University.

2. GENERAL

2.1 The medium of instruction as well as of examination shall be English for all subjects except Islamic Studies and Pakistan Studies, for which medium shall be either Urdu or English.

2.2 Non-Muslim students may be allowed to take Ethical Studies course in lieu of Islamic Studies.

3. SEMESTER SCHEDULE

Registration and orientation	1 day
Classes	8 weeks
Mid-Semester Examination	9th week
Classes	8 weeks
Final Examination	18th week
Semester Break	2 weeks
Internships/Makeup courses/Industrial visits during summer vacation	

Gazetted Holidays as per Govt. Announcement

4. PROGRAM DURATION

4.1 Students shall be required to complete four-year undergraduate degree programs in minimum of 8 regular Semesters (four years) and maximum of 12 regular semesters (six years) .

4.2 At the expiry of 12th semester from the date of enrollment, students shall not be allowed to appear in any subsequent university examination.

5. DEGREE REQUIREMENTS

All four years undergraduate degree programs consist of 130-136 credit hours of approved courses depending upon the requirements of a particular discipline.

6. GRADUATION RULE

The degree shall be awarded to those students who would satisfy the following conditions:

6.1 Successful completion of total number of courses approved by the Board of Studies. There should not be an 'F' grade in any course.

6.2 Maintain a minimum CGPA of 2.00 during the entire period of his/her studies in the University.

6.3 Achieve a minimum of "C" grade in Project/Thesis work. (Refer to thesis/project rules).

6.4 Passing the comprehensive viva voce examination. Fulfill other requirements outlined in the academic and disciplinary rules & regulations.

7. COURSE REGISTRATION

7.1 Students shall be required to register for the courses before start of each semester on the prescribed registration form.

7.2 Course/s registration shall be allowed as announced by the university.

7.3 Any change of the course/s shall be allowed only within the first week from the date of commencement of the semester.

8. MAXIMUM/MINIMUM COURSE LOAD IN A SEMESTER

8.1 The maximum course load for an undergraduate student in a regular (Fall & Spring) semester shall be 18 credit hours (six courses).

8.2 The minimum course load for an undergraduate student in a regular semester shall be 9 credit hours (three courses).

8.3 Students can take up to 6 credit hours (two courses) during summer semester.

9. WITHDRAWING OF COURSE

9.1 A student, with the consent of Dean/concerned HOD, may be allowed to withdraw a course/s within 10 weeks of the commencement of semester.

9.2 Student shall be awarded grade 'W' for the respective course/s if withdrawn within the 10 weeks of the semester with prior permission from the university

9.3 Course/s withdrawn within 10 weeks shall be recorded on the transcript with a grade 'W'.

9.4 Non attendance will not constitute an official withdrawal.

Add/Drop of Course/s

A student may add/drop course/s with the consent of concerned Dean/HOD within 4th week of the commencement of semester.

10. ATTENDANCE REQUIREMENT

10.1 Students are required to adhere to the university academic calendar and attend regularly all lectures, laboratory sessions, seminars, discussions, library sessions and field work as may be specified for each course in a semester.

10.2 Students shall be required to maintain minimum of 75% of class attendance in each course.

10.3 To sit in the final exam of a course a student must have attended at least 75% of classes held in that course. There shall be no relaxation what so ever for any reason.

10.4 Failure to meet the attendance requirements shall render the student ineligible for appearing in the final examination of the concerned course and he/she shall be awarded an 'F' grade in that particular course.

11. EXAMINATION, GRADING AND EVALUATION

11.1 There shall be two examinations: mid semester and final exam for each course during each semester. Same criteria shall be followed in the Summer Semester.

11.2 The performance of a student shall be evaluated through a continuous testing procedure spread over the entire period of his/her studies.

11.3 The weightage of the exams and quizzes/ assignments shall be as under:

Quizzes/assignments and or any other assessment activity 30 % Mid Semester Exam (one and half hour) 30% Final Exam (two hours maximum) 40%

11.4 In order to complete/pass a course, a student shall be required to obtain minimum 'D' grade each in Theory and Practical work separately.

11.5 The teacher may give as a part of the course requirement, home assignments, quiz reports, and projects etc.

11.6 The number of activities mentioned in 11.5 shall depend on the credit hour weightage of the course. One credit hour shall entail minimum of two class

activities. e.g. Three credit hour courses shall have minimum of 6 activities (quiz/ assignment or any other assessment activity).

11.7 Practical course considered as a separate course of one credit hour equivalent to two/three Lab. contact hours. Practical courses shall be evaluated separately. Final Exam is mandatory, irrespective of the total marks obtained in the quiz/ assignments and mid semester exam.

12. MARKS AND GRADING CRITERIA

The marks allocation/Grading Criteria shall be as follows:

Marks	Grade Point	Grade	Remarks
85 & above	4	A	Excellent
80 - 84.9	3.50	B+	Very good
75 - 79.9	3	B	Good
70 - 74.9	2.50	C+	Above Average
65 - 69.9	2	C	Average
60 - 64.9	1.50	D+	Below Average
50 - 59.9	1	D	Pass
Below 50	0	F	Fail
		I	Incomplete
		W	Course withdrawn

Fraction shall be up to two digits.

The GPA*/CGPA** is computed as:

Sum of (Credit Hs*** x grade point)/sum of Credit Hrs.

* GPA means Grade Point Average in a particular semester.

** CGPA is the grade point average for the entire work at any given period of time.

*** Credit for course work is recorded in Credit Hours. One credit hour represents one class contact hour per week, in lab work 2-3 class contact hours per week throughout the semester.

13. ACADEMIC HONORS

To earn the degree with honor, a candidate must pass all required courses in the first attempt maintaining a CGPA of 3.00 or above in each semester.

14. MERIT SCHOLARSHIP

Student obtaining GPA of 3.50 or above in any semester will be awarded merit scholarship.

15. PROBATION & EXPULSION RULES

15.1 In order to continue in good academic standing a student must achieve a Cumulative Grade Point Average (CGPA) of at least 2.00 on scale of 4.00 during the entire period of his/her studies.

15.2 If a student's GPA drops below 2.00 in the first semester he/she shall be on 1st probation in the next semester. He/she shall be required to makeup CGPA of 2.00 or more in the next semester.

15.3 If a student GPA drops below 1.00 in the first semester, he/she shall be expelled from the university.

15.4 If a student is unable to maintain the CGPA of 2.00 in the second semester, he may be promoted to the next semester and would be on final probation. If a student fails to maintain the CGPA of 2.00 in that semester, he/she shall be expelled from the University and cannot be readmitted.

15.5 If a student fails to pass certain courses, yet manages to maintain CGPA of 2.00 or above he/she may be allowed to repeat and clear the courses when such courses are offered.

15.6 A student on probation shall only be allowed to take maximum of 12 credit hours load in the next regular semester.

15.7 A student is allowed only two academic probations in a program after which he/she shall be expelled from the university.

16. REPETITION/IMPROVEMENT OF GRADES

16.1 Students generally may not be allowed to repeat courses for improvement of their grades except probationer students with 'D' and 'D+' grades only.

16.2 In case a student repeat the course which has already been taken, the old grade will be substituted with the new grade (for CGPA calculation), but in case a student takes a new course in lieu of the course in which he/she failed, both the grades will reflect on his/her transcript, i.e. old course grade and new course grade.

16.3 A student can be allowed to repeat a maximum of six courses (18 credit hours) to improve his/her grade.

17. INCOMPLETE COURSE

(projects, seminars, and special cases only)

17.1 An 'I' grade is given to a student in a project/ seminar, if he/she does not complete course requirements within the prescribed time-limit, and the supervisory committee is satisfied that it was because of circumstances beyond his/her control (special case), and that only a minor component of the course is outstanding.

17.2 Incomplete grade 'I' shall not be considered in GPA/CGPA calculations. However, it is responsibility of the student to complete the remaining work of 'I' grade course not later than 3rd week of the next semester. Failing this 'I' shall be converted to grade 'F'.

18. SUMMER SEMESTER

Summer semester is not a regular semester. It provides opportunity to students who have failed in course/s and those who wish to improve their CGPA to qualify the next semester:

18.1 During any summer semester normally, a student may enroll a course/s with 'F', 'D' and 'D+' grade up to a maximum of 6 credit hours.

18.2 A student may be enrolled only if the particular course/s is offered with minimum class formation of 5 students in each course.

19. COMPREHENSIVE VIVA VOCE

The comprehensive viva voce is mandatory requirement for the award of undergraduate degree. This viva voce is scheduled at the end of the final semester in which the student is completing his course work, in order to judge the understanding, articulation as well as application of the knowledge gained by the student. The idea is to see that students are able to digest what is being taught in four full years and see their relevance not only in the practical field but also their inter relationship.



20. MAKE-UP EXAMINATION

20.1 If a student fails to appear in the Mid or Final Exam due to unavoidable circumstances i.e. death of blood relations (Parents, Grandparents, brother or sister), personal severe accident, or illness (hospitalization) (onus of proof entirely on the student), but otherwise complies with other course requirements such as attendance, completion of assessment activities, then on the recommendations of the course teacher and the student advisor.

20.2 Mid semester or final exam may be rearranged by University, only after the approval and determination of the modalities of the case.

20.3 Any such exam if allowed shall be held within the 3rd week of that semester's final exam of which the student is defaulter.

21. SEMESTER FREEZE RULES

21.1 A student may freeze a semester with prior permission and approval from the university within the first week of the commencement of a semester and only his/her 75% tuition fee will be refunded. 25% of tuition fee will be charged as services charges. Students freezing semester after the first week will not get any dues refunded.

21.2 If a student freezes a semester, he/she will be admitted in the same semester. No freezing in the first semester is allowed.

21.3 A student freezing a semester has to complete his/her program in a maximum of 12 regular semesters (6 years). His/her registration will not be cancelled.

21.4 If a student drops a semester without prior approval of the university, his/her admission shall stand cancelled.

22. CANCELLATION OF ADMISSION

If a student fails to attend any lecture during the first four weeks of the commencement of the semester as per announced schedule, his/her admission shall stand automatically without any notice.

23. CHEATING/UNFAIR MEANS

NTU maintains a very strict policy on academic improprieties. Any student found cheating or using unfair means in the exam, quizzes and assignments will be dealt severely which may lead to expulsion from the university. (Please consult disciplinary/misconduct rules).

24. STUDENT GRIEVANCES

A committee comprising all HOD's will redress the grievances of the students about any course instructor or grades. A student must approach the Dean for a grievance on grade within 5 days of the receipt of the grade.

The Dean shall forward the grade grievance to the committee and it will be binding on the committee for hearing both sides (student and the instructor), and will give a final decision within 5 days or before the start of registration for the new semester which comes early. The decision of the committee will be final.

25. COURSE FILE

Course file will be maintained for every course by the course teacher. It will have a complete record of everything that happened during the semester. The course file will contain:

- Description of course
- Course coding
- Weekly teaching schedule
- Dates of mid-semester examination
- Grading policy will identify each activity, such as homework, quizzes, mid-semester examination, final examination, term papers
- Copy of each homework assignment
- Copy of each quiz given
- Copy of mid semester examination Grading sheets of the course detailing statistical data on the grades obtained by students
- Difficulties/problems faced during classroom/course delivery

The course file of each subject will be made available to student in the office of the HOD and also in the library.





FACULTY OF ENGINEERING & TECHNOLOGY

- ◆ Department of Yarn Manufacturing
- ◆ Department of Weaving
- ◆ Department of Knitting
- ◆ Department of Textile Processing
- ◆ Department of Garment Manufacturing
- ◆ Department of Polymer Engineering
- ◆ Department of Materials and Testing

Message Dean Faculty of Engineering & Technology



Zafar Javed

Faculty of Engineering & Technology carries a rich history at National Textile University, but it has never been content to live in the past. We are always at the forefront of significant research and teaching practices in different fields of textiles. Our faculty enjoys the exceptional reputation in the field of textile engineering and technology. We offer the university's flagship program of B.S Textile Engineering with four specializations along with M.S. Textile Engineering, Ph.D. Textile Engineering, B.S Polymer Engineering and B.S Textile Technology.

We are leaders in innovative curriculum development. From the very beginning of their academic journey, our engineering students are involved in hands-on training. Development of critical thinking, complex problem-solving skills and analytical reasoning are emphasized in our teaching. At our faculty, learning is enhanced by the most advanced technology, including the state of the art laboratories. The faculty has an ever-increasing international reach and current faculty members have many on-going research projects with international collaborators.

At Faculty of Engineering and Technology, we are committed to the success of our students. We offer them personalized attention from caring professionals who are dedicated to helping them complete their academic, career and personal goals. I invite you to become an engaged and involved student so that you can fully appreciate everything Faculty of Engineering and Technology has to offer.

DEPARTMENT OF YARN MANUFACTURING

Mission Statement

"To develop human resource with adequate moral and ethical values for the service of textile industry in general and textile spinning sector in particular by inculcating the knowledge of conventional and high performance textile materials, their processing techniques, quality control methods and engineering details of production and testing equipment.

Brief Introduction

The textile industry plays an important role for the economical development of Pakistan and its subsector the textile spinning industry occupies an important place in this regard. It is one of the most organized sub-sector of textile industry which has been the result of extremely hard work of the textile graduates of this institution.

In the University, the Department of Yarn Manufacturing is also one of the oldest and largest departments. The students opting for specialization in yarn manufacturing are given comprehensive Knowledge about textile fibers and the techniques to convert them into yarn and subsequent textile products with the best possible characteristics at most economical rates.

The practical training in the laboratory of the department is supplemented by the frequent visits to the industrial units where the students get a fair good chance to see the latest trends in the spinning machinery set-ups and become familiar with the working environment of the industry.

Facilities

The department has an excellent yarn manufacturing laboratory consisting of modern, semi-modern as well as conventional machinery including Toyoda-Ohara Hergeth Blow Room, Howa CM 80 Card, Platts Card, Flat Clipping Machine, Platts Draw Frame, Toyoda DYH 500 C Draw Frame, Rieter RSB D40 Draw Frame, Platts Lap Former, Platts Comber, Toyota FL 16 Simplex, Platts MS 2 Simplex, Howa UA-330 G Ring Frame, Toyota RY-5 Ring Frame, Pakistan RB-18 Ring Frame, Platts MR 3 Ring Frame , Edera Mini-Ring, Rieter Comfor Spin(R) K-44 Spinning frame (newly Erected) Peter Wolters Cots Grinding Machine, Murata Link Coner with Splicer, Murata Mach Coner with knotter,

Schlafhorst Auto Coro Open-end Rotor Machine, Bradford Rotor Spinning, Sanco Compressor, Hitachi Compressor, Toshiba Compressor, Kamitsu Classimat, Stalybridge Wrapping Drum, Stalybridge Wrapping Reel, Stalybridge Twist Tester, Shirely Top Roller Eccentricity Tester, Electronic Sartorius-GM 152 Weighing Balance, Avery Weighing Balance for Laps, Avery Weighing Balance for Bales, Lux Meter Testo 545, Testo 425 Air Flow Meter.

Career Prospects

The engineering and technological knowledge with practical expertise of textile engineers are highly esteemed by textile industry. The industry realizes that its future depends upon the quality of its technology and managers, because the quality of product and productivity play the vital role for exporting textile products. Our graduates play a vital role in quality production, management and productivity. At present, more than 90% spinning mills are being headed by our textile graduates. The textile engineers with specialization of yarn manufacturing can find jobs in production, quality control, research and development, process engineering , sales, corporate management , export houses, and government-sponsored development organizations. They can also enroll for higher studies within Pakistan or abroad and work as faculty and researchers in the universities and research institutes.



Faculty Members in Department of Yarn Manufacturing



Mr. Uzair Hussain

Assistant Professor / Chairman
M.Sc Textile Engg. (NTU, Faisalabad)
B.Sc Textile Engg. (UET, Lahore)



Dr. Zulfqar Ali

Assistant Professor
PhD Textile Engg. (MUET, Jamshoro)
B.Sc Textile Engg. (UET, Lahore)



Dr. Abdul Basit

Assistant Professor
PhD Textiles (UHA France)
MS Textiles & Materials
(ENSAIT-ENSAM FRANCE)



Mr. Muhammad Bilal

Assistant Professor
MS Textile Management (TUF)
B.Sc. Textile Engg. (UET, Lahore)



Mr. Sarfraz Hussain

Lecturer
B.Sc Textile Engg.
(UET, Lahore)



Mr. Amir Shahzad

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)



Hafiz Shahzad Maqsood

Assistant Professor
M.Sc Industrial & Manufacturing Engg.
(UET, Lahore)
B.Sc Textile Engg. (UET, Lahore)
(On Study Leave)



Mr. Shoaib Iqbal

Lecturer
M.Sc Mechanical Engg.
(Textile Technology)
University of Borås, Sweden
B.Sc Textile Engg. (NTU)
(On Study Leave)



Mr. Abdul Jabbar

Lecturer
M.Sc Textile Engg. (NTU, Faisalabad)
B.Sc Textile Engg. (NTU, Faisalabad)
(On Study Leave)

DEPARTMENT OF WEAVING

Mission Statement

To educate our graduates with the required competence of process optimization, industrial management, research and product development related to weaving and associated products, so that they can participate in the social, moral and economic development of our nation through academics, research and technological innovations.

Brief Introduction

The Department of Weaving is an independent department that focuses its activities on the training of weaving engineers. Every effort is made to equip students with ample knowledge of weaving technology and of the products based on it. The teaching activities are carried out by well-qualified and dedicated faculty members.

The department is equipped with a full range of weaving machines, including preparatory process and weaving shed. Students are given extensive practical training to augment their theoretical knowledge. Regular visits to the weaving units are organized to familiarize the students with the industrial environment and to get first hand feel of the industry.

The department also provides testing and consultancy services to the industry in addition to the normal teaching assignments. Research and development projects are also carried out for different sectors of textile industry.

Undergraduate Program

The department offers full time four year degree program in textile engineering with specialization in Weaving. The undergraduate program offered by the department is based on long established courses of studies, which are designed by keeping in view the requirements of the industry. As a result the undergraduate program carries an enviable repute because of its quality and contents. The machine mechanisms, fabric structures & design, process control and weaving calculations are taught in detail. This enables students to develop a professional approach towards the subject, which in turn facilitate them to become efficient managers of fabric manufacturing units.

Facilities

The Weaving department has excellent laboratory facilities including latest air jet looms to the conventional

shuttle looms, hand-loom, the back process machinery and knotting machine. The department has the facility of Computer Aided Design (CAD), in association with Nedgraphics® and Scott weave for the simulation of fabric structure and design. A number of testing instruments are available to test the different fabric parameters.

Staubli® Training Center is also a unique addition to the existing laboratory facilities, established in 2004 with the cooperation of Staubli, France. In the center, training for electronic jacquard, dobby and Cam motion is imparted by French technicians. The department has its own Library, having a collection of books, journals, manuals, research projects and helping material in soft form (CDs).

Research Area

Our major research areas are investigation of the technological and product related aspects of conventional woven fabrics, 3D woven fabrics, woven composites, technical and smart fabrics.

Career Path

Over the years, the graduates of this department have established themselves as highly competent professionals and successful managers in the Pakistani weaving industry. Presently weaving sector is expanding rapidly and students graduating with specialization in weaving are in high demand. The jobs range from production management, quality control, marketing, execution, merchandizing, chemical and machinery sales.

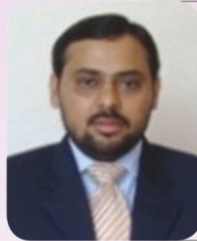


Faculty Members in Department of Weaving



Mr. Muhammad Ayub Asghar

Assistant Professor/Chairman
MS/M.Phil University of Manchester
BS Textile Engineering NTU Faisalabad



Dr. Yasir Nawab

Assistant Professor
Post Doctorate (France)
PhD Mechanical Engg. (France)
M.S Materials & Textile processing
(France)
B. Sc Textile Engg. (NTU) Fsd.



Mr. Muhammad Imran Khan

Lecturer
B.Sc Textile Engg. (NTU, Faisalabad)



Dr. Talha Hamdani

Assistant Professor
PhD Textile Science & Technology. UK
M.Sc. Textile Engg. (BZU, Multan)



Mr. Muhammad Umar Nazir

Lecturer
B.Sc Textile Engg. (NTU, Faisalabad)



Mr. Danish Mehmood Baitab

Lecturer
B.Sc Textile Engg. (NTU, Faisalabad)



Mr. Khubab Shaker

Lecturer
M.Sc. Textile Engineering
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Muhammad Zohaib Fazal

Lecturer
BSc Textile Engineering
NTU, Faisalabad.



Mr. Muhammad Maqsood

Lecturer
M.Sc Textile Engg. (NTU, Faisalabad)
B.Sc Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Ms. Adeela Nasreen

Lecturer
B.Sc Textile Engg. (NTU, Faisalabad)



Mr. Mohammad Zubair

Assistant Professor
M.Sc. Textile Engg. (NTU, Faisalabad)
M.Sc. Textile Management (FSD)
B.Sc Textile Engg. (UET) Lahore
(On Study Leave)



Mr. Adeel Zulfqar

Lecturer
M.Sc Textile Engineering (NTU)
B.Sc Textile Engineering (NTU)
(On Study Leave)



Mr. Muhammad Umair

Lecturer
M.Sc Textile Engg. (NTU, Faisalabad)
B.Sc Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Muhammad Usman Javed

Lecturer
M. IT (VU)
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)

DEPARTMENT OF KNITTING

Mission Statement

To educate our graduates with the required competence of process optimization, research and product development and industrial management in the field of knitting so that they could participate in the social, moral and economic development of our nation through academic, research and technological innovations.

Brief Introduction

The Department of Knitting is an independent department that focuses its activities on the training of fabric engineers. Every effort is being made to equip students with ample knowledge of fabric manufacturing techniques. The teaching activities are carried out by well-qualified and dedicated faculty members having industrial experience. The department is equipped with a full range of knitting machines. Students are given extensive practical training to augment their theoretical knowledge. Regular visits to the Knitting units are organized to familiarize the students with the industrial environment and to get first hand feel of the industry. Knitting department, in collaboration with top most industrial units arranges campus recruitments for fresh graduates as well. The department also provides testing and consultancy services to the industry in addition to the normal teaching assignments. Research and development projects are also carried out for different sectors of textile industry. Knitting department has signed Memorandum of Understanding (MoU) with Kalsah Mills Ltd. and many other such projects are in pipeline.

Undergraduate Program

The department offers four year full time courses in textile engineering with specialization in Knitting. The undergraduate program offered by the department is based on long established courses of studies, which are designed keeping in view requirements of the industry. As a result the undergraduate program carries an enviable reputation because of its quality and contents. The machine mechanism, fabric structures & knitting calculations, specialty knitting and some management related subjects are being taught. This enables students to develop a professional approach towards the subject, which in turn enables them to become efficient managers of fabric manufacturing units.

Facilities

The Knitting department has excellent laboratory facilities. A wide range of the latest knitting machines are available in the department including flat and circular knitting

machines. Hand driven flat knitting machine is also available which can produce a variety of designs, ranging from single jersey to jacquard. Shima Seiki SFG-I ultrafine seamless gloves knitting machine (fully automated) and Lonati 144 GL (4") Socks knitting machine are also available. Our labs are equipped with Computer Aided Design (CAD) facilities and a number of testing instruments to test different fabric parameters. We also have two latest software, Scott weave and Star fish, for the simulation of fabric structure and design.

The department has its own Resource Center, having a collection of books, journals, manuals, research projects and helping material in soft form (CDs).



Research Area

The research and development projects are carried out for different textile sectors; our major research area is the field of mechanical and structural characteristics of knitting fabrics. Some research papers have been published last year and some are in pipeline.

Career Prospects

Over the years, graduates of fabric manufacturing have established themselves as highly competent professionals and successful managers in the Pakistan industry. Currently Fabric manufacturing department (Weaving & Knitting) is expanding rapidly and students graduating with specialization in fabric manufacturing are in high demand. The jobs range from production management, quality control, marketing, execution, merchandizing, chemical and machinery sales. With more than 90% employability rate, knitting department is striving to bring industry to class rooms.

Faculty Members in Department of Knitting



Mr. Muhammad Ayub Asghar

Assistant Professor/Chairman
MS/M.Phil University of Manchester
BS Textile Engineering NTU Faisalabad



Mr. Waqas Ashraf

Lecturer
M.Sc Advanced Materials Engg.
(NTU) Faisalabad
B.Sc. Textile Engg. (NTU, Faisalabad)



Hafsa Riaz

Assistant Professor
M.Sc Engg. Management
(UET, Lahore)
B.Sc. Textile Engg. (UET) Lahore
(On Study Leave)



Mr. Haritham Khan

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)



Hafiz Shahbaz Ahmed

Lecturer
M.Sc Advanced Materials Engg.
(NTU Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)



Muzammal Hussain

Lecturer
B.Sc. Textile Engg. (NTU)



Mr. Habib Awais

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)

DEPARTMENT OF TEXTILE PROCESSING

Mission Statement

Textile Processing Department is committed to provide trained manpower to the Textile Chemical Processing Industry by imparting the best possible theoretical and technical knowledge of both basic and applied textile coloring and finishing science for the socio-economic development of the society.

Brief Introduction

The Department of Textile Processing occupies an eminent position in the University. It provides trained manpower to the textile processing industry. The department offers a four-year degree programme through a range of courses covering all areas of wet processing of textile materials. The theoretical knowledge is strengthened with extensive practical work. The department hosts a blend of conventional and modern processing machines for practical training of the students. Our graduates are holding important positions in the industry from production to management. They are also engaged in sales of textile chemicals, dyes and pigments of multi-national organizations. The students get internship in the industry and make frequent visits during vacations to obtain comprehensive knowledge and to see latest trends of the industry.



Facilities

Textile Chemical Testing and Quality Control Lab has calibrated instruments for testing of different textile Products and chemicals. All tests are carried out in standard laboratories conditions. The Lab had been ISO 17025 certified. The Pilot Scale Production Lab is equipped with Yarn Dyeing Machine, Open Jigger, High Pressure Jigger, High Pressure Pot Dyeing Machine, High Pressure Soft Flow Jet Dyeing Machine, Winch Dyeing Machine, Pad Steam



Continuous Dyeing Machine, Pad Thermosol Continuous Dyeing Machine, Padder with Stenter for application of chemical finishes, Roller Printing Machine, Flat Bed Screen Printing Machine, Rotary Screen Printing Machine, Steamer, Ageing/Curing Machine and Calendering machine.

The testing lab is equipped with Moisture Management Tester, Drying Rate Tester, Microscopes, Launder-o-Meter for washing fastness tests, Pot Dyeing Machine for dyeing and shade matching, Crock Meters for rubbing fastness tests, Xenon Light Fastness Tester, Viscometer for measurement of viscosity of printing pastes, Computer colour matching system, Colour Assessment Cabinet, Drying Oven, Melt spinning tester accredited, MMT & DRT.

The department also provides testing and consultancy services to local textile processing industry. The department has well qualified and skilled staff and the whole faculty works as a team for this important service to the industry. The results of our testing lab are authentic and recognized all over the world. The Lab has calibrated instruments for testing of different textile products and chemicals. All tests are carried out in standard conditions.

Career Prospects

Textile processing graduates find excellent job opportunities in the textile and other industrial sectors of Pakistan. The graduates normally start their career as process engineer, researcher, production and planning manager/supervisor, technical sales and quality control. Apart from joining industrial firms and manufacturing units after graduating, they can also start further studies abroad and in other institutions of the country.

Faculty Members in Department of Textile Processing



Mr. Muhammad Saif Maqsood
Lecturer/Coordinator
M.Sc. Textile Engg. (Germany)
BS Textile Engg. (NTU, Faisalabad)



Prof. Dr. Tanveer Hussain
PhD (Hariat Watt University, UK)



Dr. Waseem Ibrahim
Assistant Professor
PhD (Hariat Watt University, UK)



Dr. Abdur Rehman
Assistant Professor
PhD (University of Leeds, UK)



Dr. Rashid Masood
Assistant Professor
PhD (Bolton University, UK)



Mr. Ahsan Nazir
Assistant Professor
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)



Dr. Munir Ashraf
Assistant Professor
PhD Self Cleaning Surface (France)
M.Sc. Textiles (France)
B.Sc. Textile Engg. (NTU, Faisalabad)



Engr. Muhammad Irfan Siyal
Lecturer
M.E. Textile Processing
Mehran, UET, Jamshoro
B.E. (Textile Engg.)
(On Study Leave)



Dr. Kashif Iqbal
Lecturer
PhD Textiles (Hariat Watt University)
M.Sc. (Sweden)
B.Sc. Textile Engg. (NTU, Faisalabad)



Syed Qummer Zia Gilani
Lecturer
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (UET, Lahore)
(On Study Leave)



Syed Shahzad Hussain Zaidy
Assistant Professor
M.Sc. (Australia)
B.Sc. Textile Engg. (UET, Lahore)
(On Study Leave)



Hafiz Affan Abid
Lecturer
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Amjad Javaid
Lecturer
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Miss Faiza Anwar
Lecturer
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)

DEPARTMENT OF GARMENTS MANUFACTURING

Mission Statement

"Developing an excellent relationship between best academic practices and research in the field of clothing is a keystone of our mission. Through this combination we endeavor to develop in our students proper professional and technical skills along with ethical and moral values."

Brief Introduction

The Department of Garment Manufacturing was setup with a vision to enkindle some of the brightest technical minds of the country and equip them with all skills necessary to manage the clothing industry.

The Department envisions to produce successful graduates who will be capable of leading the fast paced changing scenarios of today's apparel industry through intellect, innovation and values. Research and educational activities are conducted by proficient, devoted and well-qualified faculty and staff members having ample experience in various fields of garment manufacturing. An active Interaction with industry is the main feature of our Teaching Philosophy, Industrial Visits, internships, symposiums and participation in workshops and industrial exhibitions are frequently carried out for students learning.

Department of Garment Manufacturing is also dynamically involved in providing consultancy services to the textile industry and other public sector organizations. Various national level projects were carried out with success by the department during recent years.



Facilities

The Department of Garment Manufacturing provides outstanding laboratory facilities that can be compared with any renowned national or international university. Sewing labs are equipped with almost all different types of industrial sewing and pressing machines used in apparel production and research. The department has upgraded itself with latest CAD software such as Accumark, Fashion studio, Vstitcher etc. The Department has recently setup a new smart lab to carry out research in field of smart and intelligent textiles.

Career Prospects

Since the start of this program our graduates are a real sorted out product for the Textile Apparel sector. Our graduates are serving in managerial capacities, in apparel sector ranging from production, marketing and merchandizing, quality control, product development, industrial engineering, production planning and control, procurement, quality assurance etc.

Faculty Members in Department of Garments Manufacturing



Mr. Saad Ullah Channa

Lecturer/Chairman
M.Sc. Advanced Materials (Technical Textiles) with Distinction, UK
B.Sc. (Hons) Textile Science (TIP, Karachi)



Mr. Zafar Javed

Assistant Professor
M.Sc. (Ghent) Belgium
B.Sc. Textile Engg. (UET, Lahore)



Dr. Abher Rasheed

Assistant Professor
PhD Textile Science & Engg. (France)
M.Sc. Textile Materials & Processes (ENSAIT/ENSAM France)
B.Sc. Textile Engg. (NTU, Faisalabad)



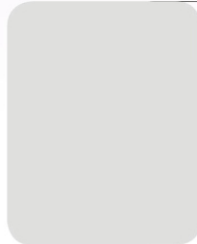
Mr. Ateeq-ur-Rehman

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)



Mr. Nauman Ali

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)



Miss Muntaha Rafiq

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)



Mr. Muhammad Rizwan Imtiaz

Lecturer
B.Sc. Textile Engg. (TUF, Faisalabad)



Mr. Jawad Naeem

Lecturer
M.Sc. Textile Technology (Sweden)
MBA (QAU, Islamabad)
(On Study Leave)



Mr. Imtiaz Ahmed Khan

Lecturer
MS TQM (PU, Lahore)
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Muhammad Salman Naeem

Lecturer
M.Sc. Textile Engg. (NTU, Faisalabad)
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Rao Arshed Ali

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)

DEPARTMENT OF POLYMER ENGINEERING

Mission Statement

Department of Polymer Engineering is committed to provide qualified engineers to polymer sector equipped with the best possible theoretical and practical knowledge of basic sciences, social sciences and engineering concepts to fulfill the needs of society and the profession.

Brief Introduction Department of Polymer Engineering is relatively new department which has established at National Textile University in 2007. It occupies a distinguished position in the university. The foremost purpose of establishing this department is to provide trained man power to polymer sector in the country.

The Department offers a 4-year degree program through a range of courses covering all areas of polymeric materials. The curriculum is designed vigilantly by keeping in view the current and future needs of the industry and is fully flexible to be modified to keep pace with the rapidly changing production technologies. The major focus is on developing concepts and skills of students through class room learning, laboratory work, internship and industrial tours.

Department of Polymer Engineering has established industrial linkages which enables the students to grab latest trends in the industry. Moreover, Department is also involved in graduate programs at the university and actively participate in Research & Development.



Facilities

The Department of Polymer Engineering provides excellent Laboratory facilities. Polymer Synthesis Laboratory, contains Batch Polymerization Reactor, Heating Mantles, Furnace, Overhead Stirrers, and Oven etc. Polymer Characterization Laboratory consists of FTIR (Fourier Transform Infrared Spectrometer), GPC (Gel Permeation Chromatography), DSC (Differential Scanning Calorimeter), UTM (Universal Testing Machine), Melting Point Tester and Rheometer.

Instrumentation & Process Control Laboratory comprises of Temperature Process Station, Level Process Station, Pressure Process Station, Flow Process Station and Thermocouple Calibration Bench etc. Polymer Processing Laboratory is equipped with Extruder, Injection Moulding, Melt Spinning Machine and Blow Moulding Machine "Unit Operations Lab" is equipped with Air Dryer Unit, Shell & Tube Heat Exchanger, Plate and Frame Heat Exchanger, Gas Diffusion apparatus, Flow Demonstration Apparatus & Distillation Column. The Department has plans to develop its Laboratories by inducting new machines.

Career Prospects

Polymer Engineering has bright prospects in Fibres & Textiles, rubbers, composites, packaging materials, coatings & paints, adhesives and sealants. In addition to that R&D of textile fibres, textile auxiliaries, medical textiles, pharmaceuticals, technical textiles etc. Students are trained in such a way that they can adopt any field of polymers and related areas.



Faculty Members in Department of Polymer Engineering



Mr. Hammad Mohsin

Assistant Professor/ Chairman
M.S Macromolecular/Polymer Science
& Engg.
(Case Western Reserve University, USA)
B.Sc. (Hons.) Textile Sciences (TIP,
Pakistan).



Mr. Muhammad Saqib

Lecturer
M.Sc. Mechanical Engg. (UET, Lahore)



Mr. Asif Hafeez

Lecturer
Master in Chemical Science & Engg.
KTH Royal Institute of Technology,
Sweden



Mr. Mubeen Ahmed

Lecturer
M.Sc. Chemical Engg. (UET, Lahore)



Mr. Muzammil Mahmood

Lecturer
M.Sc. Chemical Engineering
UET, Lahore



Mr. Hassan Mahmood

Lecturer
B.Sc. Mechatronics & Control Engg.
(UET, Lahore)



Ms. Javeria Chiragh

Lecturer
B.Sc. Mechatronics & Control Engg.
UET, Lahore



Mr. Wasif Razzaq

Lecturer
M.Sc. Chemical Engg. (Polymer)
(UET, Lahore)

DEPARTMENT OF MATERIALS AND TESTING

Mission Statement

The Department of Materials and Testing is committed to provide full support to the undergraduate and postgraduate students of the University for gaining in-depth knowledge of conventional and high performance textile materials, the methods to evaluate their physical and chemical properties to ensure quality of intermediate and end products in textile processes. In totality, it endeavors to make it a centre of excellence for textile related research and development.

Brief Introduction

The Department of Materials and Testing is one of the most dynamic and interdisciplinary department of the University. Although, it is not offering any program, but it occupies a central position in the University. The main objectives of the department are as under.

1. To assist different programs of the University by offering engineering foundation courses which provide fundamental concepts and tools of textile materials to pursue their studies.
2. To carry out research, to develop new textile processes and products, which will provide a competitive edge to the Pakistani textile industries in international markets.
3. To provide the textile testing facilities and consultancy services of International standards to the national entrepreneurs of textiles, to enhance their quality within country and abroad. These provisions are in addition to the normal teaching assignments.



Faculty members in Department of Materials and Testing



Dr. Sheraz Ahmad

Assistant Professor
Master Fibre Technology, UAF
Master Fibre Sciences & Mechanics
ENSISA, France
PhD Textiles (France)



Mr. Khurram Shehzad Akhtar

Lecturer / Coordinator
B.Sc. Textiles Engg. (NTU, Faisalabad)



Mr. Badar Munir Zaidi

Assistant Professor
M.Sc. Fibre & Polymer Engg.
(Hanyang University South Korea)
(On Study Leave)



Mr. Muhammad Bilal Qadir

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)
M.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Faheem Ahmad

Lecturer
B.Sc. Textile Engg. (NTU Faisalabad)
M.Sc. Textile Engg. (NTU Faisalabad)
(On Study Leave)



Mr. Zubair Khaliq

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)
M.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Engr. Muhammad Ali Afzal

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)
M.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)



Mr. Muhammad Sajid Faheem

Lecturer
B.Sc. Textile Engg. (NTU, Faisalabad)
M.Sc. Textile Engg. (NTU, Faisalabad)
(On Study Leave)

PROGRAMS OFFERED BY FACULTY OF ENGINEERING & TECHNOLOGY

B.Sc. Textile Engineering

Program Objectives:

The objectives of B.Sc Textile Engineering program are to impart in the students:

- Knowledge of mathematics, natural sciences, engineering fundamentals, and textile engineering specialization
- Skills for the investigation and analysis of complex

textile engineering problems and design for their solutions

- Skills for effective communication, use of IT tools, quality & engineering management, and working in multi-disciplinary teams
- Behaviour of being socially and ecologically responsible, and ethical in decision making
- Attitude of being a lifelong learner in the practical life

Program Outcomes:

B.Sc Textile Engineering aims at achieving the following learning outcomes in the students by the time of graduation:

No.	Attributes	Outcomes
1	Knowledge base for Engineering	Ability to apply knowledge of mathematics, natural science, engineering fundamentals and textile engineering specialization to the solution of complex textile engineering problems.
2	Problem Analysis Skills	Ability to identify, formulate, research literature and analyse complex textile engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
3	Solution Design Skills	Ability to design solutions for complex textile engineering problems and design systems, products, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
4	Investigation and Experimentation Skills	Ability to conduct investigation of complex textile engineering problems using research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
5	Use of Engineering Tools	Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tool, including prediction and modeling, to complex textile engineering problems, with an understanding of the limitations.
6	Social Responsibility	Ability to apply reasoning informed by contextual knowledge to assess social, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex textile engineering problems.
7	Environment & Sustainability	Ability to understand and evaluate the sustainability and impact of professional engineering work in the solution of complex textile engineering problems
8	Professional Ethics	Ability to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
9	Individual & Teamwork	Ability to function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.
10	Communication Skills	Ability to communicate effectively on complex textile engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11	Quality & Engineering Management	Ability to demonstrate knowledge and understanding of quality & engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage textile projects and in multidisciplinary environments.
12	Lifelong Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

UNDERGRADUATE PROSPECTUS 2016

BS Textile Engineering (With specialization in) Yarn Manufacturing

A full time four-year programme in textile engineering with specialization in yarn manufacturing is being offered by the department.

The programme is based on a number of courses which have been designed considering the long term requirements of the textile industry in general and textile spinning industry in particular. The programme also provides knowledge about the future trends in textiles.

YARN MANUFACTURING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
TE-1051	Introduction to Textile Engg.	2	0	2
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	3	1	4
PH-1001	Physics-I	3	1	4
IS-1091	Islamic Studies	2	0	2
Total		16	2	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1051	Textile Raw Materials	4	0	4
CSF-1071	Introduction to Computers	2	1	3
MA-1002	Engineering Math-I	3	0	3
ENG-3091	Technical Writing	3	0	3
ME-1111	Engineering Drawing	0	1	1
SS-3091	Social Science-I	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2011	Introduction to Yarn Manufacturing	3	1	4
FM-2021	Introduction to Fabric Manufacturing	3	1	4
ME-2113	Instrumentation & Control	1	1	2
MA-2001	Engineering Math-II	3	0	3
PS-2092	Pak Studies	2	0	2
TM-2052	Polymer Science & Engg.	3	0	3
Total		15	3	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1052	Fiber Science	2	1	3
TP-2031	Introduction to Textile Chemical Processing	3	1	4
ME-2112	Mechanical Engineering Fundamentals	2	1	3
GM-2041	Introduction to Garment Manufacturing	3	1	4
ENG-2092	Communication & Presentation Skills	3	0	3
Total		13	4	17

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2012	Pre-Spinning Processes-I	2	1	3
PH-1002/ CH-1002	Physics-II/Chemistry-II	3	1	4
ME-3112	Textile Engineering Utilities & Services	3	0	3
TM-3051	Mechanics of Fibrous Structures	2	1	3
CSE-3071	Computer Programming	2	1	3
TM-3052	High-Performance Fibers	2	0	2
Total		14	4	18

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-3011	Pre-Spinning Processes-II	2	1	3
ES-4031	Environmental Issues of Textile Industry	2	1	3
EE-3111	Electrical & Electronic Systems	2	1	3
MA-4001	Statistical Methods in Textile Engineering	3	0	3
CSE-3072	Computer Applications in Engineering Design	1	2	3
TE-4051	Color Science	2	0	2
Total		13	5	17

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
SS-4091	Social Science-II	3	0	3
YM-4019	Senior Design Project-I	0	3	3
YM-4011	Advanced Spinning Techniques	3	1	4
YM-3012	Yarn Production Engineering	3	1	4
MG-4081	Management Science-I	3	0	3
Total		12	5	17

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-4012	Specialty Engineered Yarns	2	1	3
YM-4019	Senior Design Project-II	0	3	3
MG-4083	Management Science-II	3	0	3
YM-4013	Spinning Calculations	3	1	4
YM-3013	Post Spinning Operations	3	1	4
Total		11	6	17

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays)

0 1 1

BS Textile Engineering (With specialization in) Weaving

This department offers four-year full time courses in textile engineering with specialization in Weaving.

The undergraduate program offered by the department is based on long established courses of studies, which

are designed by keeping in view the requirements of the industry. As a result the undergraduate program carries an enviable reputation because of its quality and contents. The machine mechanisms, fabric structures & weaving calculations are taught in detail.

This enables students to develop a professional approach towards the subject, which in turn enables them to become efficient managers of weaving.

WEAVING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
TE-1051	Introduction to Textile Engg.	2	0	2
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	3	1	4
PH-1001	Physics-I	3	1	4
IS-1091	Islamic Studies	2	0	2
Total		16	2	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1051	Textile Raw Materials	4	0	4
CSF-1071	Introduction to Computers	2	1	3
MA-1002	Engineering Math-I	3	0	3
ENG-3091	Technical Writing	3	0	3
ME-1111	Engineering Drawing	0	1	1
SS-3091	Social Science-I	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2011	Introduction to Yarn Manufacturing	3	1	4
FM-2021	Introduction to Fabric Manufacturing	3	1	4
ME-2113	Instrumentation & Control	1	1	2
MA-2001	Engineering Math-II	3	0	3
PS-2092	Pak Studies	2	0	2
TM-2052	Polymer Science & Engg.	3	0	3
Total		15	3	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1052	Fiber Science	2	1	3
TP-2031	Introduction to Textile Chemical Processing	3	1	4
ME-2112	Mechanical Engineering Fundamentals	2	1	3
GM-2041	Introduction to Garment Manufacturing	3	1	4
ENG-2092	Communication & Presentation Skills	3	0	3
Total		13	4	17

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
FM-3021	Woven Fabric Structure & Design	3	1	4
PH-1002/ CH-1002	Physics-II/Chemistry-II	3	1	4
CSE-3071	Computer Programming	2	1	3
TM-3051	Mechanics of Fibrous Structures	2	1	3
FM-2022	Weaving Preparatory Process	3	1	4
Total		13	5	18

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
FM-3022	Weaving Mechanism-I	3	1	4
FM-3023	Weaving Calculations	3	0	3
EE-3111	Electrical & Electronics Systems	2	1	3
ME-3112	Textile Engg. Utilities & Services	3	0	3
CSE-3072	Computer Applications in Engineering Design	1	2	3
TM-3052	High-Performance Fibers	2	0	2
Total		14	4	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
FM-4021	Weaving Mechanism-II	3	1	4
FM-4029	Senior Design Project-I	0	3	3
TE-4051	Color Science	2	0	2
MA-4001	Statistical Methods in Textile Engineering	3	0	3
MG-4081	Management Science-I	3	0	3
ES-4031	Environmental Issues of Textile Industry	2	1	3
Total		13	5	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
FM-4022	Specialty Weaving	2	1	3
FM-4029	Senior Design Project-II	0	3	3
MG-4083	Management Science-II	3	0	3
FM-4023	Woven Fabric Testing & Quality Control	2	1	3
SS-4091	Social Science-II	3	0	3
Total		10	5	15

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays)

0 1 1

UNDERGRADUATE PROSPECTUS 2016

BS Textile Engineering (With specialization in) Knitting

The department offers four years full time courses in textile engineering with specialization in Knitting. The undergraduate programs offered by the department is based on long established courses of studies,

which are designed by keeping in view the requirements of the industry. As a result the undergraduate program carries an enviable reputé because of its quality and contents. The machine mechanisms, fabric structures & knitting calculations are taught in detail. This enables students to develop a professional approach towards the subject, which in turn enables them to become efficient managers of fabric manufacturing units.

KNITTING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
TE-1051	Introduction to Textile Engg.	2	0	2
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	3	1	4
PH-1001	Physics-I	3	1	4
IS-1091	Islamic Studies	2	0	2
Total		16	2	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1051	Textile Raw Materials	4	0	4
CSF-1071	Introduction to Computers	2	1	3
MA-1002	Engineering Math-I	3	0	3
ENG-3091	Technical Writing	3	0	3
ME-1111	Engineering Drawing	0	1	1
SS-3091	Social Science-I	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2011	Introduction to Yarn Manufacturing	3	1	4
FM-2021	Introduction to Fabric Manufacturing	3	1	4
ME-2113	Instrumentation & Control	1	1	2
MA-2001	Engineering Math-II	3	0	3
PS-2092	Pak Studies	2	0	2
TM-2052	Polymer Science & Engg.	3	0	3
Total		15	3	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1052	Fiber Science	2	1	3
TP-2031	Introduction to Textile Chemical Processing	3	1	4
ME-2112	Mechanical Engineering Fundamentals	2	1	3
GM-2041	Introduction to Garment Manufacturing	3	1	4
ENG-2092	Communication & Presentation Skills	3	0	3
Total		13	4	17

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
KN-3021	Knitted Fabric Structure and Design	3	1	4
PH-1002/ CH-1002	Physics-II/Chemistry-II	3	1	4
CSE-3071	Computer Programming	2	1	3
TM-3051	Mechanics of Fibrous Structures	2	1	3
KN-2022	Knitting Preparatory Process	3	1	4
Total		13	5	18

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
KN-3022	Knitting Mechanism-I	3	1	4
KN-3023	Knitting Calculations	3	0	3
EE-3111	Electrical & Electronics Systems	2	1	3
ME-3112	Textile Engg. Utilities & Services	3	0	3
CSE-3072	Computer Applications in Engineering Design	1	2	3
TM-3052	High Performance Fibers	2	0	2
Total		14	4	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
KN-4021	Knitting Mechanism-II	3	1	4
KN-4029	Senior Design Project-I	0	3	3
TE-4051	Color Science	2	0	2
MA-4001	Statistical Methods in Textile Engineering	3	0	3
MG-4081	Management Science-I	3	0	3
ES-4031	Environmental Issues of Textile Industry	2	1	3
Total		13	5	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
KN-4022	Specialty Knitting	2	1	3
KN-4029	Senior Design Project-II	0	3	3
MG-4083	Management Science-II	3	0	3
FM-4023	Knitted Fabric Testing & Quality Control	2	1	3
SS-4091	Social Science-II	3	0	3
Total		10	5	15

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays)

0 1 1

BS Textile Engineering
(with specialization in)

TEXTILE PROCESSING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
TE-1051	Introduction to Textile Engg.	2	0	2
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	3	1	4
PH-1001	Physics-I	3	1	4
IS-1091	Islamic Studies	2	0	2
Total		16	2	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1051	Textile Raw Materials	4	0	4
CSF-1071	Introduction to Computers	2	1	3
MA-1002	Engineering Math-I	3	0	3
ENG-3091	Technical Writing	3	0	3
ME-1111	Engineering Drawing	0	1	1
SS-3091	Social Science-I	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2011	Introduction to Yarn Manufacturing	3	1	4
FM-2021	Introduction to Fabric Manufacturing	3	1	4
ME-2113	Instrumentation & Control	1	1	2
MA-2001	Engineering Math-II	3	0	3
PS-2092	Pak Studies	2	0	2
TM-2052	Polymer Science & Engg.	3	0	3
Total		15	3	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1052	Fiber Science	2	1	3
TP-2031	Introduction to Textile Chemical Processing	3	1	4
ME-2112	Mechanical Engineering Fundamentals	2	1	3
GM-2041	Introduction to Garment Manufacturing	3	1	4
ENG-2092	Communication & Presentation Skills	3	0	3
Total		13	4	17

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
EE-3111	Electrical & Electronics Systems	2	1	3
TP-2032	Pre Treatment of Textiles	2	1	3
CSE-3071	Computer Programming	2	1	3
TM-3051	Mechanics of Fibrous Structures	2	1	3
PH-1002/ CH-1002	Physics-II/Chemistry-II	3	1	4
Total		11	5	16

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
TP-3032	Dyeing Theory & Practice	3	1	4
TP-3033	Textile Printing	3	1	4
TP-3031	Tex. Colorants & Auxiliaries	3	1	4
ME-3112	Textile Engg. Utilities & Services	3	0	3
CSE-3072	Computer Applications in Engineering Design	1	2	3
Total		13	5	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
TP-4032	Textile Finishing	3	1	4
TP-4039	Senior Design Project-I	0	3	3
TE-4051	Color Science	2	0	2
MA-4001	Statistical Methods in Textile Engineering	3	0	3
MG-4081	Management Science-I	3	0	3
ES-4031	Environmental Issues of Textile Industry	2	1	3
Total		13	5	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
TP-4035	Textile Coatings	2	0	2
TP-4039	Senior Design Project-II	0	3	3
MG-4083	Management Science-II	3	0	3
TP-4033	Textile Chem. Testing & QC	3	1	4
SS-4091	Social Science-II	3	0	3
TM-3052	High-Performance Fibers	2	0	2
Total		13	4	17

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays)

0 1 1

UNDERGRADUATE PROSPECTUS 2016

BS Textile Engineering (with specialization in) Garment Manufacturing

A full time four-year programme in textile engineering with specialization in garment manufacturing is being offered by the department.

The programme is based on a number of courses which have been designed considering the long term requirements of the textile industry in general and garments industry in particular. The programme also provides knowledge about the future trends in apparel.

GARMENT MANUFACTURING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
TE-1051	Introduction to Textile Engg.	2	0	2
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	3	1	4
PH-1001	Physics-I	3	1	4
IS-1091	Islamic Studies	2	0	2
Total		16	2	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1051	Textile Raw Materials	4	0	4
CSF-1071	Introduction to Computers	2	1	3
MA-1002	Engineering Math-I	3	0	3
ENG-3091	Technical Writing	3	0	3
ME-1111	Engineering Drawing	0	1	1
SS-3091	Social Science-I	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2011	Introduction to Yarn Manufacturing	3	1	4
FM-2021	Introduction to Fabric Manufacturing	3	1	4
ME-2113	Instrumentation & Control	1	1	2
MA-2001	Engineering Math-II	3	0	3
PS-2092	Pak Studies	2	0	2
TM-2052	Polymer Science & Engg.	3	0	3
Total		15	3	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-1052	Fiber Science	2	1	3
TP-2031	Introduction to Textile Chemical Processing	3	1	4
ME-2112	Mechanical Engineering Fundamentals	2	1	3
GM-2041	Introduction to Garment Manufacturing	3	1	4
ENG-2092	Communication & Presentation Skills	3	0	3
Total		13	4	17

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
GM-2042	Garment Sizing & Pattern Making	3	1	4
PH-1002	Physics-II	3	1	4
CSE-3071	Computer Programming	2	1	3
TM-3051	Mechanics of Fibrous Structures	2	1	3
ME-3112	Textile Engg. Utilities & Services	3	0	3
Total		13	4	17

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
GM-3042	Industrial Engineering in Garment Manufacturing	2	1	3
GM-4043	Apparel Merchandising & Sourcing	3	0	3
EE-3111	Electrical & Electronics Systems	2	1	3
GM-3041	Industrial Cutting & Sewing	3	1	4
CSE-3072	Computer Applications in Engineering Design	1	2	3
TM-3052	High Performance Fibers	2	0	2
Total		13	5	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
GM-4041	Advances in Apparel Production	2	1	3
GM-4042	Garment Testing & Quality Management	3	1	4
GM-4049	Senior Design Project-I	0	3	3
TE-4051	Colour Science	2	0	2
MA-4001	Statistical Methods in Textile Engineering	3	0	3
MG-4081	Operation Management	3	0	3
Total		13	5	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
GM-3043	Garment Production Machinery	3	1	4
GM-4049	Senior Design Project-II	0	3	3
MG-4082	Quality Management Systems	3	0	3
ES-4031	Environmental Issues Related to Textile Industry	2	1	3
SS-4091	Social Science-II	3	0	3
Total		11	5	16

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays)

0 1 1

BS Polymer Engineering

Polymer Engineering is a highly dynamic and interdisciplinary field. The 4-year degree program in polymer engineering carries great career prospects for the graduates, in polymer and related industries, as polymers are of increasing importance in many aspects of our lives. Some uses of polymers are:

- Fibres & Textiles
- Rubbers
- Engineering Materials
- Composites
- Packaging Materials
- Coatings & Paints
- Pharmaceuticals
- Medical implants
- Adhesives and sealants
- Aerospace & defence industry and many more

Program Objectives:

The objectives of B.Sc. Polymer Engineering program are to equip students with:

1. The ability to apply the basic mathematical, scientific and engineering principles needed for solving problems in operation, evaluation and design of polymer processes.
2. The skills related to experimentation, teamwork, open-ended problem solving, critical thinking and life-long learning.

3. The communication skills, awareness of professional ethics and safety practices.
4. Understanding of environmental, social, and economic aspects of the profession.

Program outcomes

program outcomes are:

1. Ability to apply knowledge of mathematics, science, and engineering to solve engineering problems.
2. Ability to design and conduct experiments to synthesize and characterize different Polymers and their analysis and interpretation of data.
3. Ability to evaluate and design polymer processes to meet the desired needs.
4. Ability to function on multi-disciplinary areas.
5. Ability to communicate effectively with written, oral, and visual means and understanding of professional and ethical responsibility.
6. The broad knowledge necessary to understand the impact of polymer engineering solutions in the global & social context.
7. Recognition of the needs of society, and an ability to engage in life-long learning.
8. Ability to use modern engineering techniques, skills, and computing tools necessary for polymer engineering practices.



POLYMER ENGINEERING

First Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-1091	Functional English	3	0	3
MA-1001	Calculus	3	0	3
CH-1003	Applied Chemistry	3	1	4
ME-1111	Engineering Drawing	0	1	1
SS-1091	Pak Studies	2	0	2
SS-1092	Islamic Studies/Ethics	2	0	2
PE-1101	Introduction to Polymer Engineering	3	0	3
Total		16	2/6	18

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-3091	Technical Report Writing	3	0	3
MA-1002	Engineering Math-I	3	0	3
CSE-2071	Computer Programming	2	1	3
PE-2101	Polymer Synthesis	3	1	4
PE-2102	Thermoplastic Polymers	2	0	2
SS-2091	Applied Sociology	3	0	3
Total		16	2/6	18

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
PE-3101	Heat and Mass Transfer	3	0	3
MA-2001	Engineering Math-II	3	0	3
PE-3102	Fluid and Machine mechanics	2	0	2
PE-3103	Mould & Machine Design	2	1	3
EE-3111	Electrical & Electronic Systems	3	1	4
PE-3104	Engineering Polymers	3	0	3
Total		16	2/6	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
PE-4101	Design Project I	0	3	3
PE-4102	Mechanical Properties of Polymers	3	0	3
PE-4103	Instrumentation and Process Control	3	1	4
PE-4104	Polymer Processing	3	1	4
PE-4105	Health, Environmental and Safety Engineering	2	0	2
Total		11	5/15	16

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-2091	Communication Skills	3	0	3
PH-1003	Applied Physics	3	1	4
CSE-1071	Introduction to Computing	2	1	3
ME-2112	Mechanical Engineering Fundamentals	3	1	4
CH-1004	Organic Chemistry	3	1	4
Total		14	4/12	18

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-3001	Statistical Methods in Engineering	3	0	3
PE-2103	Engineering Thermodynamics	2	0	2
PE-2104	Energy Engineering	3	0	3
PE-2105	Thermoset Polymers	2	0	2
PE-2106	Industrial Stoichiometry	3	0	3
PE-2107	Bio-Polymers	2	0	2
CSE-3071	CAD for Polymer Engineering	2	1	3
Total		17	1/3	18

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
PE-310.10	Elastomer Technology	3	0	3
PE-3105	Unit Operations	3	1	4
PE-3106	Structural Characterization & Testing of Polymers	3	1	4
PE-3107	Polymer Additives and their compounding	2	0	2
PE-3108	Synthetic Fibre Engineering	2	0	2
PE-3109	Polymer Reaction Engineering	3	0	3
Total		16	2/6	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
PE-4101	Design Project II	0	3	3
PE-4106	Recycling of Polymers	2	0	2
PE-4107	Engineering Management & Quality Assurance	3	0	3
PE-4108	Polymer Composites	3	0	3
PE-4109	Polymer Plant Design	2	0	2
MG-4081	Entrepreneurship	2	0	2
Total		12	3/9	15

Internship atleast 6 weeks 0 1 1

BS Textile Technology

A full time four years programme in textile technology is being offered. The programme is based on courses which has been designed considering the overall requirements of textile industry of pakistan. This programme provides a

comprehensive knowledge about all fields of textiles like spinning, weaving, knitting, processing and garments. This programme also provides the knowledge about future trends in textiles.

First Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-1001	Calculus	3	0	3
CH-1001	Chemistry-I	2	1	3
PH-1001	Physics-I	2	1	3
ENG-1091	Functional English	3	0	3
IS-1091	Islamic Studies	2	0	2
TT-1051	Textile Raw Materials-I	2	0	2
Total		14	2	16

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-1002	Engineering Math-I	3	0	3
PH-1002	Physics-II	2	1	3
PS-1092	Pak Studies	2	0	2
TT-2011	Yarn Manufacturing	3	1	4
CH-1002	Chemistry-II	2	1	3
TT-1052	Textile Raw Materials-II	3	0	3
Total		15	2	17

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
CS-1071	Introduction to Computer	2	1	3
TT-2021	Fabric Manufacturing	3	1	4
TT-2031	Textile Processing	3	1	4
TT-2041	Garment Manufacturing	3	1	4
TT-2051	Polymer Science & Technology	2	0	2
Total		13	4	17

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-2001	Engineering Math-II	3	0	3
ENG-2092	Communication & Presentation Skills	2	0	2
MT-2112	Fundamentals of Mechanical Technology	2	1	3
MT-2111	Technical Drawing	0	1	1
TT-2052	Fiber Science	2	1	3
TT-2012	Yarn Preparatory Process	2	1	3
EE-2111	Electrical & Electronic Systems	2	1	3
Total		13	5	18

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
CS-3071	Computer Processing	2	1	3
MG-3001	Management Practices in Textile Industry	3	0	3
TT-3021	Fabric Manufacturing Preparatory Process	2	1	3
TT-3013	Spinning Techniques	2	1	3
TT-3031	Pretreatment of Textiles	2	1	3
TT-3082	Anthropometry and Garment Construction	0	2	2
Total		11	6	17

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
CS-3072	Computer Application in Textile Technology	1	2	3
TT-3083	Sewn Product Technology	3	0	3
TT-3022	Fabric Manufacturing Technology	2	1	3
TT-3023	Fabric Manufacturing Calculations	2	1	3
TT-3032	Dyeing and Printing	2	1	3
MA-3001	Statistical Method in Textiles	2	0	2
Total		12	5	17

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
TT-4041	Textile Testing and Quality Management	1	2	3
TT-4042	Apparel Merchandizing and Sourcing	3	0	3
ENG-4091	Textile Writing	3	0	3
TT-4083	Production Planning & Control	2	0	2
TT-4041	Spinning Calculations	3	0	3
TT-4031	Textile Finishing	3	0	3
Total		15	2	17

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
TT-409	Senior Design Project	0	6	6
TT-4086	Environmental Aspect of Textile Industry	0	2	2
Total		0	8	8

Industrial Internship (4 weeks, 6 days/week, 8 hours/day during summer holidays for first three academic years)

0 3 3



FACULTY OF SCIENCE

- ◆ Department of Applied Sciences
- ◆ Department of Computer Science

Message Dean, Faculty of Science



Prof. Dr. Muhammad Tahir Hussain

Welcome to Faculty of Science (FOS) at National Textile University Faisalabad. FOS comprises of two departments: the Department of Applied Sciences (DAS) and the Department of Computer Science (DCS). We play a pivotal role within NTU. The FOS has much strength in its excellent faculty, their research and teaching programs. The FOS, through its departments offers a curriculum for success that includes courses in computer science, physical and applied sciences. Presently we are offering four years Bachelor of Computer Science (BSCS), Bachelor of Software Engineering (BSSE), MS(CS) and PhD in Computer Science at the Department of Computer Science. We are also offering MS in Mathematics at the Department of Applied Sciences. Through these programs, we are committed to produce high quality and top ranked IT managers and software engineers in Pakistan working successfully in national and international market.

Our mission and core values that guide our teaching, research and public services are inspiring and challenging. The work that we do makes a difference in a rapid changing technological environment. We promote team work, critical thinking, problem solving skills and effective communication in students. We also give importance to the spirit of inquiry, creativity, a sense of service and desire for long life learning.

We have a diversified group of faculty members qualified from top-ranked universities around the globe. Our faculty possesses solid academic performance and sophisticated practical insights having close ties with not only academic circle but also with the industry as well by focusing on research and providing technological solutions.

University website provides information about our mission, academic programs and faculty. For a more personal touch, we invite you to visit the campus to meet faculty and students. Do also visit the website regularly for updates about developments and events.

DEPARTMENT OF APPLIED SCIENCES

Department of Applied Sciences at NTU is playing an important role in developing the future scientists, engineers and professionals for industry. The role of the department is evident from the fact that the foundation of all technical and major courses is established through the courses taught under this department.

The department is offering PhD in Chemistry and MS in Mathematics. Moreover, the department is also offering the foundation courses for all programs offered at NTU in the subjects of Chemistry, Physics, Mathematics and Statistics.

Not only technical but also personal growth and development is one of the most important aspects of human life, especially when one has to maintain one's pace with the current and modern needs of the job. To deal with this aspect, the department aims to provide students with solid foundation that will prepare them to adjust successfully in their careers.

Multi disciplinary in its nature, the department offers a wide range of courses in Chemistry, Physics, Mathematics and Statistics. The department is continually striving to improve the quality of its functioning, with special emphasis on teaching techniques and materials through improving the academic standards and also by regularly upgrading the

courses contents. The teaching methodology comprises lectures, laboratory work, projects, case studies, group assignments, seminars, presentations and industrial tours.

The department being a part of Faculty of Science determines, promotes and facilitates multidisciplinary research. Our faculty members are involved in research intra-departmental and inter-departmental. We have also active research collaborations with other institutes of the region and local industries. The faculty members have completed several research projects funded by national agencies including Higher Education Commission and several research projects are in progress. The department has state-of-the-art research laboratories equipped with sophisticated research facilities.

One of our main goals is to produce scientists and engineers with creative and innovative skills needed to rise to the top of their profession. We at NTU are fully cognizant of the fact that engineering is indeed an intellectually demanding profession, mainly because of the wide range of skills needed to deploy. Our degrees will surely be an evidence that our graduates can apply the skills they have learnt to diverse subjects, situations and problems beyond their immediate field of study.



Faculty Members in Department of Applied Sciences



Dr. Zahid Rizwan

Associate Professor, Physics/
Chairman
M.Phil. (PU), PhD (Malaysia)



Prof. Dr. Muhammad Tahir Hussain

Professor, Chemistry / Dean FOS
M.Phil, PhD (QAU)



Dr. Zulfiqar Ali Raza

Associate Professor, Chemistry
PhD (UOP)



Dr. Muhammad Arshad

Assistant Professor, Mathematics
PhD (GCUL)



Ms. Shazia Muzaffar

Assistant Professor, Chemistry
M.Phil. (UAF)



Dr. Muhammad Tahir Saddique

Assistant Professor, Chemistry
PhD (UOP, Peshawar)



Dr. Umber Sheikh

Assistant Professor, Mathematics
PhD (PU)



Dr. Nadeem Nasir

Assistant Professor, Physics
M.Sc. (PU)



Mr. Saeed Ahmad

Lecturer, Statistics
M.Phil (UAF)



Mr. Naseer Ahmed

Assistant Professor, Statistics
M.Phil (PU)



Mr. Yasir Nadeem Anjam

Lecturer, Mathematics
M.Phil (QAU)



Mr. Rehan Butt

Lecturer, Mathematics
M.Sc Mathematics (GCUF)
M.Phil. (Mathematical Modeling
and Simulation) Sweden



Mr. Muhammad Yasir Mahmood

Lecturer, Mathematics
M.Sc Mathematics (GCUF)
M.Phil. (Mathematical Modeling
and Simulation) Sweden



Mr. Imran Yousaf

Lecturer, Physics
M.Sc. (PU)
(On Study Leave)



Mr. Muhammad Aslam

Lecturer, Physics
M.Phil (GCUF)
(On Study Leave)

DEPARTMENT OF COMPUTER SCIENCE

Vision

To build a congenial learning and teaching environment that responds effectively in this ever changing technological age.

Mission Statement

The Department of Computer Science is committed to impart quality and up-to-date education in accordance with the University mission, in order to train the students in both, theoretical and applied foundations of Computer Science through its comprehensive educational programs and innovative research.

Brief Introduction

National Textile University (NTU) is the pioneer textile institute of Pakistan. keeping in view the modern demand of computer applications in textiles, NTU decided to launch its computer science program under the faculty of science, in order to tailor the global needs of industrial world. With this aim, Bachelor of Science in Computer Science (BSCS) program was offered in 2009. This program has been awarded top ranked category "W" by National Computing Education Accreditation Council (NCEAC) Islamabad.

NCEAC is a computer programs accreditation authority of Higher Education Commission (HEC) Pakistan. Currently, the Department of Computer Science (DCS) is offering four

degree programs namely Bachelor of Science in Computer Science (BSCS), Bachelor of Science in Software Engineering, MSCS and PhD Computer Science programs. These programs are designed to produce IT professionals with latest technical and professional skills to meet the requirements of the industry.

DCS has more than sixty percent foreign qualified faculty. The department has five computer labs with state of the art computing facilities. it has been attracting bright students from all parts of the country for quality education at undergraduate and graduate level.

Undergraduate Programs

Department is offering following programs at undergraduate level:

BS Computer Science

BS Software Engineering

Career Prospects

According to the Bureau of labor Statistics, future job prospects for computer science graduates are higher than for any other science or engineering field "it also states that CS enrollment is up for the first time in six years.

Ninety five percent of graduates of computer science department are employed in national and multinational companies as software engineers, software developers, lecturers and call center managers.



Faculty Members in Department of Computer Science



Mr. Waqar Ahmad

Assistant Professor/Chairman
MS (CS), Specialization in Intelligent
Software Systems (Sweden)
M.Sc. Computer Science (PU)



Dr. Muhammad Asif Habib

Assistant Professor
PhD Computer Science (JKU-Austria)



Dr. Muhammad Asif

Assistant Professor
PhD Computer Science
(AIT Thailand)
M.Sc (CS) QAU ISB



Dr. Muhammad Sheraz Malik

Assistant Professor
PhD Information Technology
Universiti Teknologi PETRONAS,
Malaysia.



Mr. Muhammad Shahid

Lecturer
MS Software Engineering Linkoping
University, Sweden



Mr. Nasir Mahmood

Lecturer
M.Sc Computer Engineering
(CASE Islamabad)



Mr. Khalil-ur-Rehman

Lecturer
MS Software Engineering
(SZABIST, Islamabad)



Engr. Umer Ali Khan

Lecturer
MS Software Engineering,
(UET Taxila, Pak)



Anam Zahid

Lecturer
MS (Information Technology)
(NUST, Islamabad)



Mr. Muhammad Adeel

Lecturer
MS(CS) Software Engineering (GCUF)
M.Sc. IT (QAU, Islamabad)
(On Study Leave)



Mr. Shahbaz Ahmad

Assistant Professor
MS (CS), Specialization in Networking
(UAF)
(On Study Leave)



Mrs. Mubeen Aslam

Assistant Professor
MS (CS), Specialization in Software
Engineering (UAF)
BS (CS), (GCUF)
(On Study Leave)



Muhammad Nadeem Faisal

Lecturer
MS (CS) Human Computer
Interactive System Design, Sweden
BS (IT) Advance Business Studies
BTH Karlskrona-Sewden
(On Study Leave)

Bachelor of Science in Computer Science

Program Objectives

The objective of the program is to prepare students for successful careers and for advanced graduate study in computer science, by giving them the following qualities:

Depth: Deep understanding of fundamentals theoretical and practical Computer Science, and the ability to adapt to an ever-changing technological landscape.

Breadth: Knowledge of a broad range of Computer Science skills, tools, and mathematical techniques, and the capability of applying them to analyze and design complex systems.

Reasoning: Capability of solving a wide variety of problems by applying principles of computational thinking.

Teamwork: Habits of working effectively and professionally on diverse projects teams.

Clarity: Ability to communicate technical information clearly and effectively, both orally and in writing.

Integrity: Understanding how to approach social effects of computing ethically and responsibly, and being committed to doing so.

Learning: Interest in life-long learning, to adapt and shape an evolving world.

Program Outcomes

By the time of graduation BSCS graduates will have achieved:

1. An ability to analyze a problem, identify and define the computing requirements appropriate to its solution.
2. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
3. An ability to function effectively on teams to accomplish a common goal.
4. An understanding of mathematics and statistics appropriate to understand various computer science fields.
5. An ability to undertake independent learning and continuing professional development
6. An understanding of professional ethics.



BS IN COMPUTER SCIENCE

First Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-1001	Calculus	3	0	3
PH-1003	Applied Physics	3	1	4
ENG-1091	Functional English	3	0	3
HU-1091	Islamic Studies	2	0	2
CSC-1073	Fundamentals of Computing	3	1	4
	Total	14	2	16

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
PH-1004	Basic Electronics	2	1	3
MA-1005	Linear Algebra	3	0	3
MGT-XXXX	Management Elective 1	3	0	3
HU-1092	Pakistan Studies	2	0	2
CSC-1071	Problem Solving Using C	3	1	4
CSC-1072	Discrete Structures	3	0	3
	Total	16	2	18

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
CSC-2078	Database Systems	2	1	3
MA-2003	Multivariate Calculus	3	0	3
ENG-2091	Communication Skills	3	0	3
CSC-2071	Object Oriented Programming	3	1	4
CSC-2072	Digital Logic Design	2	1	3
	Total	13	3	16

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-2003	Probability and Statistics	3	0	3
ENG-3091	Technical Writing	3	0	3
CSC-2075	Computer Organization and Assembly Language	2	1	3
CSC-2076	Theory of Automata and Formal Languages	3	0	3
CSC-2077	Data Structures	2	1	3
CSE-2073	Introduction to Software Engineering	3	0	3
	Total	16	2	18

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-2003	Differential Equations	3	0	3
CSC-3071	Design and Analysis of Algorithms	3	0	3
CSC3072	Operating Systems	3	0	3
CSC-3080	Data Communication and Networks	3	0	3
CSC-3074	Web Application Engineering	3	1	4
	Total	15	1	16

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
MGT-3071	Software Project Management	3	0	3
CSX-XXXX	CS Elective I	3	0	3
CSC-3075	Computer Architecture	3	0	3
CSC-3073	Introduction to Artificial Intelligence	3	0	3
CSX-XXXX	CS Elective II	3	0	3
CSX-XXXX	CS Elective III	3	0	3
	Total	18	0	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
SS-4071	Professional Issues in Computing	3	0	3
GM-4045	Computer Applications for Textile	3	0	3
CSC-4071	BS Final Project	0	3	3
CSC-4072	Compiler Construction	3	0	3
CSX-XXXX	CS Elective IV	3	0	3
CSX-XXXX	CS Elective V	3	0	3
	Total	15	3	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
MGT-XXXX	Management Elective 2	3	0	3
CSC-4071	BS Final Project	0	3	3
CSX-XXXX	CS Elective VI	3	0	3
CSX-XXXX	CS Elective VII	3	0	3
	Total	9	3	12

BS Software Engineering

Introduction

Software Engineering is the discipline of designing, developing, deploying, and maintaining reliable, economical and efficient software systems. However, more recently Software Engineering has evolved in response to the increased importance of software in safety-critical applications and to the growing impact of large and expensive software systems in a wide range of situations.

Objectives

- Be able to model, analyze, document and track system requirements, both functional and non-functional
- To produce proficient software developers and effective team members.
- Be able to understand and apply software project management skills: measurement, estimation, costing, planning, deployment and tracking of resources.
- To prepare students for professional careers.
- To have knowledge and experience with software product engineering and engineering management.



Learning Outcomes

Various courses have been included in the curriculum to ensure that the graduates will:

- Understand and be able to apply mathematics, physical science, computer science and related disciplines.
- Understand and be able to apply the principles of software engineering practice and process, subject to realistic constraints.
- Be able to model, analyze, document and track system requirements, both functional and non-functional.
- Be able to design, implement, deploy and maintain software systems.
- Be able to verify and validate the software systems.
- Have an awareness of current industry standards and practices.
- Be able to work in one or more application domains.
- Understand and apply the principles of the team process.
- Be able to understand and apply software project management skills: measurement, estimation, costing, planning, deployment and tracking of resources.
- Have strong communication and interpersonal skills.
- Be capable of independent learning.
- Understand professional responsibility and application of ethical principles.
- Have knowledge of economics, humanities and social sciences.

BS Software Engineering

First Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-1001	Calculus	3	0	3
PH-1003	Applied Physics	3	1	4
ENG-1091	Functional English	3	0	3
HU-1091	Islamic Studies	2	0	2
CSF-1073	Fundamentals of Computing	3	1	4
	Total	14	2	16

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
PH-1004	Basic Electronics	2	1	3
MA-1005	Linear Algebra	3	0	3
MGT-XXXX	Management Elective-I	3	0	3
HU-1092	Pakistan Studies	2	0	2
CSC-1071	Problem Solving Using C	3	1	4
CSC-1072	Discrete Structures	3	0	3
	Total	16	2	18

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
CSC-2078	Database Systems	2	1	3
MA-2003	Multivariate Calculus	3	0	3
ENG-2091	Communication Skills	3	0	3
CSC-2071	Object Oriented Programming	3	1	4
CSE-2073	Introduction to Software Engineering	3	0	3
	Total	14	2	16

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-2003	Probability and Statistics	3	0	3
ENG-3091	Technical Writing	3	0	3
SEC-2073	Software Construction	3	0	3
CSC-2076	Theory of Automata and Formal Languages	3	0	3
CSC-2077	Data Structures	2	1	3
CSC-2072	Digital Logic Design	3	0	3
	Total	17	1	18

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
MA-3002	Differential Equations	3	0	3
CSX-XXXX	Human Computer Interaction	3	0	3
CSC-3072	Operating Systems	3	0	3
CSC-3070	Software Requirement Engineering	3	0	3
CSC-3074	Internet Programming	3	1	4
	Total	15	1	16

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
MGT-3071	Software Project Management	3	0	3
CSX-XXXX	SE Elective-I	3	0	3
CSX-XXXX	Data Communication and Networks	3	0	3
SEC-3071	Software Design & Architecture	3	0	3
SEC-3072	Software Quality Engineering	3	0	3
CSX-XXXX	SE Elective-II	3	0	3
	Total	18	0	18

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
SS-4071	Professional Issues in Computing	3	0	3
GM-4045	Computer Applications for Textiles	3	0	3
CSC-4071	BS Final Project	3	0	3
CSX-XXXX	Formal Methods in Software Engineering	3	0	3
CSX-XXXX	SE Elective III	3	0	3
CSX-XXXX	SE Elective IV	3	0	3
	Total	18	0	18

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
MGT-XXXX	Management Elective II	3	0	3
CSX-XXXX	BS Final Project	0	3	3
CSX-XXXX	SE Elective V	3	0	3
CSX-XXXX	SE Elective VI	3	0	3
CSX-XXXX	SE Elective VII	3	0	3
	Total	12	3	15



FACULTY OF HUMANITIES & SOCIAL SCIENCE

- ◆ Department of Management Sciences
- ◆ Department of Design

DEPARTMENT OF DESIGN

Mission Statement

"Department of Design is committed to inculcate students with vision, knowledge & skill, enabling them to provide creative solutions to Textile & Fashion World, coherent with rapidly changing technology and indigenous roots of Design."

Introduction

The four years degree programs in Fashion & Textile Design are based on a comprehensive and interdisciplinary approach that investigates the conceptual and theoretical foundation of design process and methodology. The proposed courses emphasizes on a research based approach to Design. Methods of instruction include lectures, seminars with extensive studio work and emphasize on team work in design projects. Education at the university provides the students a skill that will prepare them to follow successfully their future career paths.

Facilities

Department of Design is facilitated of many dedicated studio spaces, as well as specialized work areas for various assignments & projects. Department has a variety of facilities that are unique to campus, such as sewing and weaving lab, 3D art workshop, Drawing Studio, Draping Lab & several



design studios, Equipped with cutting tables, industrial sewing machines, Mannequins, Handlooms, Digital SLR Camera & other necessary equipment.

Students can also access computer facilities located adjacent to the main studios to develop contextual digital and photographic work for their projects. For advance Technological development in design Department of Design is collaborated with latest labs & Equipment of Textile Engineering Department which creates exclusive Design education in this region.

Career Paths

Due to very adoptable curriculum of Textile & Fashion Design the students could pursue to a wide range of career, few examples of these are Textile Designer, Fashion Designer, Surface Designer, Stylist, CAD/CAM Designer, Technical Designer, Freelance Artist, Textile Artist, Graphic Artist, Product Specialist and above all some of the Designers can go on to setup their own design business and studios for consultancies.

Programs offered by Department of Design

- Bachelor of Fashion Design & Technology
- Bachelor of Textile Design & Technology



Faculty Members in Department of Design



Mr. Umer Hameed
Assistant Professor / Chairman
Bachelor in Textile Design
(NCA Lahore)
MS in Textile and clothing (GCUF)



Mr. Saleem Ansari
Assistant Professor
MFA (PU, Lahore)



Mr. Nigar Muhammad Khan
Senior Designer
Bachelors in Textile Design
(NCA Lahore)



Mr. Tauseef Kamboh
Assistant Professor
Bachelors in Fashion Design (GCUF)



Mrs. Tabassum Amir
Lecturer
Bachelor in Textile Design (GCUF)
MS in Textile and Clothing (GCUF)



Mrs. Sadia Musaddiq
Lecturer
Bachelors in Fashion Design (GCUF)
MS in Textile and Clothing (GCUF)



Mrs. Sidrat Nasir
Lecturer
Bachelor in Textile Design
(Lahore College for Woman
University, Jhang)



Ms. Nusrat Bibi
Lecturer
Bachelor in Textile Design
(IU, Bahawalpur)

Faculty Members in Department of Design



Ms. Mubarra Rafiq
Lecturer
Bachelor in Textile Design
(NCA, Lahore)



Ms. Samen Boota
Lecturer
Bachelor in Textile Design (GCUF)
MS in Textile and Clothing (GCUF)



Mr. Ahsan Ali
Lecturer
Bachelor of Textile Design (GCUF)



Miss. Hira Masood
Lecturer
Bachelor in Fashion Design (GCUF)



Ms. Nida Ramzan
Lecturer
MA Visual Arts (NCA)



Mrs. Arooba Mumtaz
Lecturer
Msc in (HE) Related Arts
Home Economics College of Lahore



Mrs. Rafia Asghar
Lecturer
Bachelor in Textile and Apparel
Design (NTU, Faisalabad)
M. Phil Textile & Clothing (GCUF)



Muhammad Umer Iqbal
Lecturer
Bachelor in Textile and Apparel
Design (NTU, Faisalabad)



Ms. Zunaira Saleem
Teaching Assistant
Bachelors of Fashion Design (GCUF)

Programs Offered by Department of Design Bachelor of Fashion Design & Technology

Program Objectives

1. To indulge theoretical study of Fashion Design and its technical aspects in the students.
2. To generate human resources in the field of design with the intense knowledge of technology and command on creative process specifically to the sectors related to Fabric & Textiles to attire look of costume.
3. To impart students about the importance of aesthetics & functionality at every phase of Designing, sampling, production, marketing & Merchandizing.
4. To give knowledge of Research so they can apply it in further studies & advancement in practical field.
5. To teach the students about the moral & Ethical values of the society so they can contribute well as designer & Human being.

Program Outcomes

1. After formal education graduates have the ability to work as a Fashion Designer, Stylist, Illustrator and Costume designer in the market.
2. Graduates have ability to produce designs in kid's wear.



3. Graduates are able to work in the industry for import and export business in garment as we are producing industry oriented Designer as well.
4. Graduates have the ability to provide services as accessory designer.
5. Graduates are able to work in the field of arts as a Textile artist, fabric instillation Artist, Soft sculptor, Pattern Maker & Drapist.
6. Graduates have the ability to perceive designs and able to lead design houses & studios.
7. Graduates are able to work as communication designer particularly for textile sector and have the ability to work as marketer & Visual Merchandiser.
8. Graduates are given the intense knowledge of Digital Technology and can work as computer Aided Designer in the market.
9. Graduates have the ability to work interdisciplinary tasks in a team.
10. Have the ability to play its role as good citizen with code & conducts of the society & religion.

BACHELOR OF FASHION DESIGN & TECHNOLOGY

First Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-1091	Functional English Grammar	3	0	3
HS/IS-2091	Islamiat Studies/Ethics	2	0	2
FA-1061	Basic Drawing-I	1	6	3
CSF-1073	Digital Communication-I	1	3	2
DES-1062	History of Fundamentals of Design -I	1	6	3
DES-1063	History of Art & Culture-I	1	0	1
DES-1064	Mathematics for Designer-I	1	3	2
FA-1065	Sculpture-I	0	6	2
	Total	10	24	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-2091	Communication Skills-I	3	0	3
PS-2092	Pakistan Studies	2	0	2
FA-1066	Basic Drawing-II	1	6	3
CSF-1062	Digital Communication-II	1	3	2
DES-1067	Design Development	1	6	3
DES-1068	History of Art & Culture-II	1	0	1
DES-1069	Mathematics for Designer-II	1	3	2
FA-1070	Sculpture-II	0	6	2
	Total	10	24	18

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-2062	Textile Basics & Fibers	2	0	2
FD-2061	Flat Pattern Calculations	1	3	2
FA-2062	Drawing-I	0	6	2
FD-2064	Draping I	1	3	2
TD-2063	Textile (Print) Design	0	6	2
FD-2066	Sewing I	0	6	2
ENG-2092	Communication Skills II	2	0	2
FD-2067	Digital Fashion Design I	0	3	1
FD-2068	Development in Fashion Costume I	2	0	2
	Total	8	24	17

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2068	Yarn Manufacturing	2	0	2
FD-2069	Mathematics of Pattern	1	3	2
FD-2070	Sewing II	0	6	2
FD-2071	Draping II	0	6	2
FD-2072	Digital Fashion II	0	3	1
FD-2073	Fashion Design Studio III	1	6	3
FD-2074	Development in Fashion Costume II	2	0	2
TD-2061	Textile (Weave) Design	1	3	2
	Total	7	27	16

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-3091	Technical Writing	2	0	2
FD-3077	Pattern & Grading I	0	6	2
FD-3078	Sewing III	0	6	2
FD-3079	Draping III	0	6	2
FD-3080	CAD I	0	3	1
FD-3081	Fashion Design Studio II	1	6	3
TP-3082	Textile Chemistry	2	0	2
LAN-2061	Foreign Language I	2	0	2
	Total	7	27	16

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
FD-3083	Pattern & Grading II	0	6	2
FD-3084	Fashion Design Studio III	1	6	3
FD-3085	Sewing IV	0	6	2
FD-3086	CAD II	0	3	1
FD-3087	Draping-IV	0	6	2
TD-3086	Embroidery & Embellishment Techniques I	0	3	1
LAN-2062	Foreign Language II	2	0	2
FD-3088	Advanced Fashion & Costume	3	0	3
	Total	6	30	16

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
TMM-353	Marketing & Merchandizing	3	0	3
SS-4092	Research Methodology	2	0	2
FD-4089	Advance Pattern	0	6	2
FD-4090	Fashion Collection	1	6	3
FD-4091	Sewing V	0	6	2
FD-4092	Draping V	0	6	2
TD-4093	Embroidery & Embellishment Techniques II	0	3	1
	Total	8	27	17

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
FD-4072	Fashion Photography	1	3	2
FD-4094	Pattern-for Final Collection II	0	6	2
SS-1094	Introduction to Psychology	2	0	2
FD-4095	Sewing Final Collection	0	6	2
FD-4096	Draping Final collection II	0	6	2
FD-4097	Textile Design for Collection	1	3	2
ENG-4092	Dissertation	2	0	2
	Total	8	21	14

Programs Offered by Department of Design Bachelor of Textile Design & Technology

Programs Objectives

1. To indulge theoretical study of textile design and its technical aspects in the students.
2. To generate human resource in the field of design with the intense knowledge of technology and command on creative process specifically to the sectors related to fabric and textiles.
3. To impart students about the importance of aesthetics and functionality at every phase of designing, sampling, production, marketing and merchandizing.
4. To teach the students about the moral and ethical values of the society so they can contribute well as designer and human being.
5. To give knowledge of research so they can apply it in further studies and advancement in practical field.
3. Graduates have the ability to provide services as made ups and stuff toy designer in the area of its designing, cutting and pattern.
4. Graduates are able to work in the field of art as textile artist, fabric installation artist and soft sculptor.
5. Graduates have the ability to perceive designs and able to lead design houses and studios.
6. Graduates are able to work as communication designer /graphic designer particularly for textile sector and have the ability to work as visual merchandiser
7. Graduates are given the intense knowledge of Digital Technology and can work as computer Aided Design in the market.

Program Outcomes

1. After formal education graduates have the ability to works as woven and print designer in the market.
2. Graduates have the ability to work as embroidery and
8. Graduates have the ability to work interdisciplinary tasks in a team.
9. Have the ability to play its role as good citizen with code and conducts of the society and religion.



BACHELOR OF TEXTILE DESIGN & TECHNOLOGY

First Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-1091	Functional English Grammar	3	0	3
HS/IS-2091	Islamiat Studies/Ethics	2	0	2
FA-1061	Basic Drawing-I	1	6	3
CSF-1073	Digital Communication-I	1	3	2
DES-1062	History of Fundamentals of Design -I	1	6	3
DES-1063	History of Art & Culture-I	1	0	1
DES-1064	Mathematics for Designer-I	1	3	2
FA-1065	Sculpture-I	0	6	2
Total		10	24	18

Second Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-2091	Communication Skills I	3	0	3
PS-2092	Pakistan Studies	2	0	2
FA-1066	Basic Drawing-II	1	6	3
CSF-1062	Digital Communication II	1	3	2
DES-1067	Design Development	1	6	3
DES-1068	History of Art & Culture-II	1	0	1
DES-1069	Mathematics for Designer II	1	3	2
FA-1070	Sculpture II	0	6	2
Total		10	24	18

Third Semester

Code	Course Title	Theory	Lab	Credit Hours
TM-2062	Textiles Basics & Fibers	2	0	2
TD-2061	Weave Design Studio I	1	3	2
FA-2062	Drawing-I	0	6	2
TD-2063	Textile Design Foundation	1	6	3
FD-2064	Pattern Sewing I	0	6	2
ENG-2092	Communication Skills II	2	0	2
TD-2065	CAD I	1	3	2
TD-2066	History of Design I	2	0	2
Total		9	24	17

Fourth Semester

Code	Course Title	Theory	Lab	Credit Hours
YM-2068	Fibers & Yarns	2	0	2
TD-2069	Weave Design Studio II	0	6	2
TD-2071	Design Studio-I	1	6	3
TD-2072	CAD II	1	6	3
FA-2073	Drawing II	0	6	2
TD-2074	Development of Textile Design	2	0	2
FD-2075	Pattern Sewing II	0	6	2
		6	30	16

Fifth Semester

Code	Course Title	Theory	Lab	Credit Hours
ENG-3091	Technical English Writing	2	0	2
TD-3077	Advance Weaving	1	3	2
TD-3078	Knit Design & Technology	1	3	2
FA-3079	Drawing III	0	6	2
TD-3080	Textile CAD	0	3	1
FD-3086	Embroidery & Embellishment Techniques I	0	3	1
TP-3082	Textile Chemistry	2	0	2
TD-3083	Design Studio II	0	6	2
LAN-2061	Foreign Language I	2	0	2
Total		8	24	16

Sixth Semester

Code	Course Title	Theory	Lab	Credit Hours
TD-3084	Print Design	0	6	2
FA-3085	Drawing IV	0	6	2
SS-4092	Research Methodology	2	0	2
TD-3085	Textile Product Design	1	6	3
TD-4093	Embroidery & Embellishment Techniques II	0	3	1
GM-3087	Product Detail & Development	2	0	2
TD-3070	Digital Textiles	1	3	2
LAN-2062	Foreign Language II	2	0	2
Total		8	24	16

Seventh Semester

Code	Course Title	Theory	Lab	Credit Hours
TMM-353	Marketing & Merchandizing	3	0	3
TD-4071	Experimental Textiles	1	6	3
FD-4072	Photography	1	3	2
SS-1094	Introduction to Psychology	2	0	2
TD-4073	Design Execution	1	9	4
TD-4074	Textile Calculations	3	0	3
Total		11	18	17

Eighth Semester

Code	Course Title	Theory	Lab	Credit Hours
TD-4075	Collection-Drawing (Research & Development)	0	9	3
TD-4076	Collection-Product Development	1	6	3
TD-4077	Collection-Textile Construction (Development)	1	6	3
TD-4078	Final Collection	1	6	3
ENG-4092	Dissertation	2	0	2
Total		5	27	14

DEPARTMENT OF MANAGEMENT SCIENCES

Vision Statement

We want to be the best business school in the region.

Mission Statement

We are developing the dynamic business leaders with best knowledge and proficiency, ready to dwell in the challenging executive position in textile sector and multinational organizations.

Brief Introduction

National Textile University offers professionally designed business programs in Faisalabad, the most business oriented and enterprising hub of Pakistan. The curriculum has been rationally tailored to the requirements of business community at national level, at the same time it is fully compatible to the global standards. Its BBA and MBA programs are based on developing the upcoming dynamic business leaders, ready to dwell in the challenging executive positions in leading multinational and national organizations within the country and abroad.

It aims to foster entrepreneurial abilities and skills of the students coming from different walks of life enabling them to recognize new opportunities, create new successful business enterprises or grow, build and transform their existing businesses. The interaction between faculty and students is focused on building and grooming the personalities of future business leaders. NTU Business programs are planned to be the most exciting, challenging and rewarding experience for its graduates.

Career Prospects

A BBA gets you entry-level positions in many national and multinational organizations. You would do lot of backend work, and provide support services to your seniors. Exceptional candidates could expect to do some customer interface, though it is very rare. Also invariably, you would hit the glass ceiling very fast, and would require an MBA to move up the ladder.



Faculty Members in Department of Management Sciences



Mr. Liaqat Ali

Assistant Professor/Chairman
Department of Management Sciences
MS Management Sciences (Pak)
BBA (USA)



Dr. Sajjad Ahmad Baig

Assistant Professor
PhD-TQM (PU), MS-TQM (PU)



Dr. Muhammad Abrar

Assistant Professor
PhD Marketing (HUST)
MBA-Marketing (BZU)
M.Sc. (Hons.) Agronomy (UAF)



Mr. Muhammad Farooq Jamal

Assistant Professor
M.Phil-Marketing (SZABIST)



Ms. Mina Kharal

Lecturer
MS (Finance)
MBA-Finance UAF



Dr. Muhammad Hashim

Assistant Professor
PhD Supply Chain Management
(SCM) China



Mr. Zahid Hussain

Lecturer
MBA Marketing
BBA (Hons.)



Mr. Nasir Ali

Lecturer
MS-Finance (SZABIST)
BBA (Hons.) (UMO)



Mr. Muhammad Ahmad ur Rehman

Lecturer
M.Phil Marketing (IIUI)
MBA Marketing (UCP)



Mr. Muhammad Zia-ur-Rehman

Lecturer
MS (Finance) IIUI



Ms. Alishba Ahkam

Lecturer
MS (Marketing)
MBA-Marketing UAF



Ms. Kiran Shahzadi

Lecturer
MBA Marketing (QAU) Islamabad



Ms. Anum Mehmood Cheema

Lecturer
MS (Management Science, MAJU)
MBA (UAF)

Faculty Members in Department of Management Sciences



Mr. Muhammad Nisar Bhatti
Assistant Professor
MA (Sociology) P.G.D. (PUP)



Qari Muhammad Ilyas Arshad
Lecturer
MA Islamiyat



Mr. Nasir Ali
Lecturer
MA English
M. Phil Applied Linguistics



Mr. Muhammad Abrar Tahir
Lecturer
MA English
M. Phil Applied Linguistics



Ms. Mehreen Ahsan
Lecturer
MA English
M.Phil English Literature



Ms. Rabia Rani
Lecturer
MA English
M. Phil (Applied Linguistics)
Diploma TEFL, B.Ed



Ms. Asifa Arif
Lecturer
MA Applied Psychology
M.Phil Clinical Psychology

Programs Offered by Department of Management Sciences

Bachelor of Business Administration

BS in Textile Management and Marketing

Programs Objectives

1. Students have the skills to develop an integrated, multi-disciplinary approach to business decision-making.
2. Students have the skills necessary to analyze business situations and recommend solutions.
3. Students have the communication skills to persuasively and professionally articulate their thinking.
4. Students understand team dynamics and are effective team players and leaders.
5. Students incorporate ethical considerations in decision-making.

Programs Outcomes

The students who earn the BBA degree will be able to:

1. Communicate effectively and professionally; also demonstrate the ability to create coherent written

and oral statements with the diverse audience across the cultures replicating skills to analyze and synthesize information.

2. Understand the importance of teamwork and group dynamics in achieving organizational goals and demonstrate ability to work effectively in teams.
3. Acknowledges and understands significance of cultural diversity adapt their interpersonal behaviours and styles accordingly.
4. Understand various leadership styles and demonstrate proven ability in exercising these styles according to the requirement of the situation.
5. Understand the dynamics of the organizational conflict; power and politics; make use of their analytical and interpersonal skills accordingly.
6. Acquire awareness of global diverse perspectives and



understand the theory, operations, and challenges of global business.

7. Demonstrate effectively practicing of overall functional business knowledge and ability to identify and interpret essential business concepts, principles and skills.
8. Identify core organizational values; understand the issues of ethical and social diversity based on ethic, gender, religion, culture and demonstrate the ability to propose feasible solutions to these issues.
9. Understand computer-based information systems and able to use end-user computing tools and infrastructures to apply and interpret functional business knowledge.

Areas of Specialization for BBA

- Finance
- Marketing
- Human Resource Management

Specialization Courses for BBA

Finance

1. Corporate Governance (FIN-4080)
2. Analysis of Financial Statements (FIN- 4081)
3. Financial Markets and Institutions (FIN- 4082)
4. Managerial Finance (FIN-4083)
5. Islamic Banking and Finance (FIN-4084)
6. Treasury Management (FIN-4085)
7. Insurance Management (FIN-4086)
8. Inventory Management Finance (FIN-4087)
9. Security Analysis (FIN-4088)
10. Case Studies in Finance / Seminar etc.

Marketing

1. Retail Management (MKT-4081)
2. Brand Management (MKT-4082)
3. Fashion Marketing & Distribution (MKT- 4083)
4. Sales Management (MKT-4084)
5. Advertising Management (MKT-4085)
6. Services Marketing (MKT-4086)
7. Promotion Management (MKT-4087)

8. Cyber Marketing (MKT-4088)
9. Export Marketing (MKT-4089)
10. Agriculture Marketing (MKT-4080) etc.

Human Resource Management

1. Staffing (HRM-4080)
2. Leadership and Motivation (HRM-4081)
3. Human Resource Development (HRM- 4082)
4. Strategic Human Resource Management (HRM-4083)
5. Training Intervention in Job Skills (HRM- 4084)
6. Labour Law and Industrial Relations (HRM-4085)
7. Rural and Urban Dynamics (HRM-4086)
8. Micro Organizational Dynamics (HRM- 4087)
9. Team Management (HRM-4088)
10. Interviewing Skills (HRM-4089) etc.



BACHELOR OF BUSINESS ADMINISTRATION

First Semester

Code	Course Title	Credit Hours
HU-1081	Islamic Studies	3
MGT-1081	Introduction to Management	3
MIS-1081	Introduction to Computing	3(2-1)
ENG-1081	English-I	3
HU-1082	Pakistan Studies	3
ACCT-1081	Financial Accounting-1	3
Total		18

Second Semester

Code	Course Title	Credit Hours
HU-1083	Language (Arabic / French)	3
MKT-1081	Principles of Marketing	3
ECON-1081	Micro Economics	3
MA-1004	Business Mathematics	3
SS-1081	Human Psychology	3
ENG-1082	English-II	3
Total		18

Third Semester

Code	Course Title	Credit Hours
HRM-2081	Introduction to Human Resource Management	3
SS-2082	Sociology	3
BUS-2081	Oral Communication	3
ECON-2082	Macro Economics	3
MA-2003	Business Statistics	3
TMM-2081	Textile Raw Material	3
Total		18

Fourth Semester

Code	Course Title	Credit Hours
BUS-2082	Business Communication	3
ACCT-2082	Financial Accounting II	3
ECON-2083	Analysis of Pakistan Economy	3
FIN-2081	Business Finance	3
TMM-2082	Introduction to Textile Operations	3
MKT-2082	Marketing Management	3
Total		18

Fifth Semester

Code	Course Title	Credit Hours
ACCT-3083	Cost Accounting	3
BUS-3083	Logic	3
LAW-3081	Business Law	3
BUS-3084	Business Ethics	3
MKT-3083	Consumer Behavior	3
MA-3004	Statistical Inference	3
Total		18

Sixth Semester

Code	Course Title	Credit Hours
MGT-3082	Organizational Behavior	3
ECON-3084	Managerial Economics	3
MIS-3082	Management Information System	3
MA-3005	Business Calculus	3
BUS-3085	Business Research & Report Writing	3
FIN-3082	Financial Management	3
Total		18

Seventh Semester

Code	Course Title	Credit Hours
MGT-4083	Total Quality Management	3
MGT-4084	Operation Management	3
MGT-4085	Entrepreneurship	3
	Specialization I	3
	Specialization II	3
Total		18

Eighth Semester

Code	Course Title	Credit Hours
MGT-4086	International Business Management	3
MGT-4087	Change Management	3
MGT-4088	Strategic Management	3
	Specialization III	3
	Specialization IV	3
Total		15

BS IN TEXTILE MANAGEMENT AND MARKETING

Program Aim and Objectives

The BS Program in Textile Management and Marketing at NTU is intended to meet the present and future demands of the textile industry. This program presents a combination of technical and Business courses. The main objective is to prepare professionals who are educated with the technology and process of textiles industry alongwith the important managerial and marketing skills. The blend of education of textile and business skill will have a wealth of options open to them in the dynamic international world of clothing and textiles management and marketing. Some realistic examples of first jobs within the marketing and textile manufacturing sectors are: purchasing assistant, production assistant, product specialist, merchandiser, junior product manager, junior logistics manager, sales product manager, concept designer and quality control.

Upon graduation, student will have the ability to:

- Demonstrate and apply broad knowledge of textile and fashion processes, methods and applications in a management perspective, in particular in-depth knowledge of the textile with emphasis on

brand management, consumer insight, retailing and communication;

- Critically and systematically gather literature and theory within the textile and fashion management area;
- Analyze and find solutions to organizational issues on textiles , marketing and branding;
- Integrate and apply knowledge in the field for research and development purposes and other skilled activities;
- Quickly obtain new organizational skills and apply them to textile related Development and innovation by creating, analyzing and critically evaluating various market-related solutions;
- Develop and design textile fashion processes and systems with regard to human conditions with socially and ecologically sustainable development;
- Participate in teamwork and cooperate in groups of different composition.



BACHELOR OF BUSINESS ADMINISTRATION IN TEXTILE MANAGEMENT & MARKETING

First Semester

Code	Course Title	Credit Hours
MA-1006	Business Mathematics-I	3
MGT-1081	Principles of Management	3
MIS-1081	Introduction to Computing	3 (2-1)
TMM-1081	Introduction to Textile Industry	3
ENG-1081	English-I	3
SS-1081	Introduction to Psychology	3
Total		18

Second Semester

Code	Course Title	Credit Hours
MA-1007	Business Mathematics-II	3
ACCT-1081	Fundamentals of Accounting	3
MKT-1081	Principles of Marketing	3
TMM-1082	Introduction to Textile Raw Materials	3
HU-1081	Islamic Education	3
ENG-1082	English-II	3
Total		18

Third Semester

Code	Course Title	Credit Hours
HU-2082	Pakistan Studies	3
ECON-2081	Micro Economics	3
FIN-2081	Introduction to Business Finance	3
BUS-2081	Business Communication	3
TMM-2083	Yarn Manufacturing	3 (2-1)
ACCT-2082	Financial Accounting	3
Total		18

Fourth Semester

Code	Course Title	Credit Hours
MA-2004	Statistics and Probability Theory	3
MKT-2082	Marketing Management	3
BUS-2082	Oral Communication	3
ECON-2082	Macro Economics	3
BUS-2083	Business Research Methods	3
TMM-2084	Fabric Manufacturing	3(2-1)
Total		18

Fifth Semester

Code	Course Title	Credit Hours
HRM-3081	Human Resource Management	3
MIS-3082	Management Information System	3
MGT-3082	Organizational Behavior	3
FIN-3082	Financial Management	3
MKT-3083	Consumer Behavior	3
TMM-3084	Textile Processing	3(2-1)
Total		18

Sixth Semester

Code	Course Title	Credit Hours
MA-3004	Statistical Inference	3
MIS-3085	E-Commerce	3
TMM-3086	Environmental Aspects of Textile Industry	3
TMM-3087	Garment Manufacturing	3(2-1)
MKT-3084	Integrated Marketing Communication	3
TMM-3088	Textile Operations Management	3
Total		18

Seventh Semester

Code	Course Title	Credit Hours
TMM-4089	Supply Chain Management in the Textile Industry	3
TMM-4090	Product Costing in the Textile and Apparel Industry	3
BUS-4084	Business and Labor Laws	3
BUS-4085	Entrepreneurship	3
MGT-4083	Total Quality Management	3
BUS-4086	Export Marketing	3
Total		18

Eighth Semester

Code	Course Title	Credit Hours
TMM-4091	Textile Brand Management and Marketing	3
BUS-4087	Business Ethics and Corporate Social Responsibility	3
MGT-4084	Change Management	3
MGT-4085	Strategic Management	3
BUS-4088	Research Project	3
TMM-4092	Textile Testing and Quality Control	3(2-1)
Total		18



HOW TO APPLY

Eligibility Criteria for Admission

Undergraduate Programs (Engineering)

BS Textile Engineering

(Yarn Manufacturing, Weaving, Knitting, Textile Processing, Garments Manufacturing).

BS Polymer Engineering

The applicants must have one of the following qualifications with overall score of at least 60%.

- F.Sc. (Pre-Engineering)
- B.Sc. (Physics & Math)
- Three A-Levels (with Physics, Chemistry and Mathematics) and eight O-Levels.

Applicants who have studied in non- Pakistani systems (O-Level, A-Level etc.) must provide an equivalence certificate from Inter Board Committee of Chairmen IBCC, other wise their merit will not be finalized.

Admissions to the Engineering Programs of the University are decided on the basis of candidates' score in the NTS (NAT-IE) Test (45% weightage), Marks of F.Sc. (45% weightage) and Marks of Matriculation (10% weightage).

Candidates may apply for provisional admission if they have completed one of the above mentioned qualifications but waiting for their results.

Allotment of Specialization

In first four semesters, all the students of textile engineering will study common courses. During 4th semester, availability of seats will be notified in each specialization of the textile engineering.

Students will be required to submit their option on prescribed Proforma available from admission office and the same will be submitted in the admission office within 7 days. Allotment of the specialization will be decided on the bases of the following:

- CGPA after 4th semester
- Choice of students as per prescribed Proforma
- Availability of seats in required field of studies

Health Fitness Certificate (for BS Textile Engineering Only)

All the successful candidates are required to provide a Health Fitness Certificate from a recognized medical practitioner bearing the following requisite conditions:

- That he is not colour blind.
- That he is not suffering from any type of respiratory disorder i.e., Asthma, dust and chemicals allergies.
- That he is not sensitive to noise pollution.

However, the admission will be confirmed subsequently after the verification of Domicile and academic credentials.

ALLOCATION OF SEATS FOR BS TEXTILE ENGINEERING

For Male Applicants	
All Pakistan basis	23
Punjab	57
Sindh (Urban)	09
Sindh (Rural)	16
Khyber Pakhtunkhwa	14
Baluchistan	09
Islamabad territory	03
FATA	09
Tribal Area of DG Khan Rajanpur Disttt.	01
Azad Jammu and Kashmir	04
Disable persons	01
Northern area	03
Foreign students	02
Total	151
For Female Applicants	
All Pakistan basis	04
Punjab (Including federal areas)	09
Sindh (Urban)	01
Sindh (Rural)	02
Khyber Pakhtunkhwa	01
Baluchistan	01
FATA Azad Jammu and Kshmir	01

UNDERGRADUATE PROSPECTUS 2016

BS Software Engineering

Applicants must have an Intermediate F.Sc. ICS, 'A' Level or equivalent with minimum 60% marks. (Both Physics & Mathematics as elective subject).

Admission to BSSE Programs is decided on the basis of candidates, score in the NTS Test (45% weightage), Marks of F.Sc. (45% weightage) and Marks of Matriculation (10% weightage).

Undergraduate Programs (Non-Engineering)

1. BSCS

Applicants must have an Intermediate, F.Sc.(Pre-Engg.), ICS, 'A' Level or equivalent with math as compulsory subject having at least 60% marks.

Admission to BSCS Programs is decided on the basis of candidates, score in the NTS Test (30% weightage), Marks of F.Sc. (60% weightage) and Marks of Matriculation (10% weightage).

2. BS Textile Technology (BSTT)

Candidates must have an Intermediate F.Sc (Pre-Engineering), DAE(Textile, Mechanical, Chemical, Electrical & Civil or equivalent), Three A-level (Physics, Chemistry and Mathematics) or Equivalent with at least 50% Marks.

Admission to BSTT Programs is decided on the basis of candidates, score in the marks of F.Sc. (70%weightage) and Marks of Matriculations (30% Weightage).

3. BFDT & BTDT

Candidates holding Intermediate certificate (F.A., F.Sc., I.Com, I.C.S. etc.) or Equivalents, with at least 50%marks from any institute recognized by HEC in Pakistan or abroad are eligible to apply.

Admissions to BFDT and BTDT Programs are decided on the basis of candidate's score in the University test (30%weightage), Marks of Intermediate (60% weightage and Marks of Matriculation (10% weightage).

Please note that passing of University Drawing Test in compulsory for the admission to BFDT and BTDT Programs.

4. BBA (Hons.)

Candidates holding Intermediate Certificate (F.A., F.Sc., I.Com, I.C.S etc.) or Equivalents, with at least 50% marks from any institute recognized by HEC in Pakistan or abroad are eligible to apply. Admission to BBA (Honors) Program is decided on the basis of intermediate marks.

5. BS-TMM

Candidates holding Intermediate certificate F.Sc. (Pre-Engineering) or Equivalents, with at least 50% marks from any institute recognized by HEC in Pakistan or abroad are eligible to apply. Admission to BS TMM Program is decided on the basis of Intermediate marks.

Eligibility Criteria with seat allocation

Programs	Duration	No. of seats	Eligibility Criteria
BS Textile Engineering	4 years		At least 60% in the following: a. F.Sc. (Pre-Engineering) b. B.Sc. (Physics & Math) c. Three A-Levels (with Physics, Chemistry and Mathematics) and seven O-Levels.
• Yarn Manufacturing		45	
• Weaving		45	
• Knitting		25	
• Textile Processing		45	
• Garment Manufacturing		45	
BS Polymer Engineering	4 years	40	
BS Software Engineering	4 Years	45	F.Sc.(Pre-Engineering.), ICS, 'A' Level or equivalent with math as compulsory subject having at least 60 % marks.
Bachelor of Science in Computer Science (BSCS)	4 years	45	
BS Textile Technology	4 years	45	
BS in Textile Management & Marketing (BSTMM)	4 years	45	F.Sc. (Pre-Engineering) or Equivalent, with at least 50% marks
Bachelor of Business Administration (BBA Hons)	4 years	45	F.A., F.Sc., I.Com, I.C.S. or Equivalent, with at least 50% Marks. (University Drawing Test is compulsory for the admission to BFDT & BTDT)
Bachelor of Fashion Design & Technology (BFDT)	4 years	45	
Bachelor of Textile Design & Technology (BTDT)	4 years	45	

Fee Structure for Undergraduate Programs

Programs	Tuition Fee for 1st Semester (Rupees)	Total Dues of 1st Semester (Rupees)
BS Textile Engineering	Rs. 21,500/-	Rs. 67,850/-
BS Polymer Engineering	Rs. 30,500/-	Rs. 76,850/-
BS Software Engineering	Rs. 30,500/-	Rs. 76,850/-
BS Computer Science	Rs. 30,500/-	Rs. 76,850/-
BS Textile Technology	Rs. 30,500/-	Rs. 76,850/-
Bachelor in Business Administration	Rs. 30,500/-	Rs. 76,850/-
BS Textile Management & Marketing	Rs. 30,500/-	Rs. 76,850/-
Bachelor of Textile Design & Technology	Rs. 30,500/-	Rs. 82,850/-
Bachelor of Fashion Design & Technology	Rs. 30,500/-	Rs. 82,850/-

Other Charges (Included in above mentioned 1st Semester Dues)

Other Charges	Rupees
Admission Fee (Once at the time of admission)	Rs. 20,000/-
Degree Fee (Once in the last semester)	Rs. 5,000/-
Certificate Verification Fee (Once at the time of admission)	Rs. 2,000/-
Processing Fee (Once at the time of admission)	Rs. 5,000/-
University Security (Refundable)	Rs. 5,000/-
Red Crescent Donation (Once at the time of admission)	Rs. 50/-
University Card Fee (Once at the time of admission)	Rs. 300/-
Library Fee (Per Semester)	Rs. 1,000/-
Examination Fee (Per Semester)	Rs. 3,000/-
Medical Fee (Per Semester)	Rs. 2,000/-
Transport Fee Non-Border (Per Semester)	Rs. 5,000/-
Student Activity Fund (Per Semester)	Rs. 2,000/-
Endowment Fund (Per Semester)	Rs. 1,000/-
Annual Exhibition Fee (Per Semester)	Rs. 6,000/- (Only for Textile Design and Fashion Design)

Hostel Dues	Rupees
Room Rent	Rs. 4,500/-
Electricity Charges	Rs. 4,500/-
Sui Gas Charges	Rs. 2,500/-
Mess Service Charges	Rs. 2,000/-
Hostel Activity	Rs. 500/-
Hostel Security (Refundable)	Rs. 5,000/-

Note: (i) 1/3rd of the Tuition Fee along with Examination fee will be charged in Summer Semesters.
(ii) Tuition fee for all programs will be increased by 10% every year for new admission only.

Fee Structure for Self Finance

Programs	Self Finance Dues	1st Semester Regular Dues	I.T Advance	Total Dues Payable in 1st Semester
BS Textile Engineering	Rs. 350,000/-	Rs. 67,850/-	Rs. 20,645/-	Rs. 438,495/-
BS Polymer Engineering	Rs. 300,000/-	Rs. 76,850/-	Rs. 18,595/-	Rs. 395,445/-
BS Software Engineering	Rs. 300,000/-	Rs. 76,850/-	Rs. 18,595/-	Rs. 395,445/-
BS Computer Science	Rs. 300,000/-	Rs. 76,850/-	Rs. 18,595/-	Rs. 395,445/-
Bachelor in Business Administration	Rs. 200,000/-	Rs. 76,850/-	Rs. 13,595/-	Rs. 290,445/-
BS Textile Management & Marketing	Rs. 200,000/-	Rs. 76,850/-	Rs. 13,595/-	Rs. 290,445/-
Bachelor of Textile Design & Technology	Rs. 250,000/-	Rs. 82,850/-	Rs. 16,395/-	Rs. 349,245/-
Bachelor of Fashion Design & Technology	Rs. 250,000/-	Rs. 82,850/-	Rs. 16,395/-	Rs. 349,245/-

Procedure to apply for Admission on Self-Finance Basis

The University offers 35 seats for B.Sc. Textile Engineering and 05 Seats each in all other programs on self-finance basis to the candidates having good academic record, who could not be admitted on open merit. However, the minimum eligibility criterion for the admission on Self-Finance Basis is the same as prescribed for Open Merit. The other conditions and procedure to apply are as under:

1. All the male/female citizens of Pakistan irrespective of their domicile may apply for the admission on self-finance basis.
2. The candidates seeking admission against self-finance seats will have to apply on separate application form.
3. The application packet (Prospectus and Application Form) can be collected in person for **Rs. 1000/-** from the Admission Office of the University for each Program. If application packet sought by post, the fee of **Rs.1200/-** should be sent in the form of a money order or a bank draft payable to National Textile University, Faisalabad.
4. The completed application form with required supporting documents as mentioned in the application form alongwith a bank draft of following (Self-Finance Dues + Regular 1st Semester dues + I.T Advance) should reach the Admission Office of the University on or before the notified closing date. If the interested candidates exceed from the total number of available self-finance seats then admission will be made strictly on merit. If their merit does not fall in required top candidates then their total submitted dues will be refunded.
5. For B.Sc Textile Engineering students the field of specialization will be allocated after the 4th semester on the basis of merit and availability of seats.

Foreign Applicants Eligibility Criteria

The eligibility requirements for the foreign applicants are the same as for the applicants from within Pakistan.

Entry Test Requirement

Candidate may appear any one of these Entry Tests:

- I. NTS (NAT-IE) Test (If candidate wants to appear in Pakistan).
- II. SAT-II (Physics & Math-II) (If candidate wants to appear in his home country).

Fee Structure

1000\$ (One thousand US Dollar) or equal amount in Pakistani currency for each semester including hostel dues.

Application Submission Process

Application will be submitted by the candidate through his Ministry of Interior, in the Embassy of Pakistan, situated in the candidate's home country, which will forward the same in NTU Admission Office through Ministry of Interior, Government of Pakistan.

Refund Policy

Students who desire to leave will be refunded the dues as per existing refund policy of Higher Education Commission (HEC) according to the following Rules:

1. If any student applies for the refund of university dues paid by him/her up to 7th day of commencement of classes, he/she will be refunded full (100%) deposited dues except the admission fee of Rs. 20,000/- (Subject to clearance from all the department).
2. If any student applies for the refund of deposited university dues from 8th to 15th day of commencements of classes, then he/she will be refunded security deposited and half (50%) fee (Subject to clearance from all the departments).
3. If any student applies for the refund of paid university dues from 16th day of the commencement of classes, only his/her amount of security will be refunded (Subject to clearance from all the departments).
- I. % age of fee shall be applicable on all components of fee, except for security and admission charges.
- II. Timeline shall be calculated continuously, covering both weekdays and weekend.

University Merit Scholarships

In order to create a competitive academic environment the university management has introduced a new scheme of Merit Scholarships based on the following parameters:-

1. University merit scholarships would be granted on the basis of single semester result. The minimum requirement for the grant of Merit Scholarship will be 3.50 GPA.
2. 1st position holder of each section of a semester will be granted full exemption from the tuition fee for his/her next semester.
3. 2nd position holder of each section of a semester will be granted 75% exemption from the tuition fee in his/her next semester.
4. 3rd position holder of each section of a semester will be exempted from 50% tuition fee in his/her next semester.
5. In case two or more students having same GPA, then decision will be made on %age marks of the students. If the %age marks are also found equal of two or more students then both or more students will be eligible for the grant of university merit scholarships.



How to Apply

The fee for the application packet is Rs. 1000/- and can be paid in cash if the admission material is collected in person. If sought by post, the fee of Rs. 1200/- should be sent in the form of a money order or a bank draft payable to National Textile University. An application packet (including an application form, prospectus and guidelines for applicants) may be obtained by post or in person from:

**The Admission Office,
National Textile University
Sheikhupura Road,
Faisalabad-37610
Phone: 041-9230081-90, Ext-250, 251**

The completed application form with required supporting documents should reach the Admission Office at National Textile University on or before the notified closing date. Applicants are advised to ensure that the application is complete in all respect with required documents, which are

1. One recent passport size photograph.
2. One attested copy of each of Matriculation, F.Sc. or Equivalent and B.Sc. result cards.
3. The candidates waiting for their results will have to submit their marks sheet immediately after the declaration of results. If the candidate fails to meet the basic eligibility criteria his/her candidature will be cancelled.
4. One attested copy of valid Domicile Certificate. (only for textile engineering candidates)
5. Attested copy of National Identity Card or B-Form.

UNDERGRADUATE PROSPECTUS 2016

University Management

Rector, Prof. Dr. Tanveer Hussain

Tel: 041-9230099

Tel: 041-9230081-85, Ext: 102

Dean Faculty of Engineering & Technology

Zafar Javed

Tel: 041-9230081-90, Ext: 212

Dean Faculty of Science

Prof. Dr. M. Tahir Hussain

Tel: 041-9230081-90, Ext: 138

Registrar

Prof. Dr. Muhammad Ashfaq

Tel: 041-9230097

Tel: 041-9230081-90, Ext: 158

Controller of Examinations

Muhammad Zabihullah Khan

Tel: 041-9230093

Tel: 041-9230081-90, Ext: 127

admission@ntu.edu.pk, coe@ntu.edu.pk

Director Finance

Zulfikar Ahmad

Tel: 041-9230092

Tel: 041-9230081-90, Ext: 121

Director Quality Assurance

Muhammad Nisar Bhatti

Tel: 041-9230094

Tel: 041-9230081-90 Ext: 125

Student Advisor

Muhammad Farooq Jamal

Tel: 041-9230078, 041-9230081-90, Ext: 272

Librarian

Mushtaq Ahmad

Tel: 041-9230081-90 Ext: 150

Main Exchange Lines:

(+92-41) 9230081-90

Fax: (+92-41) 9230098

Chairman Department of Yarn Manufacturing

Uzair Hussain

Tel: 041-9230081-90, Ext: 184

Chairman Department of Weaving & Knitting

Muhammad Ayub Asghar

Tel: 041-9230076

Tel: 041-9230081-90, Ext: 211

Coordinator Department of Textile Processing

Muhammad Saif Maqsood

Tel: 041-9230081-90, Ext: 208

Chairman Department of Garment Manufacturing

Saad Ullah Channa

Tel: 041-9230081-90, Ext: 255

Chairman Department of Polymer Engineering

Hammad Mohsin

Tel: 041-9230081-90, Ext: 210

Coordinator Department of Material & Testing

Khurram Shahzad Akhter

Tel: 041-9230081-90, Ext: 108

Chairman Department of Computer Science

Waqar Ahmad

Tel: 041-9230081-90, Ext: 140

Chairman Department of Applied Sciences

Dr. Zahid Rizwan

Tel: 041-9230081-90, Ext: 159

Chairman Department of Design

Umer Hameed

Tel: 041-9230081-90, Ext: 230

Chairman Department of Management Sciences

Liaquat Ali

Tel: 041-9230081-90, Ext: 162



For information please contact

The Admission Office

National Textile University

Sheikhupura Road, Faisalabad-37610

Tel: 041-9230081-90, Ext. 250-251

Fax: 041-9230098

admission@ntu.edu.pk

www.ntu.edu.pk