



## National Textile University Since 1962

*"NTU has been the premier institute of textile education in the country, meeting technical and managerial human resource needs of entire textile industry of Pakistan by establishing crucial link between university and the business world. NTU has strived to achieve the aim of imparting world class education while encouraging research and intellectual growth in the country. As a result, NTU has played a key role in setting high standards of academics and produced professionals to compete in the world. NTU imparts extraordinary academic and social skills among students to face challenges of the time and become the next generation of leaders believing in its motto "Innovate and Lead". NTU has close collaboration with the world renowned universities to promote research and innovation. The hallmark of NTU is that within a short period of 16 years, it is now among top universities of the country. On the face of fast changing and diverse world, NTU stands firm to offer new programmes in relevant, emerging fields for the people of Pakistan and the wider world."*

## MS Advanced Materials Engineering

The objective of this program is to give the students an overview of various types of materials used for advanced engineering applications. The students learn about the properties and applications of various polymeric, ceramic, metallic, bio- and composite materials ranging from nanoscale to macro scale. In addition to various physical and mechanical properties, various functional aspects of the materials are also be covered in the course including: shape memory effect, self-healing, phase change, fire retardant behavior and energy harvesting properties.

[www.ntu.edu.pk/ogsr](http://www.ntu.edu.pk/ogsr)

For an informal discussion about more study options, call Graduate Studies & Research Office at +92 41 9230081-85 (Ext-257-258) or email at [ogsr@ntu.edu.pk](mailto:ogsr@ntu.edu.pk)



## Eligibility Criteria

BS Textile/Materials/Polymer/Mechanical/Chemical Engineering or any other equivalent degree from HEC/PEC recognized institution with a minimum CGPA 2.00/4.00 or 3.00/5.00 in semester system or 60% marks in annual/term system.

The applicant must pass NTU-GAT (General) test conducted by National Textile University, as per HEC guidelines and adopted by Advanced Studies and Research Board of NTU, Faisalabad with a minimum of 50% cumulative score.

The applicant must not be already registered as a student in any other academic program in Pakistan or abroad.

## Merit Criteria

BS or Equivalent	60% weightage,
NTU-GAT (General)	30% weightage
Interview	10% weightage

## Semester-Wise Layout of Courses

### Semester-I

<u>Course Title</u>	<u>Credit Hours</u>
Advanced Materials	3
Technical Textiles	3
Composite Technology	3
Research Methodology	3

### Semester-II

Nano Materials	3
Smart Materials	3
Mechanics of Materials	3
Advance Characterization Techniques	3

### Semester-III & IV

Research Thesis	6
<b><u>Total Credit Hours</u></b>	<b>30</b>

(24 credit hours of course work and 6 credit hours for research work/thesis)

## Study Duration

The minimum duration of study will be 4 semesters and maximum of 8 semesters as per HEC guidelines.

## How to Apply

Apply online at [admissions.ntu.edu.pk](http://admissions.ntu.edu.pk)

## **For More Information Please Contact or Visit:**

Office of the Graduate Studies & Research, National Textile University, Faisalabad, Sheikhpura Road, Faisalabad.  
Ph. +92 41 9230081-82 (Ext.257-258) or email at [ogsr@ntu.edu.pk](mailto:ogsr@ntu.edu.pk) website: [www.ntu.edu.pk/ogsr](http://www.ntu.edu.pk/ogsr)