Postgraduate (follow-up) Master Study Programmes at FT TUL

TEXTILE ENGINEERING (N0723A270002) provides three specializations:

- Nonwoven and Nanomaterials
- Clothing Technology and Materials
- Textile Technology and Materials *(not opened in English)*

Description:

The objective of the Textile Engineering consecutive Master's Degree programme is to

- train university-educated professionals for a career with textile and clothing technology companies. This industry's characteristic feature is a continuous and fast innovation spiral leading to specialized and highly functional, high-added value products.
- develop knowledge in the field of textile technologies (spinning, weaving, knitting, non-woven textiles, clothing industry, treatment), expand a knowledge of the properties and applications of fibrous and nanofibre materials, fabric-reinforced composites and production of nanofibre and hybrid hierarchical structures.
- provide graduates with a solid understanding of fundamental theoretical and testing methods of material engineering to facilitate their fast adaptation to manufacturing, patterning and research approaches in a wide range of textile and non-textile applications. Depending on their dissertation topics students will then become familiar with the application, technological, experimental and theoretical background of other material engineering areas. With its three specialist disciplines the Textile Engineering postgraduate Master's Degree programme covers the entire engineering spectrum of the textile and clothing industry.

Since the TUL programmes are recognized by the European Federation of National Engineering Associations FEANI, alumni are eligible for the EUR ING title. It is also fully accredited by The International Textile Institute, Manchester.

Further study: PhD study programme

Admission Requirements:

Graduating from a Bachelor's degree programme

Stipulated grade average at university or passing an entrance examination

How to Apply - see details at: www.ft.tul.cz/en

Application Deadlines:

- February 28, 2022 (first round)
- July 31, 2022 (second round – together with the **valid** Recognition of previous degree **only**)

Application Fee: USD 100

Tuition Fee: USD 3000 / year

Duration: 2 years

Start of study: September 26, 2022 (winter semester).

Start from summer semester is not allowed.

Total number of ECTS: 120 ECTS

Postgraduate Master study programme: TEXTILE ENGINEERING (N0723A270002)

Compulsory courses - 1st year	Course code	Winter	Summer	Examination	ECTS
Applied Mathematics	KAP/AMA	4+4		Credit + Exam	6
Physics	KFY/AFY	2+2		Credit + Exam	6
Textile Chemistry	KMI/TXC	2+2		Credit + Exam	6
Properties of Fibres	KMI/VV	2+2		Credit + Exam	6
Statistics	KAP/STT		2+2	Credit + Exam	6
MATLAB Programming Fundamentals	KHT/ZPM		0+2	Credit + Exam	4
Facultative courses - 1st year (one course must be selected)	**Course code**	**Winter**	**Summer**	**Examination**	**ECTS**
Materials for Tissue Engineering	KNT/MTI		2+2	Credit + Exam	6
Applied Mechanics	KTT/AME		2+2	Credit + Exam	6

Nonwovens and Nanomaterials background (NNMA bkgd.)

Compulsory courses - 1st year – NNMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Polymer Physics	KCH/FYP		2+2	Credit + Exam	6
Diploma Thesis 1	KNT/DPR1		0+2	Credit (no grade)	3
Mechanical Technologies of Nonwovens	KNT/MNTI		2+2	Credit + Exam	6
Theory of Nonwovens	KNT/TEN		2+2	Credit + Exam	5

Clothing Technology and Materials background (OTMA bkgd.)

Compulsory courses - 1st year – OTMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Automation of Apparel Production	KOD/AOV		2+2	Credit + Exam	6
Diploma Thesis 1	KOD/DPR1		0+2	Credit (no grade)	3
Principles of Clothing Machines	KOD/POS		2+2	Credit + Exam	6
Chapters of Garment Manufacture Technology	KOD/VYT		2+2	Credit + Exam	5

Textile Technology and Materials background (TTMA bkgd.) – *not opened in English*

Compulsory courses - 1st year – TTMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Diploma Thesis 1	KTT/DPR1		0+2	Credit (no grade)	3
Construction and Properties of Knitted Fabrics	KTT/KVP		2+2	Credit + Exam	6
Processes and Systems in Spinning	KTT/PSP		2+2	Credit + Exam	5
Processes and Systems in Weaving	KTT/PST		2+2	Credit + Exam	6

Compulsory courses - 2nd year	Course code	Winter	Summer	Examination	ECTS
Special Measurement Methods	KMI/SMM	2+2		Credit + Exam	6
Structure of Fibrous Assemblies	KTT/SVU	2+2		Credit + Exam	6
Textile Engineering	KMI/TEN		2+2	Credit + Exam	5
Topical Law Issues	KPE/APR		2+0	Credit + Exam	3

Nonwovens and Nanomaterials background (NNMA bkgd.)

Compulsory courses – 2nd year – NNMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Physical Principles of Electrospinning	KCH/FTP	2+2		Credit + Exam	6
Diploma Thesis 2	KNT/DPR2	0+2		Credit (no grade)	6
Thermal and Chemical Technologies	KNT/TCTI	2+2		Credit + Exam	6
Industrial Textiles	KNT/TPA	2+2		Credit + Exam	6
Diploma Thesis 3	KNT/DPR3		0+2	Credit (no grade)	4
Facultative courses – 2nd year – NNMA bkgd. (two courses must be selected)	**Course code**	**Winter**	**Summer**	**Examination**	**ECTS**
Stereology	KCH/STE		2+2	Credit + Exam	6
Automotive industry textiles	KNT/TAP		2+2	Credit + Exam	6
Technology of Nanofibers Production	KNT/TTN		2+2	Credit + Exam	6
Medical textiles	KNT/ZDT		2+2	Credit + Exam	6

Clothing Technology and Materials background (OTMA bkgd.)

Compulsory courses - 2nd year – OTMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Diploma Thesis 2	KOD/DPR2	0+2		Credit (no grade)	6
Computer-aided Pattern Design	KOD/KPC	1+2		Credit + Exam	6
Utility Properties of Clothing Materials	KOD/OM	2+2		Credit + Exam	6
Computer Simulation of Clothing Production	KOD/PSO	1+2		Credit + Exam	6
Diploma Thesis 3	KOD/DPR3		0+2	Credit (no grade)	4
Project of Clothing Product	KOD/PRO		1+2	Credit + Exam	6
Advanced Technology and Measurement	KOD/STE		2+2	Credit + Exam	6

Textile Technology and Materials background (TTMA bkgd.) – *not opened in English*

Compulsory courses - 2nd year – TTMA bkgd.	Course code	Winter	Summer	Examination	ECTS
Diploma Thesis 2	KTT/DPR2	0+2		Credit (no grade)	6
Construction and Properties of Yarns	KTT/KVD	2+2		Credit + Exam	6
Construction and Properties of Woven Fabrics	KTT/KVT	2+2		Credit + Exam	6
Processes and Systems in Knitting	KTT/PPL	2+2		Credit + Exam	6
Biomaterials and Biostructures	KTT/BIO		2+2	Credit + Exam	6
Diploma Thesis 3	KTT/DPR3		0+2	Credit (no grade)	4
Computer-aided Modelling	KTT/PPM		2+2	Credit + Exam	6

Student can be enrolled for the next academic year or semester provided s/he fulfils the conditions for enrollment in to the next year or semester of study - to gain at least:

- 10 ECTS credits in the first semester
- 40 ECTS credits in the first year
- 30 ECTS credits in the second year

Students must pass all the compulsory courses in their study plan. They must earn 6 ECTS credits from a pair of facultative courses of the study programme.
The total sum of ECTS credits has to be at least 120.

Alternatively, students may attend any course from the curriculum of all the faculties of TUL, after approval by the guarantor of selected course.