

# Curriculum

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**Notice:** Undefined offset: 3 in `/web/html/ntf/public_html/wp-content/themes/ntf/functions/function-shortcodes.php` on line **2915**

## 1st year

Course	Hours					ECTS
	L	S	P	O	Σ	
<b>1st semester</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>
Basic courses	0	0	0	0	600	20
Elective courses	0	0	0	0	300	10
Individual research work	0	0	0	0	900	30
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

## 2nd year

Course	Hours					ECTS
	L	S	P	O	Σ	
<b>3rd semester</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>
Elective courses	0	0	0	0	450	15
Presentation of doctoral thesis research topic	0	0	0	0	150	5
Individual research work	0	0	0	0	1200	40
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

## 3rd year

Course	Hours					ECTS
	L	S	P	O	Σ	
<b>5th semester</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>
Individual research work	0	0	0	0	1800	60
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

## year

Course	Hours					ECTS
	L	S	P	O	Σ	
<b>7th semester</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>
Individual research work	0	0	0	0	1500	50
Presentation of doctoral thesis prior to public defence	0	0	0	0	150	5
Elaboration of doctoral thesis and public defence	0	0	0	0	150	5
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

Course	Hours					ECTS
	L	S	P	O	Σ	
<b>1st semester</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

Basic courses	0	0	0	0	600	20
Elective courses	0	0	0	0	300	10
Individual research work	0	0	0	0	900	30
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1800</b>	<b>60</b>

Basic optional courses	Hours					ECTS
	L	S	P	O	Σ	
T-S-1 (general) Mechanics – selected topics	60	900	150	300	10	
T-S-2 (general) Physical organic chemistry with modern methods of separation and identification of organic compounds	60	900	150	300	10	
T-S-3 (general) Optics, spectroscopy and microscopy for graphic and textile applications	60	900	150	300	10	
T-S-4 (general) Principles of electronics for application in printed electronics	60	900	150	300	10	
T-S-5 (general) Colour models and colour transforms	60	900	150	300	10	
T-S-6 (general) Theory of colour	60	900	150	300	10	
T-S-7 (general) Design of experiments and multivariate analysis methods in graphic arts and textiles	60	900	150	300	10	
T-P-1 (textile engineering) Fibre forming polymer structure	60	900	150	300	10	
T-P-2 (textile engineering) Structure and properties of textiles – selected topics	60	900	150	300	10	
T-P-3 (textile engineering) Speciality fibres – selected topics	60	900	150	300	10	
T-P-4 (textile engineering) Theory of finishing process	60	900	150	300	10	
T-P-5 (graphic communication) Generating and processing information in graphic media – the message of graphic media	60	900	150	300	10	
T-P-6 (graphic communication) Visual image as a communication media	60	900	150	300	10	
T-P-7 (graphic communication) interdisciplinary typography	60	900	150	300	10	
T-P-8 (graphic communication) Advanced printing technologies, development and applications	60	900	150	300	10	
T-P-9 (graphic communication) Interactivity	60	900	150	300	10	
T-P-17 (graphic communication) Polymers for 3D printing in graphic art (active in 2023/24)	90	600	150	300	10	
T-P-10 (textile design) Selected issues in sociology of arts	60	900	150	300	10	
T-P-11 (textile design) Theory of textile and fashion art	60	900	150	300	10	
T-P-12 (textile design) Theory of fashion	60	900	150	300	10	
T-P-13 (textile design) Structure of art practice	60	900	150	300	10	
T-P-14 (textile design) Cultural studies of fashion	60	900	150	300	10	
T-P-15 (textile design) Theoretical foundations of textile design	60	900	150	300	10	
T-P-16 (textile design) Theory of costume design	60	900	150	300	10	

Optional courses	Hours					ECTS
	L	S	P	O	Σ	
I-S-1 (general) Environmental aspects in textiles and graphics	60	900	150	300	10	
I-S-2 (general) Quality – selected topics	60	900	150	300	10	
I-S-3 (general) Analysis of structure and properties of textile and graphic materials – selected chapters	60	900	150	300	10	
I-S-4 (general) Recycling of polymeric materials	30	450	75	150	5	
I-S-5 (general) Plasma technologies for textiles and graphics	60	900	150	300	10	
I-S-6 (general) Printed electronics	60	900	150	300	10	
I-S-7 (general) Dyes and pigments in textile and graphic technology	30	300	150	150	5	
I-S-8 (general) Microcapsulation	15	300	75	150	5	
I-S-9 (general) Colour measurement – selected topics	30	300	150	150	5	
I-S-10 (general) Suitable and sensible application of colour	30	450	75	150	5	
I-S-11 (general) Computing and numerical methods in textile and graphics research	30	450	75	150	5	
I-S-12 (general) Photography as a communication media	30	450	75	150	5	

I-S-13 (general) Design and innovation	30450 75 1505
I-S-14 (general) Advanced technologies in clothing with selected topics of 2d/3d development of garment cuts	60900 15030010
I-S-15 (general) Use of image processing and image analysis in graphic and textile research	60900 15030010
I-S-16 (general) The methodologies of computer-aided design of products	60900 15030010
 I-1 (textile engineering) Functionalisation of textile materials	60900 15030010
I-P-2 (textile engineering) Biotechnology for textile processing	60900 15030010
<b>Do not stop</b> I-P-3 (textile engineering) Advanced technologies for line textiles production – selected topics	60900 15030010
 I-4 (textile engineering) Advanced technologies in clothing – selected topics	60900 15030010
 I-5 (tekstilstvo) Dyeing and printing of textiles – selected topics	60900 15030010
 I-6 (textile engineering) Pretreatment and finishing of fibrous substrates - selected topics	60900 15030010
 I-P-7 (textile engineering) Textile care – selected topics	25500 75 1505
 I-P-8 (textile engineering) Speciality textiles– selected topics	30450 75 1505
 I-9 (graphic communication) Ancient graphic materials and techniques – selected topics	60900 15030010
 I-P-10 (graphic communication) Sustainability at production and processing of paper and packaging	60900 15030010
 I-P-11 (graphic communication) Packaging and graphic materials – selected topics	60900 15030010
 I-12 (graphic communication) Methods for studying of material – print interactions	60900 15030010
 I-13 (graphic communication) Quality analysis of graphic design products	30450 75 1505
I-P-19 (graphic communication) Functionalization of graphic materials (active in 2022/23)	60900 15030010
 I-P-14 (textile design) Interior and exterior textiles	60900 15030010
I-P-15 (textile design) Advanced materials in textiles	60900 15030010
 I-P-16 (textile design) The study of gender, body and clothing	60900 15030010
 I-P-17 (textile design) Fashion and media communication	60900 15030010
I-P-18 (textile design) Sustainable design	60900 15030010

**Abbreviations used for the syllabus:**

L – lectures

S – seminar

P – practice

O – other forms of educational activities (mainly project work)

ECTS – European Credits Transfer System (1 credit point equals a 30-hour student workload)

Grey – Grey written courses are not carried out in this academic year

The proportion of the electivity per academic year (the ratio of ECTS credits that the student acquires with the mandatory and optional learning units)

Academic year	Mandatory learning units	Optional learning units	Practical training	Doctoral thesis
1 <sup>st</sup> year	0% (0 ECTS)	50% (30 ECTS)	/	50% (30 ECTS)
2 <sup>nd</sup> year	8% (5 ECTS)	25% (15 ECTS)	/	67% (40 ECTS)
3 <sup>th</sup> year	17% (10 ECTS)	/	/	83% (50 ECTS)
Total	8% (15 ECTS)	25% (45 ECTS)	/	67% (120 ECTS)



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