New Bachelor

In “WOOD TECHNOLOGY AND INTERIOR DESIGN”

Bachelor’s Program “Wood Technology and Interior Design”

The Bachelor’s program in ’’**Wood Technology and Interior Design’’** combines the practical and creative aspects of wood and wood based materials processing with the artistic and functional design of interior spaces. The curricula is designed to equip students with the technical skills and knowledge necessary to work in the wood industry, while also providing a strong foundation in interior design principles.

Students will typically learn about wood materials and modern manufacturing techniques, alongside design principles, spatial planning, and interior styling. The program includes both theoretical courses and hands-on projects, allowing students to work with wood as a material for creating furniture, structures, and interiors. Graduates are prepared for careers in both the wood and design industries, working in areas like furniture design, architectural interior design, sustainable construction, or product development. The interdisciplinary nature of the program fosters innovation, problem-solving, and an understanding of the environmental impacts of design and material usage.

Program Objectives

This program aims to:

- **Develop Technical Expertise in Wood Materials and Manufacturing**: Equip students with in-depth knowledge of wood properties, processing techniques, and modern production methods to create high-quality, sustainable wood products.
- **Foster Creativity and Innovation in Interior Design**: Provide skills to design aesthetically pleasing and functional interior spaces, integrating elements such as furniture, lighting, and color theory with a focus on user experience and comfort.
- **Promote Sustainable Practices in Design and Construction**: Encourage an understanding of sustainable material use, eco-friendly design principles, and the environmental impact of both wood products and interior design choices.
- **Enhance Problem-Solving and Project Management Skills**: Prepare students to manage design and construction projects, from conceptualization through to execution, ensuring effective planning, budgeting, and coordination with various stakeholders.

- **Cultivate Interdisciplinary Collaboration**: Develop students' ability to work across disciplines, blending the technical aspects of wood technology with the artistic and functional aspects of interior design, to create cohesive and innovative solutions for real-world challenges.

Key Competencies

Graduates will gain expertise in:

1. **Wood processing Skills**: Proficiency in wood processing techniques, and innovative technology, including CAD and CNC.
2. **Design and Aesthetic Sensibility**: Mastery of design principles for creating visually appealing and functional interior spaces.
3. **Sustainability and Material Knowledge**: Understanding of wood and wood based materials properties, sustainable sourcing, and eco-friendly design practices.
4. **Project Management and Collaboration**: Skills in managing design projects, planning, budgeting, and effective teamwork.
5. **Problem-Solving and Critical Thinking**: Ability to analyze challenges and develop innovative, user-centered design solutions.

Career Opportunities

Graduates can pursue roles as:

- **Engineer in wood industry factories** managing production and implementing contemporary technologies in the technological processes of manufacturing furniture and other wood-based products.
- **Designer in architectural or interior design studio** to contribute in building design, as well as offering furniture design and interior organization.
- **Designer adviser in Furniture Sales Centers**: The furniture and interior design specialist can work in large furniture sales centers in the country. Possessing strong knowledge of products, he/she can competently advertise it to customers.
- **Independent Specialist in Furniture and Interior Design**: Small furniture production businesses may hire independent designers. Helps improve the aesthetic quality of products to remain competitive in the market.

Curriculum Structure

The three-year program blends **natural sciences, technical courses, and social sciences**:

- **1st Year**: Foundational courses in physics, mathematics, wood biology, wood protection, process engineering 1, Basics of economics etc (60 ECTS).
- **2nd Year**: Advanced training in Structure and physics of materials, Wood Processing technology I, Renewable and raw materials, Industrial furniture construction, Fundamentals of interior design, Market strategies (60 ECTS).
- **3rd Year**: Two specialization in Wood Technology Engineering and Furniture and Interior Design (60 ECTS).

Interdisciplinary Approach

Aligned with international standards (Muster Curricula), the program balances:

- **Natural Sciences (42 ECTS)**: physics, Subject-specific basic 1, Subject-specific basic 2, Applied physics, Chemistry, etc..
- **Technical Sciences (42 ECTS)**: Wood Processing technology I, Renewable and raw materials, Industrial furniture construction, etc
- **Social Sciences (42 ECTS)**: Market strategies, Basics of economics, Work systems and organization economy, production management, etc.

Why Choose This Program?

This degree combines creativity, technical skills, and sustainability, preparing students for a growing industry focused on eco-friendly solutions. Through hands-on experience, students enhance their wood processing skills and design capabilities, opening diverse career paths such as interior designer and wood processing engineer. This program is ideal for those seeking to merge artistic expression with technical applications while making a meaningful impact on quality of life.

Bachelor “WOOD TECHNOLOGY AND INTERIOR DESIGN”

1st Year - Overview 60 ECTS fundamental courses

No.	Obligatory Modules	ECTS	Courses	Type	ECTS
1	Value chain wood and other renewable raw materials	6	Value chain wood and other renewable raw materials	VO	6
2	Subject-specific basic 1	6	General botany	VO	2

			Forest knowledge	VS	4
3	Subject-specific basic 2	6	Mathematics	VU	4
			Statistics	VU	2
4	Basics of economics	6	Basic principles of economics	VO	2
			Fundamentals of business administration	VU	4
5	Applied physics	6	Physics	VU	4
			Thermo technics	VU	2
6	Chemistry	6	Inorganic chemistry	VU	3
			Organic chemistry	VU	3
7	Wood Biology	6	Wood biology	VO	3
			Wood biology	UE	3
8	Wood chemistry and wood preservation	6	Wood chemistry	VO	2
			Wood pests and Wood protection	VU	4
9	Law and politics	6	Fundamentals of law	VO	3
			Wood processing industry policy	VS	3
10	Process engineering I	6	Technical drawing	VU	2
			CAD 2D	VS	4

2nd Year - Overview 60 ECTS advanced courses

No.	Obligatory Modules	ECTS	Courses	Type	
11	Process engineering II	6	Mechanics and statics	VU	3
			Details and elements of machines	VU	3

12	Structure and physics of materials	6	Wood physics	VU	3
			Strength of materials	VU	3
13	Wood Processing technology I	6	Wood machining	VU	4
			Measurement and control technology	VU	2
14	Fundamentals of interior design	6	Introduction to Interior Design	VO	4
			Introduction to Interior Design	PJ	2
15	Wood Processing technology II	6	Wood drying	VU	3
			Wood processing technology	PJ	3
16	Renewable and raw materials	6	Sawn timber	VS	3
			Wood based materials	VS	3
17	Industrial furniture construction	6	Introduction to furniture construction with the basics of work preparation	VO	3
			Industrial furniture construction from concept to realization	UE	3
18	Market strategies	6	Wood products markets	VO	2
			Basics of marketing	VS	4
19	Finishing process	6	Gluing and varnishing of wood	VS	4
			Systems of control quality	VS	2
20	Work systems and organization	6	Business process management	VS	3
			Ergonomics	VS	3

3rd Year - Overview 60 ECTS specialization, thesis, etc.

SPECIALIZATION 1 Wood Technology Engineering	ECTS	SPECIALIZATION 1 Wood Technology Engineering	Type	ECTS

Compulsory specialization modules 18 ECTS			Compulsory specialization courses		
1	Production management	6	Technologic line layout	VU	2
			Businesses application system	VS	2
			Internal transport	PJ	2
2	CNC Processing	6	CNC Processing	VU	2
			CNC production	PJ	4
3	Innovation and the timber industry	6	Excursion wood industry	EX	4
			Innovation management	VO	2
Elective specialization Modules 12 ECTS			Elective specialization Courses		
1	Programming skills	6	Programming with Python basic (in Eng.)	VU	3
			Advanced Python (HNT) (in Eng.)	VU	3
2	Digital design and systems	6	CAD 3D	PJ	4
			Digital assistance systems for wood technology processes	VS	2
3	Fundamentals and concepts of Circular Bio economy	6	Fundamentals and concepts of Bio economy	VO	4
			Technology aspects of circular bio economy in wood industry	VS	1
			Excursion and Seminar	XS	1
4	Wood utilization	6	Dendrochronology	VS	3
			Wood utilization	VX	3

SPECIALIZATION 2	ECTS	SPECIALIZATION 2	Type	ECTS

Furniture and Interior Design			Furniture and Interior Design		
Compulsory specialization modules 18 ECTS			Compulsory specialization courses		
1	Fundamentals of interior design	6	Introduction to Interior Design	VO	4
			Introduction to Interior Design	PJ	2
2	Furniture design	6	History of furniture	VS	2
			Furniture design	PJ	4
3	Interior design project	6	Interior design project	PJ	6
Elective specialization Modules 12 ECTS			Elective specialization Courses		
1	Digital design	6	CAD 3D	PJ	3
			Digital Design (3dMax, …)	PJ	3
2	Composition in interior design	6	Composition in interior design	VO	3
			Composition in interior design	PJ	3
3	CNC processing and programming	6	CNC production	PJ	3
			Programming with Python basic (in Eng.)	VU	3
4	Fundamentals and concepts of Circular bio economy	6	Fundamentals and concepts of Bio economy	VO	4
			Technology aspects of circular bio economy in wood industry	VS	1
			Excursion and Seminar	XS	1

How is the interdisciplinarity of the program according to Muster Curricula implemented?

26 % ECTS in Natural Science

26 % ECTS in Technical Science

26 % ECTS in Social Science

12 % of English classes