

## DESCRIPTION OF THE MODULE

### Project Management

<b>Aim</b>	The student obtains profound knowledge and skills in project management to prepare and effectively manage projects of a company.
<b>Tasks</b>  <b>(Learning Outcomes)</b>	<p><b>The workplace matches the competence and duties:</b>                      Explain basic concepts of project management;                      Choose the most appropriate project management methods and tools, taking into account the stages of project management;                      Prepare and manage a real project for a company.</p> <p><b>The student is able to:</b>                      Explain basic concepts of project management.  <b>Knows:</b>                      Theory of the concepts of projects management, project types and requirements, the main stages of projects management.  <b>Understands:</b>                      Principles and methods of projects' preparation and management. Understands the ways to apply acquired knowledge in project management.</p> <p><b>The student is able to:</b>                      Explain the different phases of project management  <b>Knows:</b>                      Project management methods and tools and its usage in practice  <b>Understands:</b>                      How to apply project management methods and tools in all stages of project management.</p> <p><b>The student is able to:</b>                      Prepare and manage a real project for their company  <b>Knows:</b>                      How to prepare project proposal and document operational writing  <b>Understands:</b>                      The context of the learned modules above and use them in a real project</p>
<b>Assessment form</b>	<p>When learning the module, the student studies project management in a selected manufacturing company and drafts a project proposal based on the company needs. At the end of the module the student presents a "real" project drafted for the selected manufacturing company. Substantial of processing is, that the students act independently or in groups.</p> <ol style="list-style-type: none"> <li>1. During the acquisition of the module, the learner researches the needs of innovative project concept in the manufacturing company, identifying the main resources for its implementation. At the end of the module, the learner presents the developed "real" project.</li> <li>2. During the acquisition of the module, the learner performs a case study in the manufacturing company regarding the innovative project concept identification, describing it based on company needs. Based on the performed analysis, proposals for innovative idea implementation are developed. At the end of the module, the learner presents the final project in the selected manufacturing company.</li> <li>3. During the acquisition of the module, the learner analyses a practical needs for innovative project conception implementation in a selected the manufacturing company, taking into account the peculiarities of the external environment. According to the respective assignment, the learner analyses the necessity for implementation project management methods and tools. At the end of the module, the learner presents the results on the analysis of the need for project conception development in the selected manufacturing company, providing proposals for the improvement of planning.</li> <li>4. During the acquisition of the module, by studying the project management in the selected manufacturing company, the learner develops a real project conception description and the implementation plan. At the end of the module, the learner presents the created project for the selected manufacturing company.</li> </ol>
<b>Role in curricula</b>	Final module of the curriculum, which provides students the possibility to use knowledge gained from previous modules and manage their own final projects.

## CONTENT OF THE MODULE

Learning outcomes	Topics	Content (suggested)	Assessment of acquired learning outcomes (optimal level)	Methods and ideas for learning process
<p><b>The student is able to:</b> Explain basic concepts of project management</p> <p><b>Knows:</b> The main elements, methods, tools and works in project management.</p> <p><b>Understands:</b> The essence of project management principles, methods, process of project management. Understands the possibilities for the application of theoretical knowledge in a manufacturing company.</p>	<p><b>1.1 Basic concepts of project management</b></p>	<p><b>1.1.1 Definition of project management</b></p> <p><b>1.1.2 Benefits of project management</b></p> <p><b>1.1.3 Characteristics of a project</b></p> <p><b>1.1.4 Holistic project management</b></p> <p><b>1.1.5 Life cycle</b></p> <p><b>1.1.6 Target determination</b></p> <p><b>1.1.7 Analysis of the project environment</b></p> <p><b>1.1.8 Phases</b></p> <p><b>1.1.9 Milestones</b></p> <p><b>1.1.10 Interdisciplinary character of the management</b></p> <p><b>1.1.11 Project events</b></p>	<p>Describes the main differences between the project management definitions.</p> <p>Describes the benefits of project management.</p> <p>Names and describes the main project's characteristics.</p> <p>Describes the importance and challenges of holistic project management approach.</p> <p>Names and describes the life cycle phases of project management.</p> <p>Describes the main principles of target determination</p> <p>Describes the methods and principles of analysis of the project environment</p> <p>Describes the phases of project management</p> <p>Describes the meaning and advantages of project management milestones.</p> <p>Describes the interdisciplinary character of the management</p> <p>Describes the events' effects on the project.</p> <p>Describes the partners and stakeholders' roles in the project.</p>	<p>The students study theoretical materials about the project management</p> <p>Discussions: the students describe their understanding of importance of innovation implementation in project management.</p> <p>Discussion: the students discuss and analyze the main project's characteristics and different approaches of project management.</p> <p>The students study theoretical materials about the life cycle phases of project management.</p> <p>Task in segmentation of project target groups: the students demonstrate their ability to recognize the main criteria for quality framing of project target groups.</p> <p>Discussions: the students define the external and internal instruments (sources) for projects funded and its benefit and risk.</p> <p>Task in the defining the main milestones: the students demonstrate their ability to recognize the main project management milestones.</p> <p>Discussions: the students discuss the partners and stakeholders' roles from timber industry and their company in the project development.</p>

		<b>1.1.12 Roles in the project</b>		
<p><b>The student is able to:</b> Explain the different phases of project management.</p> <p><b>Knows:</b> Framework, methods and tools for project design and management.</p> <p><b>Understands:</b> The need for project planning and objectives, milestones, results, outputs formation; Project implementation and team building peculiarities. Methods and tools for setting and implementing plans and project objectives.</p>	<p><b>2.1. Explain the definition phase</b></p>	<b>2.1.1 Project order</b>	Describes the forms, background, objectives, legal basis of project order.	Practical work - interview: the students interview a manager (specialist) in the company to understand its needs for innovative project in their company.
		<b>2.1.2 Project requirements</b>	Names and describes the requirements for the project.	Discussions: the students discuss and analyses a concept and requirements for the project in their company.
		<b>2.1.3 Project start</b>	Names and describes the six steps to start project.	Task: regarding the requirements for a project, the students must be able to prepare a short description of their project idea (conception).
		<b>2.1.4 Project application</b>	Describes the basic principles of project application and sketch preparation.	Task: the students provide proposals for a project plan.
		<b>2.1.5 Project sketch</b>	Describes the goals and tasks of planning.	Discussion: the students discuss planning methods and tools in their companies.
		<p><b>2.2. Explain the planning phase</b></p>	<b>2.2.1 Work breakdown structure</b>	Names and describes the tools and methods for preparation the work breakdown structure, project schedule.
	<b>2.2.2 Project schedule</b>		Describes the tools and methods for determination the project capacity.	Discussion: the students discuss the quality requirements for project management.
	<b>2.2.4 Capacity plan</b>		Describes the project cost classification and cost calculation methods.	Task regarding the risks management. The students demonstrate their ability to recognise risks, respond within their company for project implementation.
	<b>2.2.5 Cost plan</b>		Describes the criteria and tools for project management quality ensure.	Discussion: the students discuss approval procedures and ways to ensure them.
	<b>2.2.6 Quality plan</b>		Describes the risk groups and its assessment principles.	Discussion: the students discuss the importance of project control in project management and the main goals and tasks.
	<b>2.2.7 Risk assessment</b>		Describes the project approval procedures.	Task: the students demonstrate the ability to identify the key performance indicators based on target-actual deviation of the project activities and propose the corrective measures to manage project deviations.
	<p><b>2.3 Explain the realization phase</b></p>	<b>2.2.8 Project approval</b>	Describes the goals and tasks of project control.	Discussion: the students discuss the key metrics of the productive project teamwork.
<b>2.3.1 Project control</b>		Describes the methods of information recording about the actual project state, target-actual deviation.	Discussion: the students discuss and analyse the project outcomes examples and impact measurable statements.	
		<b>2.3.2 Recording actual state</b>	Describes the corrective measures to manage project deviations.	



