

**BASIC INFORMATION:**

Organizational unit	01.07.100.	Faculty of Business Economics
Abbreviation	<b>FPE-CMM</b>	
Chair		Department of Marketing and Management
Subject/module		<b>Technological Management</b>

**SUBJECT TYPE:**

Functional area	<b>Core</b>
Level of abstraction	<b>Medium</b>
Subject type - obligation	<b>Mandatory</b>

**COURSE REGISTRATION:**

Scientific field	<b>5.0.0</b>	<b>Social Sciences</b>
Scientific field	<b>5.2.0</b>	<b>Economy and business</b>
Narrow scientific field	<b>5.2.17.</b>	<b>Management</b>

**COURSE DESCRIPTION:**

Educational and professional goals:	The focus of the course is on key concepts, models and methods that enable the manager to effectively manage the development and use of technologies. The goal is to develop awareness of the scope and complexity of phenomena, issues and problems related to the economy and the management of technology and technological innovation. Within the course, the focus will be on micro issues, but the discussion will expand to macro issues of technology management by studying how industries and firms are transformed by new technologies, how new industries are formed and what factors affect innovation performance. In other words, a systems perspective will be used to develop insights into the conditions under which particular structural arrangements and systems are likely to facilitate technological development.
Competences/educational outcomes:	Educational outcomes for the Technology Management course include understanding technological processes, developing analytical skills for assessing technological needs and opportunities, acquiring management skills for managing technological projects, encouraging innovation and development of technological products, understanding the role of technology in strategic planning of organizations, developing leadership in the context of technological management, acquiring skills in the use of technological tools, developing communication skills for cooperation with different stakeholders, understanding ethical aspects in technological management, the ability to adapt to changes in technology and business environments, and developing a global perspective in technological management. These educational outcomes provide students with the foundation for a successful career in technology management.
Skills Mastered:	Students will master analytical skills for understanding technological processes with a focus on strategic thinking, leadership and communication skills, encouraged ethical thinking and preparation for work in a global business environment. In addition, students learn to use technological tools and adapt to changes, which makes them competitive in the labour market.
Course content:	<ol style="list-style-type: none"> <li>1. Theoretical and methodological aspects of the study of technological development</li> <li>2. Methodology measuring the degree and dynamics of technological development</li> <li>3. Analysis of technological development and technology transfer</li> <li>4. Modern strategies of technological management</li> </ol>

								5. Strategic planning process and technological management 6. New methods of choosing technological strategies 7. Product and technology life cycle 8. Modern innovations of technological development
<b>COURSE METRICS:</b>								
ECTS	Teaching activities (hour)					Individual work		EVERYTHING hours of work
	Contact classes	Exercises trainings	Seminar and stud. works	Pedagogical workshops	Professional and professional. practice	Individual. and group learning	Researchabl e. source	
<b>5</b>	30	30	18			68	4	<b>150</b>
<b>Teaching languages</b>		<b>Languages of the peoples of Bosnia and Herzegovina</b>						

### PREREQUISITES FOR ACCESS

Code	Name of the subject/module of knowledge	Grade	Description of conditions (additional)

### METHODOLOGY OF THE COURSE

During the processing of the case, the following are foreseen:

- 30 contact hours of interactive lectures;
- 30 hours of exercises in the field of technological management;
- 4 hours for resource research;
- 18 hours for making a seminar paper;

**Lectures according** to the established schedule with the use of modern presentation and demonstration tools and techniques with the application of an interactive method of working with students, which gives insight into their prior knowledge and specific experiences based on the issues covered, but also insight into the continuity of mastering the material.

The teaching methodology for the Technology Management course includes a combination of lectures, seminars, case studies, projects and workshops in order to provide students with a comprehensive understanding of the theoretical and practical aspects of this field. During lectures, students are introduced to key concepts and principles, while seminars and workshops are used for deeper understanding and critical thinking. Case studies and projects enable the application of learned knowledge to real-world situations, while regular assessment and feedback are used to monitor student progress. Guest lecturers and extracurricular activities further enrich the learning experience, while consultations with the professor provide additional support. Online resources also support independent study and research.

### EVALUATION OF STUDENT WORK

Ord. no.	Type of evaluation	partial/ final	optional / mandatory	Percentage participation
01	Participation in contact work - interaction at lectures	pre-exam obligation	mandatory	20%
02	Student's seminar/professional papers	pre-exam obligation	mandatory	20%
03	Exam activities - partial test (problem test, case study)	partial	mandatory	10%

04	Examination activities - final test	final	mandatory	50%
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### LITERATURE / SOURCES (listed in order of importance)

Author (Last Name, First Name)	Publication name	Publisher's headquarters	Publisher	year editions	Kind public*
a/ Basic literature					
Vladimir Stojanović	Technological management	Banja Luka	Pan-European University "APEIRON"	in 2008	A book
b/ Supplementary literature					
Baroš Željko,	management,	Banja Luka,	Faculty of Business Economics,	in 2005	book
Thompson Strickland,	strategic management,	Zagreb,	MATE doo,	in 2005	A book
Dhillon BS,	Engineering and technology management tools and applications,	UK,	Artech House,	in 2002	A book
Thomas Misa,	Modernity and Technology,	USA,	myth press,	in 2003	book
c/ Other sources - magazines,					
Author - Surname, First name (if the source is an article)	Name of the journal	Publisher's headquarters	Publisher	year editions	Kind magazine
c/ Other sources - Internet (WEB) sources					
Site name	Site address	Title of work/hyperlink		Read	
	Journal of Technology Management & Innovation, <a href="https://www.jotmi.org/index.php/GT">https://www.jotmi.org/index.php/GT</a>				
	International Journal of Technology Management (IJTM), <a href="https://www.inderscience.com/jhome.php?jcode=ijtm">https://www.inderscience.com/jhome.php?jcode=ijtm</a>				
	Journal of Engineering and Technology Management - Elsevier, <a href="https://www.journals.elsevier.com/journal-of-engineering-and-technology-management">https://www.journals.elsevier.com/journal-of-engineering-and-technology-management</a>				
(*)Type of publication (book, script, compendium, multimedia)					