



Меѓународен Универзитет Визион - International Vision University  
Universiteti Ndërkombëtar Vizion - Uluslararası Vizyon Üniversitesi

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### DERS İZLENESİ (SYLLABUS)

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
STEEL CONSTRUCTIONS	3031	6	180	6

Prerequisite(s)	None
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Course Language	Turkish
Course Type	Elective
Course Level	First Cycle
Course Lecturer	
Course Assistants	
Classroom	
Extra Curricular Office Hours and Location	

Course Objectives	To provide the knowledge of steel behaviour as a structural material and advantages/disadvantages. To teach the design and calculation of steel connections and connection members/design. To provide knowledge for design of beams subjected to tension and/or bending. To provide knowledge for design of steel elements subjected to compression. To teach the arrangement of steel trusses and design rules. To teach the multi-storey steel buildings arrangement and their calculations.
Course Learning Outcomes	<ul style="list-style-type: none"><li>• Achieves the knowledge on the behaviour of steel material.</li><li>• Has the knowledge about steel connection methods and ability to design connection members.</li><li>• Can solve the design and control problems of steel members subjected to tension.</li><li>• Will be able to design steel trusses and joint details.</li><li>• Has the knowledge of basic design rules of structural steel members subjected to bending.</li><li>• Can solve the design and control problems of steel members subjected to compression.</li><li>• Has the knowledge on multi-story steel structures design.</li></ul>
Course Contents	Design of steel structures, material properties of steel, connections, tension members, compression members, bending members, dimensioning and arrangement of steel trusses, multistorey steel buildings arrangement principles and examples.

## WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Introduction, Steel Material Behavior, Advantages and Disadvantages	Related Chapters of Course Sources
2	Connection Types of Steel Members, Welded and Bolted Connection Design	Related Chapters of Course Sources
3	Problem Session 1- Welded and Bolted Connection Design	Related Chapters of Course Sources
4	Design of Tension Members 3 Problem Session 2- Tension Members	Related Chapters of Course Sources
5	Design of Compression Members	Related Chapters of Course Sources
6	Design of Compression Members	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Problem Session 2- Compression Members	Related Chapters of Course Sources
9	Design of Bending Members	Related Chapters of Course Sources
10	Introduction to Steel Truss Systems and Arrangement Principles, Joint Design of Truss 6 Members	Related Chapters of Course Sources
11	Problem Session 3- Introduction to Steel Truss Systems and Arrangement Principles, Joint Design of Truss 6 Members	Related Chapters of Course Sources
12	Multi-Storey Steel Structures, Arrangement Principles and Examples, Frame Types	Related Chapters of Course Sources
13	Multi-Storey Steel Structures, Arrangement Principles and Examples, Frame Types	Related Chapters of Course Sources
14	General Application	Related Chapters of Course Sources
15	Final Exam	Related Chapters of Course Sources

**ECTS / WORKLOAD TABLE**

Presentation / Seminar			
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Midterm Exam	1	12	12
Final examination	1	14	14
Total Work Load			
<b>ECTS</b>	<b>6</b>		

**GENERAL PRINCIPLE RELATED WITH COURSE**

Dear students,

You need to be included in the flow, please follow the course of learning and using that to achieve our success you deserve, you need to practice every day on topics that are covered by the course. It takes practice reading basic and auxiliary literature that is strictly recommended. You should visit classes course I need to make an effort to visit all the professors' lectures. Your activity on the session will be assessed by your professors and the Battle active participant in the discussions that will take place during the time. Students visiting lectures for all at the end if an additional 15 points.

**SOURCES**

<b>COMPULSORY LITERATURE</b>		
<b>No</b>	<b>Name of the book</b>	<b>Author's Name, Publishing house, Publication Year</b>
<b>1</b>	Çelik Yapılar - Sanayi Yapıları	Cemal EYYUBOV, Birsen Yayınevi,2014
<b>2</b>	Structural Steel Design (5th edition)	<u>Jack C. McCormac</u> , <u>Stephen F. Csernak</u> , Prenticce Hall,2012
<b>3</b>		

<b>ADDITIONAL LITERATURE</b>		
<b>No</b>	<b>Name of the book</b>	<b>Author's Name, Publishing house, Publication Year</b>
<b>1</b>	Çelik Yapılar	Özden Çağlayan, Erdoğan Uzgider, Filiz Piroğlu, Hilmi Deren, Çağlayan Kitabevi,2000
<b>2</b>	Steel Design	William T. Segui, Cengage Learning,2011
<b>3</b>		

## EVALUATION SYSTEM

Underlying the Assessment Studies	NUMBER	PERCENTAGE OF GRADE
Attendance/Participation	14	% 15
Project / Event	1	% 15
Mid-Term Exam	1	% 35
Final Exam	1	% 35
<b>TOTAL</b>	<b>14</b>	<b>%100</b>

## ETHICAL CODE OF THE UNIVERSITY

In case students are cheating on exams or preparation the same, it is not making reference to the source to be used in studies, as for example in assignments, projects and presentation (plagiarism), in accordance with legislations by Ministry of Education and Science of the Republic of Macedonia and International Vision University, apply relevant disciplinary rules. International Vision University students are expected never attempts in this kind of behavior.