COURSE IDENTIFICATION FORM

Course Code and Name: IM5059 Advanced Building Technologies	Department of : Civil Engineering / Department / Civil Engineering Master's Degree Program With Thesis

Semester	Theoretic Hour	Practice Hour	Total Hour	Credits	ECTS	Education Language	Type: Compulsory Elective
Fall	3	0	3	3	5	Turkish	Elective

Prerequisite (s)		
Instructor	Assoc. Prof. Dr.Selim CEMALGİL	**Mail : scemalgil@munzur.edu.tr** **Web :**
Course Assistant		**Mail :** **Web :**
Groups / Classes		
Course Aim	To gain the ability to provide and organize information on the elements that make up a building, the structure, the load-bearing system in the building, construction and construction systems, infrastructure, structure-soil relationship, user-environment-building system interaction and to transform this information into design and application.	
Course Goals	• Advanced construction technologies • Industrial production approaches • Structure-ground interaction • Building geometry and earthquake behavior • Carrier systems and elements • walls • stairs • roofs • Finishing operations • Evaluation of a building as a whole	
Course Learning Outs and Proficiencies	1.To develop and deepen their knowledge at the level of expertise in a field of civil engineering, based on undergraduate qualifications 2.To understand the interaction between disciplines related to the field 3. To be able to use theoretical and practical knowledge at the level of expertise gained in the field 4.To be able to create new knowledge by integrating knowledge in the field with knowledge from different disciplines; To be able to solve problems that require expertise using scientific research methods,	

	5. Being able to independently construct a problem in the field, develop a solution method, solve it, evaluate the results and apply it when necessary. 6. To be able to develop new strategic approaches and produce solutions by taking responsibility in unforeseen complex situations that will be encountered in the applications in the field. 7. To be able to critically evaluate information related to the field, to direct learning and to carry out advanced studies independently. 8. To be able to systematically convey current developments in the field and one's own work to groups within and outside the field, in written, verbal and visual formats. 9. To be able to examine social relations and the norms that guide these relations from a critical perspective, and to take action to improve them and change them when necessary. 10. Being able to communicate verbally and in writing in at least one foreign language 11. To be able to use information and communication technologies at an advanced level along with computer software at the level required in the field. 12. To be able to develop strategies, policies and implementation plans on issues related to the field and to evaluate the results obtained within the framework of quality processes. 13. To be able to teach and supervise social, scientific and ethical values in the stages of collecting, interpreting and announcing data related to the field. 14. To be able to apply the knowledge and problem-solving skills they have absorbed in their field in interdisciplinary studies.
Course Basic and Auxiliary Contexts	Mindham, C. N., Roof Construction and loft Conversion, Blackwell Scientific Publications, London, 1994. •Osbourn, D., Intruduction To Building, Mitchell, London, 1991. •Arslan, M., BUILDING Material Information-Construction principles-Cost Analyzes, A.U. Institute of Science, Real Estate Development Department, ANKARA, 2011. •Banz, H., Building Construction Details Practical Drawings, Von Nostrand Reinhold Cmpany, Newyork, 1979. •Araslan, M., Yapı Teknolojileri-1, Seçkin Yayınevi, ANKARA 2012 . •Araslan, M., Construction Technologies-2, Seçkin Publishing House, ANKARA 2012. .
Methods of Give a Lecture	Face to Face Lecture, Question and answer, demonstration,

Assessment Criteria		**If Available, to Sign (x)**	**General Average Percentage (%) Rate**
	1. Quiz	**X**	**50**
	2. Quiz		
	3. Quiz		
	4. Quiz		
	5. Quiz		
	Oral Examination		
	Practice Examination (Laboratory, Project etc.)		
	Final Exam	**X**	**50**

Semester Course Plan

Week	Subjects
1	Advanced building production technologies
2	Industrial production systems
3	Structure-ground interaction
4	Building geometry and earthquake behavior
5	Building geometry and earthquake behavior
6	Carrier systems
7	Fundamentals
8	Midterm exam
9	Vertical load-bearing elements
10	Horizontal carrier elements
11	Walls
12	Stairs
13	Roofs
14	Finishing operations