Modern Methods

BSc

Modern Architectural and Engineering Methods
(Korszerű mérnöki módszerek)

course in SS   **code**

BASIC INFORMATIONS

LECTURER	**Lecturer András HORKAI**	
TOPIC	In the course, students will be able to get acquainted with modern architectural engineering technologies (laser scanner survey, point clouds, BIM) with innovative methods, insight into the application of the latest IT and data collection tools; and in geospatial data processing related to architectural design.	
LECTURE (WEEKLY)	1 x 2 hours (90 minutes)	4 credits
CONSULTATION (WEEKLY)	-	
EXAM / TESTS / TASK	0 / 1 / 0	

GOAL OF THE SEMESTER:
During the semester, students will learn about modern - innovative architectural methodologies during lectures. The aim of the course is to get students acquainted with technologies that help us better explore our built and natural environment.

OUTLINE FOR THE SEMESTER

WEEK	LECTURE	CONSULTATION	DEADLINE
1	Introduction		
2	Opportunities for Obtaining Information		
3	Basics of BIM		
4	BIM uses		
5	BIM processes, roles and responsibilities Classification systems Information and graphical details of the model: LoD, LoG, LoIN		
6	BIM in practise: case studies, software usage I. (ArchiCAD)		
7	BIM in practise: case studies, software usage II. (ArchiCAD)		
8	Remote Sensing, 3D Pointclouds		
9	Pointcloud production I.: On-site survey with photogrammetry		
10	Pointcloud production II.: Processing of the pointcloud		
11	Basic of Geographical Information Systems (GIS)		
12	GIS in practice		
13	Test		
14	Repeated test		

EXAM / TESTS / TASK

	DESCRIPTION	TO HAND IN	SCORE
TEST	The purpose of the exam is to control the acquisition of general knowledge, in which it is typically necessary to answer short, expansive questions. During the semester 1 test is written, at the end of the semester. The test with a minimum score of 60% is considered to be successful. The test can be replaced at one time by repeaed test.		100 points
TOTAL			**100 points (min. 61 points)**

EVALUATION

0-60 points (60%)	61-70 points (61-70%)	71-80 points (71-80%)	81-90 points (81-90%)	91-100 points (91-100%)
1- FAILED	**2 - SUFFICIENT**	**3 - SATISFACTORY**	**4 - GOOD**	**5 - EXCELENT**