

Course Name	
PRINCIPLES OF GEOGRAPHIC INFORMATION SYSTEMS	
Course Code	CE 512
Department	Civil Engineering
Course Instructor	Dr.Orhan ERCAN
Telephone	+90312 480 65 26
Office Number	
Hours / Semester	Lecture:31 hrs Field Work / Laboratory: 9 hrs
Learning Outcomes	<p>Introduction-maps and spatial information, computer assisted mapping, the components of a geographical information systems, future direction and trends in GIS; definition of a map, data organization in the computer; files and data acces; database structure; the major components of geographic information sytems, including raster and vector data structures, moduls for data input, verification, storage and output; data quality, errors; methods of spatial interpolation; choosing a geographical information system.</p> <p>The course is supported with a computer-lab activities. We are going to use of ESRI product especially, ARCVIEW 8.3. as a software for the practical applications. The lab activities are designed to build upon theoretical and practical knowledge gained in all aspects of the course. As a result, students should become confident users of ESRI GIS softwares.</p>
Course Content	Introduction to GIS, data models, attribute, types of spatial data entry and data preparation, spatial data manipulation, spatial data visualization, data quality and metadata.
Type of course	Must
Course level	Graduate
Year of study	
Semester	Spring
Course Credit (ECTS)	3 credits
Course Length	1 semester
Pre-requisite/s	None
Coursework	
Main Teaching Methods	Both theoratical and application oriented. Industrial trips will be organized.
Assessment Modes and Weights	Grading is based on Class Participation 10%, Lab and project 30%, Midterm I 15%, Midterm II 15%, Final 30%. Closed-book examinations are usually given both in the midterm and finals.
Bibliography	Printed notes is available.