

Course Code	ULP - 04 - 043
Name of the course in English	Photogrammetry
Name of the course in Turkish	Fotogrametri
Language of the course	English
Level of Course	(x) Bachelor's / Undergraduate () Master () Doctorate
Lecturer	Asst. Prof. Dr. Özgün AKÇAY
ECTS Credits	5
COMU Credits	3
Description	This course relates the principles of precise measurement and proper data reduction through measurements of photographs followed by calculations to determine spatial information. After completing this course, the student should be familiar with methods commonly used in photogrammetric practice as well as their theoretical bases. The culmination of this course is an independent final project in which students will demonstrate their ability to apply new skills to a real-world situation of personal or professional interest.

Course Code	ULP - 04 - 044
Name of the course in English	Remote Sensing
Name of the course in Turkish	Uzaktan Algılama
Language of the course	English
Level of Course	(x) Bachelor's / Undergraduate () Master () Doctorate

Lecturer	Asst. Prof. Dr. Özgün AKÇAY
ECTS Credits	5
COMU Credits	3
Description	Students will develop a strong understanding of the tools and techniques used to display, process, and analyze remotely sensed data. Upon completion of the lecture, students will be able to develop analytical workflows to derive products and extract information from remotely sensed data for a broad range of applications. The culmination of this course is an independent final project in which students will demonstrate their ability to apply new skills to a real-world situation of personal or professional interest.

Course Code	ULP - 04 - 045
Name of the course in English	Spatial Databases
Name of the course in Turkish	Mekansal Veri Tabanları
Language of the course	English
Level of Course	(X) Bachelor's / Undergraduate () Master () Doctorate
Lecturer	Assist. Prof. Dr. Mehmet Ali YUCEL
ECTS Credits	5
COMU Credits	3

Description	Geographic data and geographical data sources, Concept and Architecture of Database Systems, Database Models and Data Modelling, Spatial Data and Spatial Database Systems, Spatial Database Systems Data Models, Spatial database design. Spatial Data Standards and Metadata, Spatial Data Sharing.
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Course Code	ULP – 04 - 046
Name of the course in English	Cartography
Name of the course in Turkish	Kartografya
Language of the course	English
Level of Course	(X) Bachelor's / Undergraduate () Master () Doctorate
Lecturer	Assist. Prof. Dr. Mehmet Ali YUCEL
ECTS Credits	5
COMU Credits	3
Description	Definition and History of Cartography, Definition of Map, Classification of Maps, Map Scale, Graticule, Grid, Neat Lines, Orthodrome, Loxodrome, Projection Surfaces and Aspects, Classification of Projection Methods, Classes of Map Projections, Azimuthal Projections, Conical Projections, Cylindrical Projections, Gauss-Krüger Projection, UTM.

Course Code	ULP – 04 - 047
Name of the course in English	GPS and GNSS Applications
Name of the course in Turkish	GPS ve GNSS Uygulamaları
Language of the course	English
Level of Course	(X) Bachelor's / Undergraduate () Master () Doctorate
Lecturer	Assist. Prof. Dr. Ramazan Cuneyt ERENOGLU
ECTS Credits	5
COMU Credits	3
Description	This course aims to introduce coordinate system definition and realization concentrating on geometric definitions, to analyze of GPS observables in form of carrier phase, to give pseudorange and phase measurements, to perform tropospheric and ionospheric delay estimation, to process static and kinematic GPS data, to use RTK/GNSS and CORS services.

Course Code	ULP – 04 - 048
Name of the course in English	Geostatistics
Name of the course in Turkish	Jeoistatistik
Language of the course	English
Level of Course	(X) Bachelor's / Undergraduate () Master () Doctorate
Lecturer	Assist. Prof. Dr. Ramazan Cuneyt ERENOGLU
ECTS Credits	5
COMU Credits	3

Description	<p>Geostatistics is a collection of mathematical tools, widely used in every branch of geosciences. It is used to understand the spatial correlation of data, and interpolate where data is missing. This course will introduce students to the core theoretical knowledge of geostatistics. Hands-on case studies will provide an understanding of its applications and highlight the necessity of translating geo-knowledge into a mathematical/numerical model. Tools such as basic statistics, variography and estimation methods will be covered during the course.</p>
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