Syllabus

Basic data of the subject	
Academic unit:	**Faculty of Engineering and Informatics**
Title of the subject:	**Research Methods**
Level:	**Master**
Course Status:	**Core**
Year of studies:	**I**
Number of hours per week:	**4**
Value of Credits - ECTS:	**6**
Time / location:	
Course lecturer:	**Prof.Dr. Agron Bajraktari**
Contact details:	
Course Description	*Concepts, definitions, theories and patterns. The search process. Formulation of the research problem. Types of Search. Literature analysis and ethics research. Sample, size and selection. Methods for primary data collection of secondary data. Qualitative research. Methods of data collection: Quantitative research (surveys, experiments), mixed methods. Use of questionnaires, their design and management. Examining relationships; differences and trends used statistics analysis and interpretation of data: Correlation analysis, regression, analysis of quarrel. The model focuses on the structure of academic writing, writing, referencing and literary techniques that help in the preparation of theses and master's thesis.*
Objectives of the course:	The objective of this module is to equip students with knowledge and skills with the application in the workplace and to equip students with knowledge of scientific research to help in the preparation of a research project. It also guides students how to organize a research or study, also, as well as the reality of doing a search, highlighting the difficulties that are encountered more frequently.
Expected learning outcomes:	*Upon successful completion of this subject, student will be able to:* • recognize the conceptual foundations of research (concepts, definitions, theories and models), methodology and research strategy. • know and understand the different kinds of data and their analysis, sampling, survey and design of research instruments (structured questionnaires, semi-structured, case studies, etc.) • select the appropriate method of research and hypotheses testing. • know the application of statistical and probability methods for analysis and interpretation of data and gain knowledge in academic writing.
Contribution to the student load (which must correspond with learning outcomes)	

Activity	Hour	Day/Week	In total
Lectures with lab tutorials	4	15	60
Internship			
Contacts with teacher / consultations	2	4	8
Field exercises			
Midterm, seminars and projects.	20		20
Homework			
Self-learning time student (at the library or at home)	3	15	45
Final preparation for the exam	15		15
Time spent on evaluation (tests, quiz and final exam)	1		1
Projects and presentations.	1		1
Total			**150**

Teaching methodology:	*Lectures combined with case studies*
Assessment methods:	Assignment 70 % Final exam 30%
Literature	
Basic Literature:	1. Matthews, B. dhe Ross, L., (2010), Metodat Hulumtimit: Udhëzues praktik për shkencat sociale dhe humane.Qendra për Arsim Demokratik: Tiranë
Additional Literature:	2. Elmazi, L., Hasani, B. (2009). Metodat e kërkimit
The ratio of theory and practice	*60% theory with numerical exercises and 40% laboratory work.*

Designed learning plan	
Week:	**Lectures and exercises to be held**
Week one:	*Research methods: Concepts, definitions, theories and models.*
Week two:	*The process of research.*
Week three:	*Formulation of research problem.*
Week four:	*Formulation of research problem.*
Week five:	*Types of Search.*
Week six:	*Analysis of literature and research ethics.*
Week seven:	*Sample, its size and selection.*
Week eight:	*Methods for collecting primary data secondary data.*
Week nine:	*Qualitative research.*
Week ten:	*Methods of data collection: quantitative research (surveys, experiments), mixed methods.*
Week eleven:	*The use of questionnaires, their design and management.*
Week twelve:	*Examination of relations.*
Week thirteen:	*Differences and trends using statistics analysis and interpretation of data: the correlation analysis, regression, analysis of variance.*
Week fourteen:	*Differences and trends using statistics analysis and interpretation of data: the correlation analysis, regression, analysis of variance.*

Week fifteen:	*Academic Writing. Scientific paper (proposal of the master's theses).*

Academic policies and rules of conduct

Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.