COURSE INFORMATON					
Course Title	*Code*	*Semester*	*L+P Hour*	*Credits*	*ECTS*
PH.D. THESIS	**ESYE700**		**0+0**	**NC**	**150**

Prerequisites	

Language of Instruction	English
Course Level	Ph.D.
Course Type	Compulsory
Course Coordinator	
Instructors	
Assistants	
Goals	The goal of Ph.D. thesis is to ensure that the student is transformed into a professional researcher and can later take on independent, long-term research commitments.
Content	Each Ph.D. thesis research is unique and has its own merits.

Course Learning Outcomes	**Program Learning Outcomes**	**Teaching Methods**	**Assessment Methods**
Ability to do detailed literature survey related to thesis topic, and reach knowledge in depth	1,2,3	2	A
Ability to properly collect, evaluate and asses the required data for the research topic	3,4,5	2	A
Ability to make experiments/observations to support the study and present the results using scientific language	5,6,7,9	2	A
Ability to defend the studies before the peers and convened jury	10	2	A
Ability to contribute to the existing scientific knowledge in the specific area of research topic	7,8	2	A
Awareness of ethical values	5	2	A

Teaching Methods:	1: Lecture, 2: Paper discussion, 3: Lab, 4: Case-study
Assessment Methods:	A: Testing, B:Paper Summary, C: Homework, D: Project

COURSE CONTENT		
Week	**Topics**	**Study Materials**
1-104+	Research for the Ph.D. Thesis+ Publications+	All research material including books, papers, patents

RECOMMENDED SOURCES	
Textbook	
Additional Resources	

MATERIAL SHARING	
Documents	
Assignments	
Exams	

ASSESSMENT		
IN-TERM STUDIES	**NUMBER**	**PERCENTAGE**
Mid-terms		
Assignment		
Lab Work		
Term Project		
Total		**100**
Contribution o Final Examination to Overall Grade		
Contribution of In-Term Studies to Overall Grade		
Total		**100**

COURSE CATEGORY	Expertise

COURSE'S CONTRIBUTION TO PROGRAM		
No	Program Learning Outcomes	Contribution

		1	2	3	4	5
1	Ability to understand and apply natural sciences, mathematics and engineering sciences in advanced level.					X
2	Ability to possess wide and deep knowledge in the field of Industrial and Systems Engineering including the most recent advances.					X
3	Ability to possess advanced level of required skill, techniques and methods to conduct research by using and evaluating up-to-date information.					X
4	Ability to model, design and develop solutions, under realistic constraints, a system, a process or a product by generating innovative and original ideas.					X
5	Ability to transfers advancement in scientific, technical and cultural developments to the society with the ethical responsibility and scientific objectivity.					X
6	Ability to perceive, design and applies an original research process independently: manages this process successfully.					X
7	Ability to execute a comprehensive study that brings innovation to the science and technology or develops technological product/process or adapts an already known method to a new field.					X
8	Ability to contribute to the development of science and technology literature by publishing research results in respectable scientific journals.					X
9	Ability to analyze, synthesize and evaluate critically the ideas and developments in the field of specialization.					X
10	Ability to communicate effectively in written, orally and visually with peers and wide scientific and social communities by using a foreign language at a level of European Language Portfolio C1 General Level.					X

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Excluding the exam weeks: 12x Total course hours)			
Hours for off-the-classroom study (Pre-study, practice)			
Homework			
Ph.D. Thesis research and thesis writing			3750
Final oral exam			3
Total Work Load			3753
Total Work Load / 25(h)			150.1
ECTS Credit of the Course			**150**