OBJECT ORIENTED PROGRAMMING

1	Course Title:	OBJECT ORIENTED PROGRAMMING
2	Course Code:	END2238
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	4
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	None
12	Language:	English
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. ERDAL EMEL
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	erdal@uludag.edu.tr Tel: 0224 294 2080 Endüstri Mühendisliği Bölüm, Mühendislik Mimarlık Fakültesi Uludağ Üniversitesi, Görükle, Bursa
17	Website:	http://www20.uludag.edu.tr/~erdal/
18	Objective of the Course:	To provide students with the information needed to understand the fundamentals of programming with Visual Basic and to present them with the information required to exercise the higher-level concepts of object-oriented programming methodology and design for bussiness applications.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

	1	To learn the characteristics that make a programming language object-oriented
	2	To be able to define software requirement specifications
	3	To be able to design use case and class diagrams using UML
	4	To be able to design sequence, colloboration and activity diagrams and user interfaces
	5	To be able to design a software by UML tools
	6	To be able to code programs in Visual Basic .Net environment
	7	To be able to create classes and instances in VB.Net
	8	To be able to use event based programming
	9	To be able to use collections, arrays, lists, queues
	10	To be able to write codes in VB.Net for forms applications

21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Overview of Object-Oriented Programming	

2	Designing OOP Solutions: Identifying the Class Structure	
3	Designing OOP Solutions: Modeling theObject Interaction	
4	Designing OOP Solutions: A Case Study	
5	Introducing Visual Basic	
6	Introducing the NET Framework	
7	Creating Classes	
8	Creating Class Hierarchies	
9	Implementing Object Collaboration; Working with Collections	
10	Working with Collections; Implementing the Business Logic	
11	Developing Windows Applications	
12		
13		
14		

22	Textbooks, References and/or Other Materials:	1. Beginning Object-Oriented Programming with VB 2005 From Novice to Professional, Daniel R. Clark, APress, 2005. 2. Object Oriented Systems Analysis and Design, Noushin Ashrafi, Hessam Ashrafi, Prentice Hall, 2009. 3. Data Structures and Algorithms Using Visual Basic.Net, Steve Saunders, O'Reilly, 2006 6. Objecteering's UML Modeler (www.objecteering.com)
23	Assessment	

Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	2.00	28.00
Practicals/Labs		0	0.00	0.00
Self-study and preperation		12	1.00	12.00
Homeworks		2	10.00	20.00
Projects		0	0.00	0.00
Midterm Exam	1	10.00		
Field Studies		0	0.00	0.00
Midterm exams	1	1	10.00	10.00
Home work-project	2	25.00		
Others		1	10.00	10.00
Final Exam	1			
Final Exams	1	1	10.00	10.00
Total	5	100.00		
Total Work Load				100.00
Contribution of Term (Year) Learning Activities to Success Grade				3.00
Total work load/ 30 hr				3.00
ECTS Credit of the Course				3.00

Total	100.00
Measurement and Evaluation Techniques Used in the Course	

24	**ECTS / WORK LOAD TABLE**

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0
ÖK2	0	3	0	5	0	0	3	0	0	0	0	4	0	0	0	0

ÖK3	0	0	0	5	0	0	3	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	5	5	0	3	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	5	5	0	3	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**