COURSE DESCRIPTION FORM	
Course Code and Title	CE116 TECHNICAL DRAWING FOR CIVIL ENGINEERING
Semester	2
Catalog description	Introductionto Technical Drawing (defition, instruments, importance in theindustry), ComputerAided Design (CAD); Introductionto ACAD 2016 , Geometric Objects Drawingwith ACAD 2016, LineTypeandPropertiesUsed in Technical Drawing, Definition of Projection, ProjectionMethods, ISO E. Method, OrthographicView, OrthographicViewDrawingwith ACAD 2016, Rules of DrawingHiddenLines , SampleDrawingwith ACAD 2016, AxonometricProjection, SectionViews(definition, type), Rules of Sectioning, Hatching, Rules of Dimensioning, SampleDrawing in CivilEngineeringwith ACAD 2016.
Required reading	Thomas E French, Charles J. Vierck, Robert J. Foster, "EngineeringDrawingandGraphicTechnology", McGrawHill.
Recommendedreading	Ali Pancarcı, M. Emin Öcal, " Yapı Teknik Resmi Cilt I-II", Birsen Yayınevi.
ECTS	4
Prerequisites and co-requisites	No prerequisite.Required attendance to lectures is at least 70% of total term hours.
Compulsory/Elective	Technical compulsory course
Language of instruction	English
Aim of course	Drawingandunderstanding of 2D and 3D objects Obtainingtheabilitytounderstandanddesign in 3D objects
Learning outcomes of the course unit	Drawingandunderstanding of 2D and 3D objects Obtainingtheabilitytounderstandanddesign in 3D objects Understanding, interpretationandexaminationskills of civilengineeringprojectsanddrawings
Mode of delivery	The mode of delivery of this course is face to face with usage of computers in the laboratory.
Course content	1. Week: Introductionto Technical Drawing (defition, instruments, importance in theindustry), ComputerAided Design (CAD); Introductionto ACAD 2016 2. Week: Geometric Objects Drawingwith ACAD 2016 3. Week: Geometric Objects Drawingwith ACAD 2016 4. Week: LineTypeandPropertiesUsed in Technical Drawing 5. Week: Definition of Projection, ProjectionMethods, ISO E. Method 6. Week: OrthographicView, OrthographicViewDrawingwith ACAD 2016. 7. Week: Rules of DrawingHiddenLines , SampleDrawingwith ACAD 2016 8. Week: Rules of DrawingHiddenLines , SampleDrawingwith ACAD 2016 and Midterm 9. Week: AxonometricProjection, 10. Week: SectionViews(definition, type), Rules of Sectioning, Hatching, Rules of Dimensioning 11. Week: SampleDrawing in CivilEngineeringwith ACAD 2016 12. Week: SampleDrawing in CivilEngineeringwith ACAD 2016 13. Week: SampleDrawing in CivilEngineeringwith ACAD 2016 14. Week: SampleDrawing in CivilEngineeringwith ACAD

	2016 15. Hafta: SampleDrawing in CivilEngineeringwith ACAD 2016
Planned learning activities and teaching methods	2 hours of theoretical lectures per week(2+2) 2 hours of practical lessons per week Web search and library use Report preparation Midterm exam and required works Final exam and required works

Assessment methods and criteria

	Quantity	Percentage (%)
Mid-terms	1	60
Assignment	-	
Exercises	-	
Projects	-	
Practice	-	
Quiz	-	
Contribution of In-term Studies to Overall Grade %	-	60
Contribution of Final Examination to Overall Grade (%)	-	40
Attendance		

Workload

Efficiency	Total Week Count	Weekly Duration (in hour)	Total Workload in Semester
Theoretical Study Hours of Course Per Week	14	2	28
Practicing Hours of Course Per Week	14	2	28
Reading	14	0	0
Searching in Internet and Library	14	0	0
Designing and Applying Materials	14	1	14
Preparing Reports	14	0	0
Preparing Presentation	14	0	0
Presentation	14	0	0
Mid-Term and Studying for Mid-Term	1	8	8
Final and Studying for Final	1	15	15
Other	0	0	0
Total Workload:			93
Total Workload / 25:			3.72
ECTS:			4

Course's contribution to program

No	Program Learning Outcomes	1	2	3	4	5
1	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.				X	
2	Ability to identify, formulate, and solve complex civil engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.	X				
3	Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.	X				
4	Ability to devise, select, and use modern techniques and tools needed for analyzing					X

	and solving complex problems encountered in civil engineering practice; ability to employ information technologies and to use at least one computer programming language effectively.					
5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex civil engineering problems or discipline specific research questions.	X				
6	Ability to work efficiently in intra-disciplinary and multi-disciplinary teams.				X	
7	Ability to work individually.				X	
8	Ability to communicate effectively in Turkish, both orally and in writing; ability to write effective reports and comprehend written reports.		X			
9	Knowledge of English of B1 level according to Common European Framework of Reference.		X			
10	Prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.					
11	Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.		X			
12	Consciousness to behave according to ethical principles and professional and ethical responsibility.			X		
13	Knowledge on standards used in civil engineering practice.				X	
14	Knowledge about business life practices such as project management, risk management, and change management.			X		
15	Awareness in entrepreneurship, innovation; knowledge about sustainable development.					
16	Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering.		X			
17	Awareness of the legal consequences of engineering solutions.					

Name of lecturer(s) and contact information	Assoc. Prof. Dr. NihatEroğlu (enihat@gazi.edu.tr), Dr. Nalan Kaya (nbulut@gazi.edu.tr)