

1. Course Description

COURSE DESCRIPTION FORM	
Course Code and Title	CHE324 ENVIRONMENTAL IMPACT ASSESSMENT
Course Semester	6
Catalog Description (Content) of the Course	An overview of the EIA definition, development and features of EIA legislation in the world and Turkey; Planning and management of EIA studies; Identification of the affected environment and the indicators used in this definition; prediction and assesment of impacts on air, water, soil environment; prediction and assesment of impacts on noise environment; prediction and assesment of impacts on on the biological environment; prediction and assesment of visual impacts; prediction and assesment of impacts on the cultural and socioeconomic environment; Evaluation of project alternatives. Public Participation; Preperation of written documentation; Monitoring and control
Main Textbook	• Environmental Impact Assessment, Larry. W. Canter, Mc.GrawHill Inc., Second Edition, 1996 • ÇED Eğitimi, Türkiye Çevre Vakfı. 1994 • Çevresel Etki Değerlendirmesi, Orhan Uslu, Türkiye Çevre Vakfı Yayını, 1996 • Metap ÇED Training Manual, Manchester University, 1999.
Supporting Textbooks	• ÇED Eğitimi, Türkiye Çevre Vakfı. 1994 • Çevresel Etki Değerlendirmesi, Orhan Uslu, Türkiye Çevre Vakfı Yayını, 1996 • Metap ÇED Training Manual, Manchester University, 1999. • http://cm.ksu.edu.tr/depo/duyuru_belge/%C3%87EDK%C4%B0TAP_1604071646184227.pdf • IntroductiontoEnvironmentalImpactAssessment, John Glasson, RikiTherivel, Andrew Chadwick, RoutledgeTaylor&FrancisGroup, Third Edition, 2005 • EnvironmentalImpactAssessment, A Guide to Best Professional Practices Charles H. Eccleston, CRC PressTaylor&FrancisGroup, 2011
Course Credit (ECTS)	3
Prerequisites of the Course (Compulsory attendance should be indicated here.)	There is no prerequisite or co-requisite for this course. There is a 70% attendance requirement.
Type of the Course	Elective
Instruction Language of the Course	English
Object and Target of the Course	Ensure that graduates will be graduated as a Chemical Engineer in the competence to be active in the preparation, review and evaluation of the EIA reports within the EIA process to be carried out before the decision of the new investments
Learning Outcomes of the Course	1. Sufficient knowledge on environment and their own engineering branches; the ability to apply them on the preparation, assessment and review of EIA reports 2. The ability to identify, define, formulate and solve complex engineering problems; selecting and applying appropriate analysis and modeling methods for this purpose. 3. Ability to develop, select and use modern techniques and tools necessary for ÇED applications; the ability to use information technologies effectively 4. Ability to collect data, analyze and interpret the results, for the assesment of environmental problems. 5. The ability to work effectively within disciplinary teams. 6. Individual work skills. 7. The ability for communication effectively in Turkish both verbally and in writing; writing active reports and understanding written reports.

	8. Knowing the necessity of lifelong learning; access to knowledge, ability to follow developments in science and technology, and constant self-renewal. 9. Professional and ethical responsibility. 10. Information on sustainable development. 11. the effects of engineering practices, at the universal and societal dimensions, on the health, environment and safety; Information on the problems of the current century. 12. Awareness of the legal consequences of engineering solutions. 13. The ability to make effective presentations. 14. Information on the technical legislation used in EIA practices.		
Mode of Delivery			
Weekly Schedule of the Course	1 st Week: An overview of the EIA definition, development and features of EIA legislation in the world and Turkey 2nd Week: planning and management of EIA study 3rd Week: Identification of the affected environment and the indicators used in this definition 4. Week: ; prediction and assesment of impacts on air environment 5. Week: ; prediction and assesment of impacts on surface environment 6. Week: ; prediction and assesment of impacts on soil and groundwater environment 7. Week: prediction and assesment of impacts on noise environment 8. Week: prediction and assesment of impacts on on the biological environment 9. Week: prediction and assesment of visual impacts 10. Week: prediction and assesment of impacts on the cultural and socioeconomic environment , 11. Week: Evaluation of project alternatives 12. Week: Public Participation 13. Week: Preperation of written documentation 14. Week: Review and Evaluation, Monitoring and control.		
Educative Activities <i>(Credit will be determined based on the time given for these activities. Should be filled carefully.)</i>	Theoretical Study Hours of Course Per Week Reading Searching in Internet and Library Preparing Reports Preparing Presentation Presentation Mid-Term and Studying for Mid-Term Final and Studying for Final		
Assessment Criteria		Quantity	Total Contribution (%)
	Midterm	2	50
	Homework	2	10
	Assignment	0	0
	Projects	0	0
	Practice	0	0
	Quiz	0	0
	Contribution of In-term Studies to Overall Grade		60
	Contribution of Final Examination to Overall Grade		40
	Attendance		

Workload of the Course		Activity	Total Week: Count	Week:ly Duration (in hour)					Total Workload in Semester
		Theoretical Study Hours of Course Per Week	14	3					42
		Practicing Hours of Course Per Week							
		Reading							
		Searching in Internet and Library	2	3					6
		Designing and Applying Materials							
		Preparing Reports	2	3					6
		Preparing Presentation	2	3					6
		Presentation	1	2					2
		Mid-Term and Studying for Mid-Term	2	5					10
		Final and Studying for Final	1	3					3
		Other							
		Total work load							75
		Total work load/25							3
		ECTS of the course							3
Course's Contribution To Program		Number	Program 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 information in these areas to model and solve engineering problems.			X			
		2	Ability to identify, formulate, and solve complex 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	X					

			conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose. (Realistic constraints and conditions may include factors such as economic and environmental issues, sustainability, manufacturability, ethics, health, safety issues, and social and political issues, according to the nature of the design.)						
		4	Ability to devise, select, and use modern techniques and tools needed for engineering practice; ability to employ information technologies effectively.				X		
		5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating engineering problems.		X				
		6	Ability to work efficiently in intra-disciplinary teams.			X			
		7	Ability to work efficiently in multi-disciplinary teams		X				
		8	Ability to work individually.			X			
		9	Ability to communicate effectively in Turkish, both orally and in writing; ability to		X				

			write effective reports and comprehend written reports, make effective presentations						
	10		Prepare design and production reports, give and receive clear and intelligible instructions.	X					
	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		Awareness of professional and ethical responsibility.	X					
	13		Information about business life practices such as project management, risk management, and change management.						X
	14		Information about awareness of entrepreneurship, innovation, and sustainable development.						X
	15		Knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety.			X			
	16		Knowledge about awareness of the legal consequences of engineering solutions.		X				
	17		Knowledge on standards used in		X				

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	engineering practice.							
Name of Lecturer(s) and Contact Information	1. Name and surname of lecturer(s) E-mail : hcabbar@gazi.edu.tr							