

Dersin Tanımı					
Adı	Kodu	Yarıyıl	T+U Saat	Kredi	AKTS
YÖNEYLEM ARAŞTIRMASINDA ÖZEL KONULAR	IND4110793	Güz Dönemi	3+0	3	6
Ön Koşul Dersleri					
Önerilen Seçmeli Dersler					
Dersin Dili	İngilizce				
Dersin Seviyesi	Lisans				
Dersin Türü	Programa Bağlı Seçmeli				
Dersin Koordinatörü	Prof.Dr. Hakan TOZAN				
Dersi Verenler	Prof.Dr. Hakan TOZAN				
Dersin Yardımcıları					
Dersin Amacı	Special topics in OR selected to suit the research interests of the faculty. Individual or small group studies of special areas of OR which fit into students' programs of study and which may not be covered by other OR courses. 2019-2020 Fall semester Industrial Engineering Applications in Health Care Systems: Explores components of the healthcare system, existing problems in healthcare systems; application of industrial engineering tools in improving the healthcare system.				
Dersin İçeriği	Bu ders; INTRODUCTION TO HEALTH CARE (DELIVERY) SYSTEMS,INTRODUCTION TO INDUSTRIAL ENGINEERING IN HEALTH CARE DELIVERY SYSTEMS (Need for Industrial and Systems engineering tools in health care system modeling, design, and analysis),APPLICATIONS OF METHODS IMPROVEMENT AND WORK SIMPLIFICATION,APPLICATION OF STAFFING METHODOLOGIES,APPLICATION OF SCHEDULING METHODOLOGIES (Work Scheduling),APPLICATION OF SCHEDULING METHODOLOGIES (Personnel Scheduling),APPLICATION OF QUEUING AND SIMULATION METHODOLOGIES,APPLICATION OF QUEUING AND SIMULATION METHODOLOGIES,APPLICATION OF STATISTICAL METHODS,APPLICATION OF OPTIMIZATION MODELS,APPLICATION OF OPTIMIZATION MODELS,APPLICATION OF QUALITY IMPROVEMENT TOOLS,APPLICATION OF INFORMATION SYSTEMS/ DECISION SUPPORT TOOLS,APPLICATION OF OTHER INDUSTRIAL ENGINEERING TECHNIQUES,FUTURE TRENDS; konularını içermektedir.				
Dersin Öğrenme Çıktıları			Öğretim Yöntemleri	Ölçme Yöntemleri	
2019-2020 Fall semester Industrial Engineering Applications in Health Care Systems: Students should be able to:- model, solve and analyze healthcare system problems using optimization and/or simulation tools; explain the complex interactions that exist in healthcare systems.			1, 14, 22, 3, 8, 9	A, D, E, F	
Öğretim Yöntemleri	1: Anlatım, 14: Bireysel Çalışma, 22: probleme dayalı öğrenme, 3: Tartışma, 8: Grup Çalışması, 9: Benzetim				
Ölçme Yöntemleri	A: Yazılı sınav, D: Proje / Tasarım, E: Kısa Sınav, F: Performans Görevi				
Ders Akışı					
Sıra	Konular	Ön Hazırlık			
1	INTRODUCTION TO HEALTH CARE (DELIVERY) SYSTEMS				
2	INTRODUCTION TO INDUSTRIAL ENGINEERING IN HEALTH CARE DELIVERY SYSTEMS (Need for Industrial and Systems engineering tools in health care system modeling, design, and analysis)				
3	APPLICATIONS OF METHODS IMPROVEMENT AND WORK SIMPLIFICATION				
4	APPLICATION OF STAFFING METHODOLOGIES				
5	APPLICATION OF SCHEDULING METHODOLOGIES (Work Scheduling)				
6	APPLICATION OF SCHEDULING METHODOLOGIES (Personnel Scheduling)				
7	APPLICATION OF QUEUING AND SIMULATION METHODOLOGIES				
8	APPLICATION OF QUEUING AND SIMULATION METHODOLOGIES				
9	APPLICATION OF STATISTICAL METHODS				
9	APPLICATION OF OPTIMIZATION MODELS				
10	APPLICATION OF OPTIMIZATION MODELS				
11	APPLICATION OF QUALITY IMPROVEMENT TOOLS				
12	APPLICATION OF INFORMATION SYSTEMS/ DECISION SUPPORT TOOLS				
13	APPLICATION OF OTHER INDUSTRIAL ENGINEERING TECHNIQUES				
14	FUTURE TRENDS				
Kaynaklar					
Healthcare Systems Engineering, Paul M. Griffin, Harriet B. Nembhard, Christopher J. DeFlicht, Nathaniel D. Bastian, Hyojung Kang, David A. Munoz, Wiley, 2016. (ISBN: 978-1-118-97108-6)					