Course Syllabus

Code - Course Title	**SAY611 - Simulation**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. SİNAN AYDIN

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Work Placement	N/A

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Simulation Modeling	
Week - 2		Discrete event system simulation, spreadsheet examples	
Week - 3		random number generation and statistical tests for randomness	
Week - 4		Random variable generation techniques	
Week - 5		Queueing models	
Week - 6		Girdi verilerinin analizi ve modellenmesi	
Week - 7		Modelling with Arena	
Week - 8		Arena smart examples	
Week - 9		Arena smart examples	
Week - 10		Output analysis	
Week - 11		Output analysis	
Week - 12		Variance reduction methods	
Week - 13		Comparison and evaluation of alternative system designs	
Week - 14		Student simulation project presentations	

Learning Outcomes

#	Learning Outcome
1	Explain simulation processes in decision making
2	Describes the features of discrete event simulation
3	Establish simulation models of systems in complex problems for decision making.
4	Uses Arena simulation software at a basic level
5	List techniques for reducing variability in simulation

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.