Course Syllabus

Code - Course Title	**SAY506 - Nonlinear Programming**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ BİLAL SARAÇ

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	Linear programming
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Non-Linear Programming; Examples of Non-Linear programming	
Week - 2		Classifiying of Non-Linear programming problems, Convex and Concav Functions	
Week - 3		Unrestricted Optimization, Locally Optimal Necessary and Sufficient Conditions	
Week - 4		Approximate Solving Techniques on Unrestricted Optimization	
Week - 5		Restricted Optimization; Equal case of constraints Lagrange Multipliers method	
Week - 6		Restricted Optimization; less or equal case of constraints, Kuhn-Tucker conditions	
Week - 7		Quadratic programming Problem	
Week - 8		Examples of Quadratic programming problem and its solutions	
Week - 9		Convex Programming and its solving method	
Week - 10		Examples of Convex Programming problem and its solutions	
Week - 11		Examples of Convex Programming problem and its solutions	
Week - 12		Seperable Programming	
Week - 13		Approximate solving method of Restricted Optimization problems	
Week - 14		Non-linear programming software	

Learning Outcomes

#	Learning Outcome
1	Describe non-linear programming problems.

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.