## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
IND404	System Dynamics	8	3	0	0	3	4

Prerequisites	IND304
Admission Requirements	IND304

Language of Instruction	French	
Course Type	Elective	
Course Level	Bachelor Degree	
Objective	This course is designed to develop an understanding of complex systems. It aims to equip students with an advanced knowledge of causal mapping technique.	
Content	Definition of a system, Complex systems, The modeling process, Structure and behavior of dynamic systems, Causal links, Causal loop diagrams, Stocks and Flows, Dynamics of stocks and flows, Dynamics of simple structures, The dynamics of growth, Delays	
References	Sterman, J. D., "Business Dynamics: Systems Thinking and Modeling for a Complex World", Irwin McGrav Hill, Boston, MA, 2000.  Morecroft, J., "Strategic Modelling and Business Dynamics: A Feedback Systems Approach", John Wiley a Sons, England, 2007.  Erkut, H., "Analiz, Tasarım ve Uygulamalı Sistem Yönetimi", İrfan Yayıncılık, İstanbul, 2005.	

## **Theory Topics**

Week	Weekly Contents
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