

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
G362	Introduction to Multi-Criteria Decision Making	6	3	0	0	3	5

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Elective
Course Level	Bachelor Degree
Objective	The purpose of this course is to give an introduction to the concept of Multi-Criteria Decision Making (MCDM). Students will have information on the basic methods that structured the starting point of the domain as well as majorly used methods in the literature whilst examining their various application fields.
Content	<p>Week 1. MCDM – A General Overview, Basic Definitions, Normalization</p> <p>Week 2. Classification of MCDM Methods, Quantitative/Qualitative Data, Attribute Generation and Weighting</p> <p>Week 3. Attribute Weighting Quantification of Qualitative Data</p> <p>Week 4. Non Compensatory MCDM Methods</p> <p>Week 5. Compensatory MCDM Methods,</p> <p>Week 6. Distance Based Methods I</p> <p>Week 7. Distance Based Methods II</p> <p>Week 8. MIDTERM</p> <p>Week 9. Pairwise comparison based methods I</p> <p>Week 10. Pairwise comparison based methods II</p> <p>Week 11. Group Decision Making</p> <p>Social Choice Functions</p> <p>Week 12. Additional Methods</p> <p>Week 13. MCDM Applications</p> <p>Week 14. Project Presentations</p>
References	<p>K. Paul YOON, Ching-Lai HWANG, Multiple Attribute Decision Making – An Introduction, Sage Publications, California, USA, 1995.</p> <p>Ching-Lai HWANG, Ming-Jeng Lin, Group Decision Making under Multiple Criteria, Springer Verlag, New York, USA, 1987.</p> <p>Thomas L. Saaty, Müjgan S. Özdemir, A Dictionary of Decisions with Dependence and Feedback Based on the Analytic Network Process, RWS Publications, Pittsburgh, USA, 2005.</p> <p>Bahadır YILDIRIM, Emrah Önder (Editörler), İşletmeciler, Mühendisler ve Yöneticiler için Operasyonel, Yönetsel ve Stratejik Problemlerin Çözümünde Çok Kriterli Karar Verme Yöntemleri, 2. Baskı, DORA Basım Yayın, Bursa, Türkiye, 2015.</p>

Theory Topics

Week	Weekly Contents
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