

  
**AMOU UNIVERSITY**  
**“A Vehicle for Peace and Development”**  
**AMOU UNIVERSITY**



**FACULTY OF ENGINEERING**

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**  
**ACADEMIC YEAR 2015/ 2016**

**COURSE DESCRIPTION**

<b>CENG 410</b>	<b>Theory of Structures I</b>		
Contact Hours	3		
Pre-requisite	N/A		
Purpose/Aim	This course provides an introduction to the analysis of determinate and indeterminate structural systems common in Civil Engineering with software applications.		
Course Objective (Indicative Learning Outcomes)	<ul style="list-style-type: none"> <li>• Apply the methods of joints and sections to analyze statically determinate trusses.</li> <li>• Develop shear and moment diagrams of statically determinate beams, beam assemblages, and frames.</li> <li>• Develop influence lines.</li> <li>• Apply the elastic beam theory and the double integration, moment/area, Conjugate beam, and energy methods to analyze the deformation of beams, trusses, and frames.</li> </ul>		
Course Content			
Learning & Teaching Methodologies	Lectures, tutorials and computer laboratory exercises		
Instructional Materials/Equipment	Classroom with audio visual aids Computer laboratory		
Course Assessment	<b>Type</b>		<b>Weighting (%)</b>
	Final Examination		60
	Mid Term Examination		20
	Assignment		10
	Attendance		10
	Total		100
Recommended Reading	<b>Title</b>	<b>Author</b>	<b>Publisher</b>
Additional Reading			
Other Support Material	A variety of multimedia systems and electronic information resources as prescribed by the lecturer.		



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Various application manuals, URL search and journals.
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