


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

CENG 458	Fundamentals of Bridge Design		
Contact Hours	3		
Pre-requisite	N/A		
Purpose/Aim			
Course Objective (Indicative Learning Outcomes)	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Data collection, site selection and span determination for bridges. Types of bridges: Reinforced concrete (slab, girder, frame), arch, cable stayed and suspension. • Selection of bridge type. • Geometry of bridges (length, cross-section). • Bridge Loading. • AASHTO standard. • Design of Reinforced Concrete and Steel girder bridges. • Bearings and railings. • Culverts and low level water crossings. 		
Course Content			
Learning & Teaching Methodologies	Lectures, tutorials and computer laboratory exercises		
Instructional Materials/Equipment	Classroom with audio visual aids Computer laboratory		
Course Assessment	Type		Weighting (%)
	Final Examination		60
	Mid Term Examination		20
	Assignment		10
	Attendance		10
	Total		100
Recommended Reading	Title	Author	Publisher
Additional Reading			
Other Support Material	A variety of multimedia systems and electronic information resources as prescribed by the lecturer. Various application manuals, URL search and journals.		



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