


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

	Reinforced Concrete I		
Contact Hours			
Pre-requisite	N/A		
Purpose/Aim	This course provides an introduction to the use of structural concrete as used in structures and foundations.		
Course Objective (Indicative Learning Outcomes)	Students will be able to: <ul style="list-style-type: none"> • Analyze and design singly and doubly reinforced concrete beams under flexure, including regular (rectangular shaped) and T-beams. • Analyze and design structural concrete beams subjected to shear loading. • Conduct a service load analysis to control deflection and cracking of beams. • Analyze and design reinforced concrete columns and develop moment axial load interaction curves. Determine bond length, lap splice and detailing requirements for reinforced concrete members 		
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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