

NATIONALLY HARMONISED B.Sc. CHEMICAL ENGINEERING PROGRAM				
Course Code	ChEg3112			
Course Name	Mechanical Unit Operations laboratory			
Degree Program	B.Sc. in Chemical Engineering			
Module Name	ChEg3112			
Module Coordinator	N.N.			
Lecturer	N.N.			
Instructor's Contact Information	Office Phone Email Office hour			
ECTS	5			
Student Work Load	Lecture	Tutorial	Laboratory or Practice	Home study
Weekly basis			3	2
Semester basis(total)			48	32
Mode of delivery	Parallel (per semester)			
Course Objectives & Competences to be Acquired	<p>The course will introduce students with practical in mechanical unit operation</p> <p>Upon the completion of the courses:</p> <ul style="list-style-type: none"> Students will be able to make experimental setup to measure effect of different parameters on fluid flow, mechanical unit operation, fluid flow measurement and evaluate performance of equipment. 			
Course Description/Course Contents	<ol style="list-style-type: none"> Analysis and Operation of Processes and Apparatuses Granulometry, Mesh Analysis Size Reduction (Crushing, Grinding, Milling, Agglomeration Sedimentation Filtration Centrifugation Mixing, Rheology, Power consumption in Agitated Vessels. Analysis and Performance parameters of Fluidized beds Pneumatic transport 			
Pre-requisites	In parallel with Mechanical unit operation			
Semester	Year III, Semester I			

Status of Course	Compulsory
Teaching & Learning Methods	Laboratory practice
Assessment/Evaluation	Laboratory report.....70% Final exam.....30%
Course Policy	<p>Attendance: 100% laboratory attendance</p> <p>Assessments: students are supposed to handle all assessments on time.</p> <p>Cheating/plagiarism: it is strictly forbidden and any misconduct is accountable per the students' code of conduct.</p> <p>Also, please do not chew gum, eat, listen to recorders or CD players, wear sunglasses, or talk about personal problems. Please be sure to turn off pagers and cell phones before class and exam sessions</p>
Literature	<ul style="list-style-type: none"> • W.L. McCabe, J.C. Smith and P. Harriott: Unit operation of chemical engineering, 5th edition, 1993 • R.J. McDonough: Mixing for the process industries, 1992 • M. Coulson & J.T. Richardson: Chemical engineering, vol. 2, 4th edition, 1991 • Ullmann's Encyclopedia of chemical engineering, vol. 2, 5th edition, 1988 • Perry's Chemical Engineering Handbook • F.A. Holland: Fluid flow for chemical engineering, 1973
Approval Section	Module coordinator/module team