

Enquiry for Course Details

CHEM3142 Chemical process industries and analysis (6 credits)		Academic Year	2021																				
Offering Department	Chemistry	Quota	60																				
Course Co-ordinator	Prof G K Y Chan, Chemistry < hrcscky@hku.hk >																						
Teachers Involved	(Prof G K Y Chan, Chemistry) (Visiting Professor, Chemistry)																						
Course Objectives	To familiarize with typical chemical industries important in local and global economy. To understand the technology of chemicals manufacturing and chemical processes in general industry.																						
Course Contents & Topics	Process flow charts, units and conversions, materials and energy balances, unit operations. Selection of chemical processes to include variation in products, scale, and types of operation, e.g. for petrochemical industries, industrial gases, beverage processes, chloroalkaline manufacturing.																						
Course Learning Outcomes	On successful completion of this course, students should be able to:																						
	CLO 1	solve basic problems of energy and mass balances in chemical and environmental processes																					
	CLO 2	be familiarized with a few common chemical industries and chemical processes																					
	CLO 3	understand some general principles of industrial practice through plant visits																					
Pre-requisites (and Co-requisites and Impermissible combinations)	Pass in CHEM2241 or CHEM2341 or CHEM2441 or CHEM2442 or CHEM2541																						
Course Status with Related Major/Minor /Professional Core	2U000C00 Course not offered under any Major/Minor/Professional core 2021 Minor in Chemistry (Disciplinary Elective) 2020 Minor in Chemistry (Disciplinary Elective) 2019 Minor in Chemistry (Disciplinary Elective) 2018 Minor in Chemistry (Disciplinary Elective) 2017 Minor in Chemistry (Disciplinary Elective)																						
Course to PLO Mapping																							
Offer in 2021 - 2022	Y 2nd sem	Examination	May																				
Offer in 2022 - 2023	Y																						
Course Grade	A+ to F																						
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Course Type	Lecture with laboratory component course																						
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Required/recommended reading and online materials	Felder and Rousseau: Elementary Principles of Chemical Processes																						

Course Website	NIL
Additional Course Information	Laboratory courses are mandatory. Students must complete ALL experiments and laboratory reports to pass this course.