

BACHELOR OF SCIENCE PROGRAM IN APPLIED CHEMISTRY

Course Condition

GENERAL EDUCATION (30 credits )		BASIC SCIENCE & MATHEMATICS (29 credits )		REQUIRED CHEMISTRY COURSE (36 credits )		REQUIRED COURSE IN SPECIALIZED FIELDS		ELECTIVES (6 credits )		FREE ELECTIVES (6 credits )	
Course	Prerequisite	Course	Prerequisite	Course	Prerequisite	Course	Prerequisite	Course	Prerequisite	Course	Prerequisite
<b>SOCIAL SCIENCE (3)</b>		2301107 CALCULUS I (3)		2302104 CHEM HAZ MGT (3)		<b>INDUSTRIAL CHEM &amp; MGT (20 credits)</b>		2302190 CHEM MOD LIFE (3)			
		2301108 CALCULUS II (3)	PRER 2301107	2302203 ORG CHEM LAB (1)	PRER 2302103	2302351 QUAL ASSCE SYS (3)		2302309 PROF INTERN (s/u)			
		2301286 PROBABILITY & STATISTICS (3)	PRER 2301113 OR 2301107 OR 2301117	2302204 INORG CHEM (3)	PRER 2302102	2601120 FIN ACCTG (3)		2302389 INTM INORG CHEM (3)	PRER 2302105 OR 2302204		
<b>HUMANITIES (3)</b>		2302101 GEN CHEM I (3)		2302205 ANAL CHEM I (3)	PRER 2302102	2602171 BUS CPTS/ETHICS (3)		2302406 GREEN CHEMISTRY (3)	PRER 2302102		
		2302102 GEN CHEM II (3)	PRER 2302101 OR C.F.	2302206 ANAL CHEM II (3)	PRER 2302205 OR C.F.	2602313 MGT/ORGANIZATION (3)		2302407 PERFUME AND FLAVOUR (3)	PRER 2302272 OR C.F.		
		2302103 GEN CHEM LAB (1)		2302231 PHYS CHEM I (3)	PRER 2302112 OR 2302102 OR 2302105 OR C.F.	2605311 PRIN MKTG (3)		2302409 CHEM GEMS (3)	PRER 2302102		
		2302301 SEMINAR (1)		2302271 ORG CHEM I (3)	PRER 2302112 OR 2302102 OR C.F.	2900111 ECONOMICS I (3)		2308341 SCI COMM (3)			
		2302399 PROJECT PROPOSAL (1)		2302272 ORG CHEM II (3)	PRER 2302271 OR C.F.	3401250 BUSINESS LAW (2)		2601224 MNGL ACCTG (3)	PRER 2601120 OR 2601121		
<b>SCIENCE &amp; MATH (3)</b>		2302402 APP CHEM PROJ (2)		2302303 SPECT CHEM (2)	PRER 2302202 OR 2302272			2311132 NEW TECH MAT SCI (3)			
		2303109 GENERAL BIOLOGY (3)		2302305 PRAC CHEM (1)	PRER 2302103,2302205 OR C.F.	<b>MATERIAL CHEMISTRY (20 credits)</b>		2309426 GEOCHEM CYCLE OC (3)			
		2303110 GEN BIO LAB (1)		2302393 CHEM INFO TECH (2)		2302232 PHYS CHEM II (3)	PRER 2302231/C.F.	2309333 GLOB BIOGEOCHEM CY (3)			
		2304151 ESSENTIAL PHYSICS (3)		2302307 INTER SCI SOC PROJ (4)	CONCUR 2302399 OR C.F.	2302281 FUND MAT CHEM (3)		2602344 PROD OPER MGT (3)			
<b>INTERDISCIPLINARY (3)</b>		2304191 PHYSICS LAB FOR CHEM (1)		2302352 IND CHEM TECH (3)		2302302 INTEG CHEM LAB (2)	PRER 2302103	2800100 RHET/HUMAN COMM (3)			
		2302107 COMP APP CHEM (1)		2302404 CURR PROB APP CHEM (2)		2302334 SURF COLL CHEM (2)	PRER 2302232 or C.F.	2800380 BRAND VIS ID DSGN (3)			
						2302384 MACROMOL CHEM (3)	PRER 2302202 OR 2302272	2308462 FUND ENVI HEALTH (3)	PRER 2308351 OR C.F.		
<b>LANGUAGE (12)</b>						2302385 MAT ID (3)					
						2302380 INORG MATERIALS (2)	PRER 2302204 and 2302281 or C.F.				
						2302480 BIOPOLYMER (2)	PRER 2302272 or C.F.				
5503111 ENG COMM SCI I (3)											
5503122 ENG COMM SCI II (3)	PRER 5500181 or 5503111										
5503213 COM PRES SKIL (3)	PRER 5503122										
Elective : Non-native (3)											
						2302232 PHYS CHEM II (3)	PRER 2302231/C.F.				
						2302315 ENVI CHEM LAB (2)					
						2302316 ENVI ECON FOR SCIENTISTS (3)					
						2302442 ADV ANAL TECH (3)	PRER 2302244 or 2302206				
<b>General Education (Special Group) (6)</b>						2308351 ENVIRONMENTAL SCIENCE I (3)	SECOND YEAR STANDING				
						2308452 ENVIRONMENTAL SCIENCE II (3)	PRER 2308351 or C.F.				
						3404107 ENVIRONMENTAL LAW (3)					
								or required courses of other options and other courses approved by Department of Chemistry			

Remark: General Education (Special Group) = All courses of Chulalongkorn University General Education Center, which taught in English (International Study Program)