

B.S. CHEMICAL ENGINEERING* (Major in Pulp and Paper Technology)
(RGEF INCLUDED)

EFFECTIVE ACADEMIC YEAR 2011-2012

FIRST YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
CHEM 16	General Chemistry I	3	CHEM 17	General Chemistry II	3
CHEM 16.1	General Chemistry I Laboratory	2	CHEM 17.1	General Chemistry II Laboratory	2
PI10(SSP)	<i>The Life and Works of Jose Rizal</i>	3	ENG 2(AH)	<i>College Writing in English</i>	3
ENG 1(AH)	<i>College English</i>	3	PHYS 3	<i>General Physics I</i>	3
MATH 17	Algebra and Trigonometry	5	MATH 36	Mathematical Analysis I	5
GE(SSP)	<i>(Social Science and Philosophy)</i>	3	MCB 1	General Microbiology	3
PE 1	Foundations of Physical Fitness	(2)	PE 2	Sports	(2)
		19			19

SECOND YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
BOT 1	Introduction to Plant Science	3	ChE 31	Introduction to Chemical Engineering.	3
CHEM 32	Quantitative Inorganic Analysis	3	CHEM 111	Physical Chemistry I	3
CHEM 32.1	Quantitative Inorganic Analysis Laboratory	2	ENSC 10a	Engineering Graphics I	2
SPCM1(AH)	<i>Speech Communication</i>	3	ENSC 11	<i>Statics of Rigid Bodies</i>	3
MATH 37	Mathematical Analysis II	5	MATH 38	Mathematical Analysis III	3
PHYS 13	<i>General Physics II</i>	3	GE(SSP)	<i>(Social Science and Philosophy)</i>	3
PE 2	Sports	(2)	NASC5(MST)	<i>Environmental Biology</i>	3
NSIP 1*	First Year Basic Course	(3)	PE 2/3	Sports/Advanced Course	(2)
		19	NSIP 2*	First Year Basic Course	(3)
					20

THIRD YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ENSC 26	Computer Applications in Engineering	3	ChE 41	Chemical Process Industry	3
CHEM 40	Organic Chemistry	3	ChE 142	Chem. Engineering. Thermodynamics I	3
CHEM 40.1	Basic Organic Chemistry Laboratory	1	ChE 147	Applications of Fluid Mechanics in Chemical Engineering	3
ENSC 12	<i>Dynamics of Rigid Bodies</i>	3	ChE 149	Transport Phenomena	3
ENSC 21	Mathematical Methods in Engineering	3	CHEM 160	Introductory Biochemistry	3
CHEM 111.1	Physical Chemistry I Lab.	2	ChE 152	Separation Processes	3
CHEM 112	Physical Chemistry II	3	GE(AH)	<i>(Arts and Humanities)</i>	3
FPPS 111	Wood and Fiber Anatomy	3			
		21			21

SUMMER

GE(SSP)	<i>(Social Sciences and Philosophy)</i>	3
GE(MST)	<i>(Mathematics, Science & Technology)</i>	3
		6

FOURTH YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ChE 143	Chem. Engineering Thermodynamics II	3	ChE 156	Unit Operations Laboratory II	2
ChE 145	Chemical Reaction Engineering	3	STAT 1	Elementary Statistics	3
ChE 153	Transfer Operations I	3	ENSC 13	Strength of Materials	3
ChE 154	Transfer Operations II	3	GE(SSP)	<i>(Social Science and Philosophy)</i>	3
ChE 155	Unit Operations Lab I	2	GE(AH)	<i>(Arts and Humanities)</i>	3
EE 1	Basic Electrical Engineering	3	FPPS 132	Pulp and Paper Technology	3
FPPS 131	Wood Chemistry I	3	FPPS 132.1	Pulp and Paper Laboratory	2
		20			19

FIFTH YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ChE 32	Industrial Stoichiometry	3	PPT 193	Pulp & Paper Plant Design	3
GE(MST)	<i>(Mathematics, Sciences & Technology)</i>	3	PPT 199	Undergraduate Seminar in Pulp & Paper	1
ENG 10	Writing of Scientific Papers	3	ENSC 10b	Engineering Graphics II	2
PPT 170	Instrumentation and Process Control for the Pulp and Paper Industry	3	PPT 200**	Thesis or Practicum	6
ChE 192	Chemical Process Equipment Design	3	PPT 200a		
PPT 188	Environ. Tech. For Pulp and Paper Industry	3			12
ChE 185	Chemical Engineering Laws, Ethics & Contracts	2			
		20			

*- May be substituted with CS or Literacy course

** - May be taken as early as the summer before the fifth year

***The student should enroll a 3-unit GE course on Philippine studies in any domain (AH/SSP/MST).**