

B.S. CHEMICAL ENGINEERING* (General)
(RGEF INCLUDED)
 EFFECTIVE ACADEMIC YEAR 2011-2012

FIRST YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
<i>GE (SSP)</i>	<i>(Social Science and Philosophy)</i>	3	CHEM 17	General Chemistry II	3
CHEM 16	General Chemistry I	3	CHEM 17.1	General Chemistry II Laboratory	2
CHEM 16.1	General Chemistry I Laboratory	2	<i>ENG 2(AH)</i>	<i>College Writing in English</i>	3
<i>ENG 1(AH)</i>	<i>College English</i>	3	MATH 36	Mathematical Analysis I	5
MATH 17	Algebra and Trigonometry	5	PHYS 3	General Physics I	3
<i>PI 10(SSP)</i>	<i>The Life and Works of Jose Rizal</i>	3	MCB 1	General Microbiology	3
P.E. 1	Foundations of Physical Fitness	(2)	P.E. 2	Sports	(2)
		19			19

SECOND YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
CHEM 32	Quantitative Inorganic Analysis	3	ChE 31	Introduction to Chemical Engineering	3
CHEM 32.1	Quantitative Inorganic Analysis Laboratory	2	CHEM 111	Physical Chemistry I	3
CHEM 40	Basic Organic Chemistry	3	ENSC 11	Statics of Rigid Bodies	3
CHEM 40.1	Basic Organic Chemistry Laboratory	1	MATH 38	Mathematical Analysis III	3
MATH 37	Mathematics Analysis II	5	<i>GE (SSP)</i>	<i>(Social Sciences and Philosophy)</i>	3
PHYS 13	General Physics II	3	ENSC 10a	Engineering Graphics I	2
<i>SPCM1(AH)</i>	<i>Speech Communication</i>	3	<i>NASC 5(MST)</i>	<i>Environmental Biology</i>	3
P.E. 2	Sports	(2)	P.E. 2/3	Sports/Advanced Course	(2)
NSTP 1*	First Year Basic Course	(3)	NSTP 2*	First Year Basic Course	(3)
		21			19

THIRD YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ChE 32	Industrial Stoichiometry	3	ENSC 26	Computer Applications in Engineering	3
CHEM111.1	Physical Chemistry I Lab.	2	ChE 142	Chemical Engineering Thermodynamics I	3
CHEM 112	Physical Chemistry II	3	ChE 149	Transport Phenomena	3
ENSC 12	Dynamics of Rigid Bodies	3	ChE 147	Applications of Fluid Dynamics in Chemical Engineering	3
EE 1	Basic Electrical Engineering	3	<i>GE (AH)</i>	<i>(Arts and Humanities)</i>	3
ENSC 21	Mathematical Methods in Engineering	3	STAT 1	Elementary Statistics	3
CHEM 160	Introductory Biochemistry	3	ChE 152	Separation Processes	3
		20			21

FOURTH YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ChE 143	Chemical Engineering Thermodynamics II	3	ChE 41	Chemical Process Industries	3
ChE 153	Transfer Operations I	3	ChE 156	Unit Operations Laboratory II	2
ChE 145	Chemical Reaction Engineering	3	ChE 192	Chemical Process Equipment Design	3
ChE 154	Transfer Operations II	3	ChE 172	Intro. To Biochemical Engineering	3
ChE 155	Unit Operations Laboratory I	2	ENG 10	Writing of Scientific Paper	3
ENSC 10b	Engineering Graphics II	2	<i>GE (SSP)</i>	<i>(Social Science and Philosophy)</i>	3
ENSC 13	Strength of Materials	3	Cognate Course		3
		19			20

FIFTH YEAR

FIRST SEMESTER		UNIT	SECOND SEMESTER		UNIT
ChE 193	Plant Design	3	ChE 191**	Special Topics	3
ChE 180	Agro-Industrial Waste Management	3	ChE 199	Plant Inspection and Seminar	1
ChE 200**	Undergraduate Thesis	3	ChE 200***	Undergraduate Thesis	3
ChE 185	Chemical Engineering Laws, Ethics and Contracts	2	<i>GE</i>	<i>(Social Science and Philosophy)</i>	3
<i>GE (AH)</i>	<i>(Arts and Humanities)</i>	3	ChE 170	Instrumentation and Process Dynamics and Control	3
<i>GE (MST)</i>	<i>(Mathematics, Science & Technology)</i>	3	<i>GE (MST)</i>	<i>(Mathematics, Science & Technology)</i>	3
Cognate Course		3			
		20			16

TOTAL UNITS = 194

* May be substituted with CS or Literacy course

** - May be taken two or three times

*** - May be taken 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).**