

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)
			<u>19</u>				<u>19</u>

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)
			<u>21</u>				<u>19</u>

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
			<u>20</u>				<u>21</u>

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
			<u>19</u>				<u>20</u>

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				
			<u>20</u>				<u>16</u>

TOTAL UNITS = 194

* May be substituted with CS or Literacy course

** - May be taken two or three times

*** - 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).

FLOWCHART OF THE 2011-2012 BSChE CURRICULUM (General)

