B.S. CHEMICAL ENGINEEERING* (Major in Sugar Technology)
(RGEP INCLUDED)
EFFECTIVE ACADEMIC YEAR 2011-2012

FIRST YEAR

	FIRST SEMESTER	UNIT		SECOND SEMESTER	UNIT
GE	***(Social Science and Philosophy)***	3	SUTC 185	Sugar Laws and Economics	2
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
ENG 1(AH)	***College English***	3	*ENG 2(AH)*	***College Writing in English***	*3*
MATH 17	Algebra and Trigonometry	5	MATH 36	Mathematical Analysis I	5
PI 10	***The Life and Works of Jose Rizal***	3	*PHYS 3*	***General Physics I***	3
P.E. 1	Foundations of Physical Fitness	(2)	MCB 1	General Microbiology	3
		19	P.E. 2	Sports	(2)
					21

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	*GE*	*(Social Science and Philosophy)*	3
PHYS 13	*General Physics II*	3	ENSC 10a	Engineering Graphics I	2
SPCM1(AH)	***Speech Communication***	*3*	*NASC 5(MST)*	*Environmental Biology*	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	ChE 41	Chemical Process Industries	3
CHEM 111.1	Physical Chemistry I Lab.	2	ChE 142	Chemical Engineering Thermodynamics I	3
CHEM 112	Physical Chemistry II	3	ChE 149	Transport Phenomena	3
CHEM 160	Introductory Biochemistry	3	ChE 147	Applications of Fluid Dynamics in Chemical Engineering	3
EE 1	Basic Electrical Engineering	3	ENSC 13	Strength of Materials	3
ENSC 21	Mathematical Methods in Engineering	3	ChE 152	Separation Processes	3
ENSC 12	*Dynamics of Rigid Bodies*	3	ENSC 26	Computer Application in Engineering	3
		20			**21**

FOURTH YEAR

	FIRST SEMESTER	UNIT		SECOND SEMESTER	UNIT
ChE 143	Chemical Engineering Thermodynamics II	3	*GE*	***(Arts and Humanities)***	3
ChE 145	Chemical Reaction Engineering	3	STAT 1	Elementary Statistics	3
ChE 153	Transfer Operations I	3	*GE*	*(Mathematics, Science & Technology)*	3
ChE 154	Transfer Operations II	3	ChE 192	Chemical Process Equipment Design	3
SUTC 148	Sugar Analysis & Factory Operations Control	3	SUTC 154	Field & Factory Operations and Processes	5
GE	***(Arts and Humanities)***	3	SUTC 181	Waste Management in the Sugar Industry	3
GE	***(Social Science and Philosophy)***	3			**20**
		21			

SUMMER

SUTC 200** or	Thesis or	3
SUTC 200a	Practicum	4
		3 or 4

FIFTH YEAR

	FIRST SEMESTER	UNIT		SECOND SEMESTER	UNIT
ENG. 10	Writing of Scientific Paper	3	SUTC 193	Sugar Process Engineering and Plant Design	3
GE	*(Mathematics, Science & Technology)*	3	ENSC 10b	Engineering Graphics II	2
GE	***(Social Science and Philosophy)***	*3*	ChE 156	Unit Operations Laboratory II	2
SUTC 170	Instrumentation and Process Control Application to Sugar Industries	3	ChE 185	Chemical Engineering Laws, Ethics and Contracts	2
SUTC 171	Sugarcane By-Products Utilization and Sucrochemistry	3			**9**
ChE 155	Unit Operations Lab. I	2			
SUTC 200** or	Thesis or	3			
SUTC 200a	Practicum	2			
		19-20			

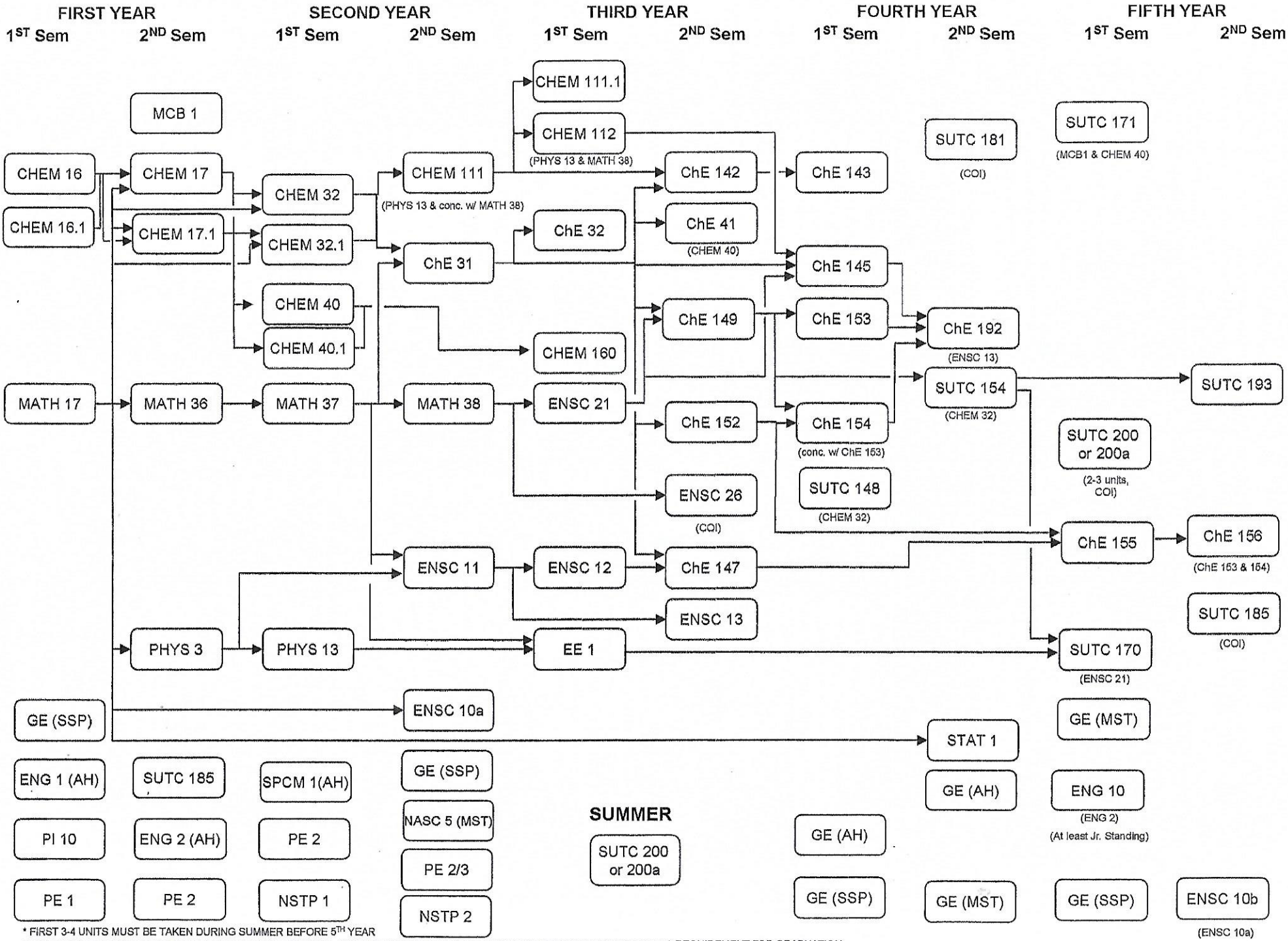
TOTAL UNITS = 194

* - May be substituted with CS or Literacy course

** - Maybe 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 - ST CURRICULUM



* FIRST 3-4 UNITS MUST BE TAKEN DURING SUMMER BEFORE 5TH YEAR

** ALL STUDENTS ARE REQUIRED TO UNDERGO THE NATIONAL SERVICE TRAINING PROGRAM (NSTP; 6 UNITS) FOR ONE YEAR AS A REQUIREMENT FOR GRADUATION