PROGRAM OF STUDY
BS CHEMICAL ENGINEERING - SUGAR TECHNOLOGY CURRICULUM

First Semester		Units	Second Semester		Units
		FIRST YEAR			
ChE 10	Introduction to Chem. Eng. Profession	1	CHEM 32	Quantitative Inorganic Analysis	3
CHEM 18	University Chemistry	3	CHEM 32.1	Quantitative Inorganic Analysis Laboratory	2
CHEM 18.1	University Chemistry Laboratory	2	CHEM 40	Basic Organic Chemistry	4
MATH 27	Analytical Geometry & Calculus II	3	CHEM 40.1	Basic Organic Chemistry Laboratory	1
PHYS 51	Elements of Physics	4	MATH 28	Analytical Geometry & Calculus III	3
PHYS 51.1	Elements of Physics Laboratory	1	GE	(Elective)	3
MCB 11	Biology and Applications of Microorganisms	3	ARTS 1	Critical Perspectives in the Arts	3
PI 10	The Life and Works of Jose Rizal	3	STS 1	Science, Technology and Society	3
HK 11	Wellness and Basic Injury Management	(2)	HK 12	Human Kinetics Activities	(2)
NSTP 1	National Service Training Program	(3)	NSTP 2	National Service Training Program	(3)
		20			**22**
		MIDYEAR			
ENSC 11	Statics of Rigid Bodies	3			
SUTC 148	Sugar Analysis & Factory Operations Control	3			
		6			
		SECOND YEAR			
ChE 30	Fundamentals of Chemical Engineering	4	ENSC 26	Computer Applications in Engineering	3
SUTC 185	Sugar Laws and Economics	2	ChE 185	Chemical Engineering Laws, Ethics, Specifications and Contracts	2
ENSC 12	Dynamics of Rigid Bodies	3	ENSC 10.1	Engineering Graphics Laboratory	2
EE 1	Basic Electrical Engineering	3	ENSC 21	Mathematical Methods in Engineering	3
CHEM 111	Physical Chemistry I	3	CHEM 111.1	Physical Chemistry I Laboratory	2
CHEM 160	Introductory Biochemistry	3	CHEM 112	Physical Chemistry II	3
KAS 1/HIST 1	Kasaysayan ng Pilipinas/Philippine History	3	GE	(Elective)	3
HK 12	Human Kinetics Activities	(2)	GE	(Elective)	3
			HK 13	Advanced Human Kinetics Activities	(2)
		21			**21**
		MIDYEAR			
ChE 32	Industrial Stoichiometry	3			
SUTC 181	Waste Management in the Sugar Industry	3			
		6			
		THIRD YEAR			
ChE 142	Chemical Engineering Thermodynamics I	3	ChE 143	Chemical Engineering Thermodynamics II	3
ChE 147	Application of Fluid Dynamics in Chem. Eng.	3	ChE 145	Chemical Reaction Engineering	3
ChE 149	Transport Phenomena	3	ChE 153	Transfer Operations I	3
ChE 152	Separation Processes	3	ChE 154	Transfer Operations II	3
COMM 10	Critical Perspectives in Communication	3	SUTC 154	Field & Factory Operations and Processes	5
ETHICS 1	Ethics and Moral Reasoning in Everyday Life	3	ENG 10	Writing of Scientific Papers	3
ENSC 13	Strength of Materials	3			
		21			**20**
		FOURTH YEAR			
ChE 157.1	Chem. Eng. Unit Operations Laboratory	2	ChE 198	Internship	3
ChE 192	Chemical Process Equipment Design	3	SUTC 200 or SUTC 200b or SUTC 200c	UndergraduateThesis or Innovationeering or Engineering Industry Research	3/6
SUTC 170	Instrumentation and Process Control Application to Sugar Industries	3			
SUTC 171	Sugarcane By-Products Utilization and Sucrochemistry	3			
SUTC 193	Sugar Process Engineering and Plant Design	3			
STAT 168	Response Surface Methodology	3			
SUTC 200 or SUTC 200b or SUTC 200c	UndergraduateThesis or Innovationeering or Engineering Industry Research	(3)			
		17-20			**6-9**

TOTAL UNITS: 163

BS Chemical Engineering - Major in Sugar Technology Flowchart