

**BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING**

**FIRST YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 10. Introduction to Chemical Engineering 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. Analytic Geometry and Calculus II	3	CHEM 40.1. Basic Organic Chemistry Laboratory	1		
PHYS 51. Elements of Physics	4	MATH 28. Analytic Geometry and Calculus III	3		
PHYS 51.1. Elements of Physics Laboratory	1	GE 1	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 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
NSTP 1. National Service Training Program	(3)	NSTP 2. National Service Training Program	(3)		
	20		22		

**SECOND YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 30. Fundamentals of Chemical Engineering	4	ENSC 26. Computer Applications in Engineering	3		
ENSC 10.1. Engineering Graphics Laboratory	2	ChE 32. Industrial Stoichiometry	3		
EE 1. Basic Electrical Engineering	3	ENSC 12. Dynamics of Rigid Bodies	3		
ENSC 11. Statics of Rigid Bodies	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 2	3		
HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
	21		20		

**THIRD YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 142. Chemical Engineering Thermodynamics I	3	ChE 143. Chemical Engineering Thermodynamics II	3	ChE 198. Internship	3
ChE 147. Application of Fluid Dynamics in Chemical Engineering	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		
ENSC 13. Strength of Materials	3	ChE 172. Introduction to Biochemical Engineering	3		
STAT 168. Response Surface Methodology	3	ChE 180. Agro-Industrial Waste Management	3		
COMM 10. Critical Perspectives in Communication	3	ENG 10. Writing of Scientific Papers	3		
	21		21		3

**FOURTH YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 157.1. Chemical Engineering Unit Operations Laboratory	2	ChE 170. Instrumentation and Process Dynamics and Control	3		
ChE 191. Special Topics	3	ChE 185. Chemical Engineering Laws, Ethics, Specifications and Contracts	2		
ChE 192. Chemical Process Equipment Design	3	ChE 193. Plant Design	3		
ChE 200/200b/200c. Undergraduate Thesis/Innovationeering/Engineering Industry Research	3	ChE 199. Plant Inspection and Seminar	1		
Cognate	3	ChE 200/200b/200c. Undergraduate Thesis/Innovationeering/Engineering Industry Research	3		
ETHICS 1. Ethics and Moral Reasoning in Everyday Life	3	Cognate	3		
GE	3				
	20		15		

**TOTAL UNITS**

**163**

**BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING**  
**Redesigned curriculum for remote learning from First Semester 2020-2021 to present**

**FIRST YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 10. Introduction to Chemical Engineering Profession	1	CHEM 18.1. University Chemistry Laboratory	2	STS 1. Science, Technology and Society	3
CHEM 18. University Chemistry	3	MCB 11. Biology and Applications of Microorganisms	3	GE 1	3
MATH 27. Analytic Geometry and Calculus II	3	ENSC 11. Statics of Rigid Bodies	3	ARTS 1. Critical Perspectives in the Arts	3
PHYS 51. Elements of Physics	4	MATH 28. Analytic Geometry and Calculus III	3		
PHYS 51.1. Elements of Physics Laboratory	1	HIST1/KAS1. Kasaysayan ng Pilipinas/Philippine History	3		
PI 10. The Life and Works of Jose Rizal	3	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
HK 11. Wellness and Basic Injury Management	(2)	NSTP 1. National Service Training Program	(3)		
	15		14		9

**SECOND YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 30. Fundamentals of Chemical Engineering	4	ENSC 26. Computer Applications in Engineering	3		
ENSC 10.1. Engineering Graphics Laboratory	2	ChE 32. Industrial Stoichiometry	3		
EE 1. Basic Electrical Engineering	3	ENSC 12. Dynamics of Rigid Bodies	3		
CHEM 32. Quantitative Inorganic Analysis	3	ENSC 21. Mathematical Methods in Engineering	3		
CHEM 32.1. Quantitative Inorganic Analysis Laboratory	2	CHEM 111. Physical Chemistry I	3		
CHEM 40. Basic Organic Chemistry	4	CHEM 160. Introductory Biochemistry	3		
CHEM 40.1. Basic Organic Chemistry Laboratory	1	GE 2	3		
HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
NSTP 2. National Service Training Program	(3)				
	19		21		

**THIRD YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 142. Chemical Engineering Thermodynamics I	3	ChE 143. Chemical Engineering Thermodynamics II	3	ChE 198. Internship	3
ChE 147. Application of Fluid Dynamics in Chemical Engineering	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		
CHEM 112. Physical Chemistry II	3	ENSC 13. Strength of Materials	3		
STAT 168. Response Surface Methodology	3	CHEM 111.1. Physical Chemistry I Laboratory	2		
COMM 10. Critical Perspectives in Communication	3	ENG 10. Writing of Scientific Papers	3		
	21		20		3

**FOURTH YEAR**

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ChE 157.1. Chemical Engineering Unit Operations Laboratory	2	ChE 170. Instrumentation and Process Dynamics and Control	3		
ChE 191. Special Topics	3	ChE 185. Chemical Engg Laws, Ethics, Specifications and Contracts	2		
ChE 192. Chemical Process Equipment Design	3	ChE 193. Plant Design	3		
ChE 200/200b/200c. Undergraduate Thesis/Innovationeering/Engineering Industry Research	3	ChE 199. Plant Inspection and Seminar	1		
Cognate	3	ChE 200/200b/200c. Undergraduate Thesis/Innovationeering/Engineering Industry Research	3		
ChE 172. Introduction to Biochemical Engineering	3	Cognate	3		
ChE 180. Agro-Industrial Waste Management	3	ETHICS 1. Ethics and Moral Reasoning in Everyday Life	3		
		GE	3		
	20		21		

**TOTAL UNITS**

**163**