The degrees which are administered by the Department of Chemical Engineering are the Bachelor of Chemical Engineering, the Master of Chemical Engineering, and the Doctor of Philosophy. The requirements for each of these degrees are stated in more detail in each directory.

Bachelor Degree

The exact courses required for the undergraduate degree are listed in the following table.

Course Timetable (for 2021 freshman)

1. A total credit hours required 131 credit hrs including （1）General Education Courses 28 credit hrs （2）Compulsory Courses 77 credit hrs （3）Departmental Elective Courses 20 credit hrs （4）Elective Courses 6 credit hrs								
2. Courses：	Freshman		Sophomore		Junior		Senior	
(1)General Education: 28 credit hrs	F	S	F	S	F	S	F	S
＊Fundation Education								
-Chinese & English language competrncy								
--chinese language knowledge and its application	2	2						
--English language skills	2	2						
-Information Literacy（at least one courses）								
-introductory courses in disciplines								
＊Liberal Education								
Dimension 1 Arts & aesthetics（at least one courses）								
Dimension 2 Energy,Environment,Ecology（at least one courses）								
Dimension 3 Humanity Life exploration（at least one courses）								
Dimension 4 Civic and Community engagement（at least one courses）								
Dimension 5 Economy and International trends（at least one courses）								
Dimension 6 Science & techology								
(2)Compulsory Course: Total 77credit hrs								
Calculus（6 credit hrs）	3	3						
General Physics（6 credit hrs）	3	3						
General Physics Laboratory（2 credit hrs ）	1	1						
General Chemistry（6 credit hrs）	3	3						
General Chemistry Laboratory（2 credit hrs）	1	1						
Introduction to Chemical Engineering（1 credit hr）	1							
Energy and Mass Balance（3 credit hrs）		3						
Engineering Mathematics（6 credit hrs）			3	3				
Organic Chemistry（6 credit hrs）			3	3				
Organic Chemistry Laboratory（2 credit hrs）			1	1				
Unit Operation and Transport Phenomenon（9 credit hrs）				3	3	3		

Physical Chemistry（6 credit hrs）				3	3			
Physical Chemistry Laboratory（2 credit hrs）				1	1			
Instrumental Analysis（3 credit hrs）					3			
Instrumental Analysis Laboratory（1 credit hr）						1		
Process Control（3 credit hrs）						3		
Chemical Thermodynamics（3 credit hrs）					3			
Chemical Engineering Laboratory（4 credit hrs）						2	2	
Chemical Reaction Engineering（3 credit hrs）						3		
Process Control & Undergraduate Seminar（3 credit hrs）							3	

(3)Departmental Elective Courses: Total 20 credit hrs		
＊Freshman（All courses are 3 credit hrs）		
Computer Programming Languages or Numerical Computation Methods（at least one courses）		
＊Sophomore（All courses are 3 credit hrs）		
Computer Programming Languages or Numerical Computation Methods（at least one courses）	Fundamental of Thermodynamics and Reaction Engineering	Physical Properties of Inorganic Materials
Materials Science or Biology（at least one courses）	Electric Circuits and Electronics	Fine chemicals
Engineering Mechanics	Applied Statistics	Biochemistry
Introduction to Chemical Process Safety		
＊Junior（Except 1 credit hr for ”Special topics (I)”，other courses are 3 credit hrs）		
Applied Mathematics for Chemical Engineering	Polymeric Materials and Processing	Introduction to Biotechnology
Introduction to Catalyst Chemistry	Introduction to Polymer Science	Introduction to Tissue Engineering
Industrial Electrochemistry	Introduction to Polymer Processing	Biomedical Materials
Special Topics (I)	Specialty Chemicals	Introduction to Bioseparation
Optical and electronic materials	Separation Process	Polymer Physics
＊Senior（Except 1 credit hr for ”Special topics (I)”、Undergraduate Seminar and Selected Literature Reading，other courses are 3 credit hrs）		
Special Topics (II)	Undergraduate Seminar and Selected Literature Reading(Required Courses)	Fermentation Processes Engineering
Forensic Material Identification	Powder Technology	Topics in Biomedical Science
Biotechnology	Statistical Thermodynamics	Nonlinear Dynamics
Biochemical Engineering(English-taught)	Polymer Dynamics	Advanced Forensic Material Identification
Industrial Catalysts	Advanced Transport Phenomena	Electronic Packaging

Anionic Polymerization		
(4)Elective Courses: Total 6 credit hrs		
1. General Education courses are taken more than 28 credit hours, the extra credits can not be used for Elective courses or total graduation credits. 2.The credits of Military Training and Nursing can not used for Elective courses or total graduation credits. 3.The credits of Teacher Education courses can be used for Elective courses or total graduation credits.		