

## Curriculum

### ☐ Undergraduate Program

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory Major Course	CH211	Physical Chemistry I	3:0:3(3)	Spring	
	CH213	Physical Chemistry II	3:0:3(3)	Fall	
	CH221	Organic Chemistry I	3:0:3(3)	Spring	
	CH223	Organic Chemistry II	3:0:3(3)	Fall	
	CH241	Inorganic Chemistry I	3:0:3(3)	Fall	
	CH252	Chemistry Major Lab I	0:6:2(3)	Fall	
	CH352	Chemistry Major Lab II	0:6:2(3)	Spring	
	CH353	Chemistry Major Lab III	0:6:2(3)	Fall	
	CH361	Introduction to Analytical Chemistry	3:0:3(3)	Fall	
Elective Major Course	CH242	Inorganic Chemistry II	3:0:3(3)	Spring	
	CH315	Physical Chemistry III	3:0:3(3)	Spring	
	CH325	Bioorganic Chemistry	3:0:3(3)	Spring	
	CH336	Physical Organic Chemistry	3:0:3(3)	Fall	
	CH381	Biochemistry I	3:0:3(3)	Spring	
	CH382	Biochemistry II	3:0:3(3)	Fall	
	CH416	Introduction to Molecular Spectroscopy	3:0:3(3)	Spring or Fall	**
	CH417	Chemical Reaction Dynamics	3:0:3(3)	Spring or Fall	**
	CH418	Computational Chemistry	3:0:3(3)	Spring or Fall	**
	CH419	Introduction to Solid-State Chemistry	3:0:3(3)	Spring or Fall	**
	CH437	Organic Structure Analysis	3:0:3(3)	Spring or Fall	**
	CH438	Organic Reactions and Synthesis	3:0:3(3)	Spring or Fall	**
	CH439	Introduction to Organometallic Chemistry	3:0:3(3)	Spring or Fall	**
	CH444	Inorganic Materials Chemistry	3:0:3(3)	Spring or Fall	
	CH450	Chemical Writing and presentation	3:0:3(3)	Spring or Fall	**
	CH451	Advanced Chemistry Lab.	0:6:2(3)	Spring, Fall	
	CH452	Introduction to Nanochemistry	3:0:3(3)	Spring or Fall	**
CH471	Polymer Chemistry	3:0:3(3)	Spring or Fall	**	
CH484	Introduction to Chemical Biology	3:0:3(3)	Spring or Fall	**	
Research	CH490	Graduation Research	0:6:3		
	CH491	Laboratory Rotation Program	0:3:1	Fall	
	CH492	Undergraduate Colloquium	1:0:1	Spring	
	CH495	Individual Study	0:6:1		

※ Note: \*\* stands for courses open to both undergraduate and graduate students

□ Graduate Program

Classification		Subject No.	Subject Name	Lecture:Lab.: Credit (Homework)	Semester	Remark
Mandatory General Course	Required	CC010	Special Lecture on Leadership	1:0:0	Fall	
		CC020	Ethics and Safety I	1AU	Spring/Fall	
	Choose 1	CC500	Scientific Writing	3:0:3	Spring/Fall	
		CC510	Introduction to Computer Application	2:3:3	Spring/Fall	
		CC511	Probability and Statistics	2:3:3	Spring/Fall	
		CC512	Introduction to Materials and Engineering	3:0:3	Spring/Fall	
		CC513	Engineering Economy and Cost Analysis	3:0:3	Fall	
		CC522	Introduction to Instruments	2:3:3	Fall	
		CC530	Entrepreneurship and Business Strategies	3:0:3	Fall	
		CC531	Patent Analysis and Invention Disclosure	3:0:3	Spring/Fall	
		CC532	Collaborative System Design and Engineering	4:0:4	Spring	
Elective Major Course	CH502	Quantum Chemistry I	3:0:3(3)	Spring	**	
	CH503	Statistical Thermodynamics I	3:0:3(3)	Fall	**	
	CH504	Advanced Physical Chemistry	3:0:3(3)	Fall		
	CH521	Advanced Organic Chemistry	3:0:3(3)	Spring		
	CH522	Organic Synthesis I	3:0:3(3)	Spring	**	
	CH523	Organic Synthesis II	3:0:3(3)	Fall		
	CH541	Advanced Inorganic Chemistry	3:0:3(3)	Spring	**	
	CH542	Organometallic Chemistry	3:0:3(3)	Fall	**	
	CH581	Advanced Biochemistry	3:0:3(3)	Spring		
CH582	Protein Chemistry	3:0:3(3)	Fall	**		
Elective Course	CH604	Quantum Chemistry II	3:0:3(3)	Spring or Fall		
	CH605	Statistical Thermodynamics II	3:0:3(3)	"		
	CH606	Chemical Reaction Dynamics	3:0:3(3)	"		
	CH607	Surface Chemistry	3:0:3(3)	"		
	CH609	Electrochemistry	3:0:3(3)	"		
	CH610	Structural Biochemistry	3:0:3(3)	"		
	CH626	Natural Products	3:0:3(3)	"		
	CH627	Heterocyclic Chemistry	3:0:3(3)	"		
	CH628	Organometallic Reactions	3:0:3(3)	"		
	CH632	Stereochemistry of Organic Chemistry	3:0:3(3)	"		
	CH644	Bioinorganic Chemistry	3:0:3(3)	"		
	CH645	Catalysis Chemistry	3:0:3(3)	"		
	CH646	Materials Chemistry	3:0:3(3)	"		
	CH671	Organic Chemistry of High Polymers	3:0:3(3)	"		
	CH672	Specialty Polymer Chemistry	3:0:3(3)	"		
	CH673	Polymer Physical Chemistry	3:0:3(3)	"		
	CH674	Organic Electronic Materials	3:0:3(3)	"		
	CH675	Introduction to Lithography	3:0:3(3)	"		
	CH711	Special Topics in Physical Chemistry I	3:0:3(3)	"		
	CH712	Special Topics in Physical Chemistry II	3:0:3(3)	"		
	CH713	Special Topics in Physical Chemistry III	3:0:3(3)	"		
CH733	Special Topics in Organic Chemistry I	3:0:3(3)	"			
CH734	Special Topics in Organic Chemistry II	3:0:3(3)	"			
CH735	Special Topics in Organic Chemistry III	3:0:3(3)	"			
CH746	Special Topics in Inorganic Chemistry I	3:0:3(3)	"			
CH747	Special Topics in Inorganic Chemistry II	3:0:3(3)	"			

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	CH773	Special Topics in Polymer Chemistry I	3:0:3(3)	"	
	CH774	Special Topics in Polymer Chemistry II	3:0:3(3)	"	
	CH782	Special Topics in Biochemistry I	3:0:3(3)	"	
	CH783	Special Topics in Biochemistry II	3:0:3(3)	"	
Research	CH960	Thesis / Dissertation Research (Master)			
	CH980	Thesis / Dissertation Research (Doctoral)			
	CH966	Seminar (Master)	1:0:1		
	CH986	Seminar (Doctoral)	1:0:1		

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