

Table of Curriculum (For undergraduate students admitted in 2015 or before)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory major courses	CH211	23.211	Physical Chemistry I	3:0:3(3)	Spring	
	CH213	23.213	Physical Chemistry II	3:0:3(3)	Fall	
	CH221	23.221	Organic Chemistry I	3:0:3(3)	Spring	
	CH223	23.223	Organic Chemistry II	3:0:3(3)	Fall	
	CH252	23.252	Chemistry Major Lab I	0:6:2(3)	Fall	
	CH263	23.263	Introduction to Analytical Chemistry	3:0:3(3)	Spring	
	CH344	23.344	Inorganic Chemistry I	3:0:3(3)	Spring	
	CH352	23.352	Chemistry Major Lab II	0:6:2(3)	Spring	
	CH353	23.353	Chemistry Major Lab III	0:6:2(3)	Fall	
Elective major course	CH315	23.315	Physical Chemistry III	3:0:3(3)	Spring	
	CH325	23.325	Bioorganic Chemistry	3:0:3(3)	Spring	
	CH336	23.336	Physical Organic Chemistry	3:0:3(3)	Fall	
	CH345	23.345	Inorganic Chemistry II	3:0:3(3)	Fall	
	CH381	23.381	Biochemistry I	3:0:3(3)	Spring	
	CH382	23.382	Biochemistry II	3:0:3(3)	Fall	
	CH416	23.416	Introduction to Molecular Spectroscopy	3:0:3(3)	Spring or Fall	◎
	CH417	23.417	Chemical Reaction Dynamics	3:0:3(3)	"	◎
	CH418	23.418	Computational Chemistry	2:3:3(3)	"	◎
	CH419	23.419	Introduction to Solid-State Chemistry	3:0:3(3)	"	◎
	CH437	23.437	Structure Determination and Comprehension of Organic Molecules	3:0:3(3)	"	◎
	CH438	23.438	Organic Reactions and Synthesis	3:0:3(3)	"	◎
	CH439	23.439	Introduction to Organometallic Chemistry	3:0:3(3)	"	◎
	CH444	23.444	Inorganic Reactions and Spectroscopy	3:0:3(3)	Fall	
	CH450	23.450	Chemical Writing and presentation	3:0:3(3)	Spring or Fall	◎
	CH451	23.451	Advanced Chemistry Lab.	0:6:2(3)	"	
	CH452	23.452	Introduction to Nanochemistry	3:0:3(3)	"	◎
	CH453	23.453	AI Chemistry	3:0:3(3)	Spring & Fall	◎
CH464	23.464	Electroanalytical Chemistry	3:0:3(3)	Fall	◎	
CH471	23.471	Introduction to Polymer Chemistry	3:0:3(3)	Spring or Fall	◎	
CH484	23.484	Introduction to Chemical Biology	3:0:3(3)	"	◎	
CH485	23.485	Special Topics in Modern Chemistry I	3:0:3(3)	"		
Research	CH490	23.490	Undergraduate Research	0:6:3		
	CH491	23.491	Laboratory Rotation Program	0:3:1	Spring or Fall	
	CH492	23.492	Undergraduate Colloquium	1:0:1	Spring	
	CH495	23.495	Individual Study	0:6:1		

※ ◎: Course mutually recognized by undergraduate and graduate programs

※ Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

Table of Curriculum (For undergraduate students admitted in 2016 or after)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory major courses	CH211	23.211	Physical Chemistry I	3:0:3(3)	Spring	
	CH213	23.213	Physical Chemistry II	3:0:3(3)	Fall	
	CH221	23.221	Organic Chemistry I	3:0:3(3)	Spring	
	CH223	23.223	Organic Chemistry II	3:0:3(3)	Fall	
	CH252	23.252	Chemistry Major Lab I	0:6:2(3)	Fall	
	CH263	23.263	Introduction to Analytical Chemistry	3:0:3(3)	Spring	
	CH344	23.344	Inorganic Chemistry I	3:0:3(3)	Spring	
	CH352	23.352	Chemistry Major Lab II	0:6:2(3)	Spring	
	CH353	23.353	Chemistry Major Lab III	0:6:2(3)	Fall	
Elective major course	CH315	23.315	Physical Chemistry III	3:0:3(3)	Spring	
	CH325	23.325	Bioorganic Chemistry	3:0:3(3)	Spring	
	CH336	23.336	Physical Organic Chemistry	3:0:3(3)	Fall	
	CH382	23.382	Biochemistry II	3:0:3(3)	Fall	
	CH416	23.416	Introduction to Molecular Spectroscopy	3:0:3(3)	Spring or Fall	◎
	CH417	23.417	Chemical Reaction Dynamics	3:0:3(3)	"	◎
	CH418	23.418	Computational Chemistry	2:3:3(3)	"	◎
	CH419	23.419	Introduction to Solid-State Chemistry	3:0:3(3)	"	◎
	CH437	23.437	Structure Determination and Comprehension of Organic Molecules	3:0:3(3)	"	◎
	CH438	23.438	Organic Reactions and Synthesis	3:0:3(3)	"	◎
	CH439	23.439	Introduction to Organometallic Chemistry	3:0:3(3)	"	◎
	CH444	23.444	Inorganic Reactions and Spectroscopy	3:0:3(3)	Fall	
	CH450	23.450	Chemical Writing and presentation	3:0:3(3)	Spring or Fall	◎
	CH451	23.451	Advanced Chemistry Lab.	0:6:2(3)	"	
	CH452	23.452	Introduction to Nanochemistry	3:0:3(3)	"	◎
	CH453	23.453	AI Chemistry	3:0:3(3)	Spring & Fall	◎
	CH464	23.464	Electroanalytical Chemistry	3:0:3(3)	Fall	◎
	CH471	23.471	Introduction to Polymer Chemistry	3:0:3(3)	Spring & Fall	◎
CH484	23.484	Introduction to Chemical Biology	3:0:3(3)	"	◎	
CH485	23.485	Special Topics in Modern Chemistry I	3:0:3(3)	"		
Advanced major	CH345	23.345	Inorganic Chemistry II	3:0:3(3)	Fall	
	CH381	23.381	Biochemistry I	3:0:3(3)	Spring	
Research	CH490	23.490	Undergraduate Research	0:6:3		
	CH491	23.491	Laboratory Rotation Program	0:3:1	Spring or Fall	
	CH492	23.492	Undergraduate Colloquium	1:0:1	Spring	
	CH495	23.495	Individual Study	0:6:1		

※ ◎: Course mutually recognized by undergraduate and graduate programs

※ Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

Table of Curriculum (Graduate Program)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Credit (Homework)	Semester	Remark
Elective	CH502	23.502	Quantum Chemistry I	3:0:3(3)	Spring	⊙
	CH503	23.503	Statistical Thermodynamics I	3:0:3(3)	Fall	⊙
	CH504	23.504	Advanced Physical Chemistry	3:0:3(3)	Fall	
	CH521	23.521	Advanced Organic Chemistry	3:0:3(3)	Spring	
	CH522	23.522	Organic Synthesis I	3:0:3(3)	Spring	⊙
	CH523	23.523	Organic Synthesis II	3:0:3(3)	Fall	
	CH541	23.541	Advanced Inorganic Chemistry	3:0:3(3)	Spring	⊙
	CH542	23.542	Organometallic Chemistry	3:0:3(3)	Fall	⊙
	CH581	23.581	Advanced Biochemistry	3:0:3(3)	Spring	
	CH582	23.582	Protein Chemistry	3:0:3(3)	Fall	⊙
	CH604	23.604	Quantum Chemistry II	3:0:3(3)	Spring or Fall	
	CH605	23.605	Statistical Thermodynamics II	3:0:3(3)	"	
	CH606	23.606	Chemical Reaction Dynamics	3:0:3(3)	"	
	CH607	23.607	Surface Chemistry	3:0:3(3)	"	
	CH609	23.609	Electrochemistry	3:0:3(3)	"	
	CH610	23.610	Structural Biochemistry	3:0:3(3)	"	
	CH626	23.626	Natural Products	3:0:3(3)	"	
	CH627	23.627	Heterocyclic Chemistry	3:0:3(3)	"	
	CH628	23.628	Organometallic Reactions	3:0:3(3)	"	
	CH632	23.632	Stereochemistry of Organic Chemistry	3:0:3(3)	"	
	CH644	23.644	Bioinorganic Chemistry	3:0:3(3)	"	
	CH645	23.645	Catalysis Chemistry	3:0:3(3)	"	
	CH646	23.646	Materials Chemistry	3:0:3(3)	"	
	CH661	23.661	Electrocatalysis	3:0:3(3)	"	
	CH671	23.671	Chemistry of Organic High Polymers	3:0:3(3)	"	
	CH672	23.672	Specialty Polymer Chemistry	3:0:3(3)	"	
	CH673	23.673	Polymer Physical Chemistry	3:0:3(3)	"	
	CH674	23.674	Organic Electronic Materials	3:0:3(3)	"	
	CH675	23.675	Introduction to Lithography	3:0:3(3)	"	
	CH683	23.683	Cell Biochemistry	3:0:3(3)	"	
	CH711	23.711	Special Topics in Physical Chemistry I	3:0:3(3)	"	
	CH712	23.712	Special Topics in Physical Chemistry II	3:0:3(3)	"	
	CH713	23.713	Special Topics in Physical Chemistry III	3:0:3(3)	"	
	CH733	23.733	Special Topics in Organic Chemistry I	3:0:3(3)	"	
	CH734	23.734	Special Topics in Organic Chemistry II	3:0:3(3)	"	
CH735	23.735	Special Topics in Organic Chemistry III	3:0:3(3)	"		

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Credit (Homework)	Semester	Remark
	CH746	23.746	Special Topics in Inorganic Chemistry I	3:0:3(3)	"	
	CH747	23.747	Special Topics in Inorganic Chemistry II	3:0:3(3)	"	
	CH773	23.773	Special Topics in Polymer Chemistry I	3:0:3(3)	"	
	CH774	23.774	Special Topics in Polymer Chemistry II	3:0:3(3)	"	
	CH782	23.782	Special Topics in Biochemistry I	3:0:3(3)	"	
	CH783	23.783	Special Topics in Biochemistry II	3:0:3(3)	"	
	CH881	23.881	Advanced Special Topic in Chemistry I	1:0:1(0)	Summer	
	CH882	23.882	Advanced Special Topic in Chemistry II	2:0:2(0)	Summer	
Research	CH960	23.960	Thesis / Dissertation Research (Master)			
	CH966	23.966	Seminar (Master)	1:0:1		
	CH980	23.980	Thesis / Dissertation Research (Doctoral)			
	CH986	23.986	Seminar (Doctoral)	1:0:1		
	CH990	23.990	Chemistry Education Training	0:3:1		

※ ©: Course mutually recognized by undergraduate and graduate programs

※ Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

Substitute Course List

Substitute courses in the department					
Category	Courses Currently offered		Courses not currently offered		
	Course No.	Course Title	Course No.	Course Title	Remark
Under-graduate	CH344	Inorganic Chemistry I	CH241	Inorganic Chemistry I	Change in Course Code
Under-graduate	CH345	Inorganic Chemistry II	CH242	Inorganic Chemistry II	Change in Course Code
Under-graduate	CH444	Inorganic Reactions and Spectroscopy	CH444	Inorganic Materials Chemistry	Change in Course Title
Under-graduate	CH263	Introduction to Analytical Chemistry	CH361	Introduction to Analytical Chemistry	Change in Course Code
Under-graduate	CH263	Introduction to Analytical Chemistry	CH261	Analytical Chemistry	Course Closed
Under-graduate	CH263	Introduction to Analytical Chemistry	CH463	Instrumental Analysis	Course Closed
Under-graduate	CH252	Chemistry Major Lab I	CH252	Chemistry Lab I	Change in Course Title
Under-graduate	CH252	Chemistry Major Lab I	CH351	Chemistry Lab II	Course Closed
Under-graduate	CH352	Chemistry Major Lab II	CH251	Chemistry Lab I	Course Closed
Under-graduate	CH352	Chemistry Major Lab II	CH352	Chemistry Lab II	Change in Course Title
Under-graduate	CH361	Introduction to Analytical Chemistry	CH463	Instrumental Analysis	Course Closed
Under-graduate	CH382	Biochemistry II	CH482	Biochemistry II	Change in Course Code
Under-graduate	CH241	Inorganic Chemistry I	CH342	Inorganic Chemistry II	Change in Course Code
Under-graduate	CH242	Inorganic Chemistry II	CH342	Inorganic Chemistry II	Change in Course Code
Under-graduate	CH416	Introduction to Molecular Spectroscopy	CH316	Molecular Spectroscopy	Course Closed

※ Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.