

Major requirements for Department of Chemistry

(For undergraduate students admitted in 2015 or before)

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 130 credits

■ **Elective Basic Courses:** at least 9 credits including at least two courses : CH103, CH104

 ※ Requirements for a double major: at least 3 credits including to CH103

 ※ Elective general course requirements are specified in the elective general course requirements by year of admission

■ **Major:** at least 42 credits

- **Mandatory Major Courses:** at least 24 credits

Physical Chemistry I, II, Organic Chemistry I, II, Inorganic Chemistry I, Introduction to Analytical Chemistry, Chemistry Lab. I, II, III

- **Elective Major Courses:** at least 18 credits

■ **Minor:** at least 21 credits

- at least 21 credits including 12 credits of mandatory major courses

■ **Double Major:**

- 40 credits including mandatory major courses including 40 credits of mandatory major courses

■ **Research Courses:** at least 3 credits

 ○ Please be sure to take 3 credit hours of graduation research.

 ※ Students having a double major are exempt.

 ○ Up to 2 credits of individual study can be included in the credits elective major course

 ○ Required LRP, Undergraduate Colloquium

□ **Transitional Measures**

- Students admitted in 2015 or before may choose to be governed by the completion requirements applicable to students admitted in 2016 and after if desired.

- CH251 Chemistry Lab I (3) → CH352 Chemistry Lab II (2) → CH352 Chemistry Major Lab II

(2)

- CH351 Chemistry Lab II (3) → CH252 Chemistry Lab I (2) → CH252 Chemistry Major Lab I (2)
- CH261 Analytical Chemistry (3) → CH361 Introduction to Analytical Chemistry (3) → CH263 Introduction to Analytical Chemistry (3)
- CH463 Instrumental Analysis (3) → CH361 Introduction to Analytical Chemistry (3) → CH263 Introduction to Analytical Chemistry (3)
- CH482 Biochemistry II (3) → CH382 Biochemistry II (3)
- CH341 Inorganic Chemistry I (3) → CH241 Inorganic Chemistry I (3) → CH344 Inorganic Chemistry I (3)
- CH342 Inorganic Chemistry II (3) → CH242 Inorganic Chemistry II (3) → CH345 Inorganic Chemistry II (3)
- CH316 Molecular Spectroscopy (3) → CH416 Introduction to Molecular Spectroscopy (3)
- Students admitted in 2007-2011 must take either CH353 or CH451 when they cannot fill total credits of mandatory major courses

Major requirements for Department of Chemistry

(For undergraduate students admitted in 2016 and after)

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 136 credits

※ Required to choose and complete one among Advanced Major, Double Major, Minor, and Individually Designed Major.

■ **Elective Basic Courses:** at least 9 credits including at least two courses : CH103, CH104

※ Requirements for a double major: at least 3 credits (including to CH103)

■ **Major:** at least 42 credits

- **Mandatory Major Courses:** at least 24 credits

Physical Chemistry I, II, Organic Chemistry I, II, Inorganic Chemistry I, Introduction to Analytical Chemistry, Chemistry Lab. I, II, III

- **Elective Major Courses:** at least 18 credits

■ **Advanced Major:** at least 12 credits

At least 12 credits including CH242(3), CH381(3)

■ **Individually Designed Major:** at least 12 credits

- Students must take 12 credits or more of major courses from more than two departments other than Department of Chemistry.

■ **Minor:** at least 21 credits

- at least 21 credits including 12 credits of mandatory major courses

※ No credits from the same course will be doubly counted to satisfy major and minor department requirements.

■ **Double Major:** at least 21 credits

- 40 credits including mandatory major courses

※ Up-to 6 credits can be doubly counted to satisfy both major department requirements.

■ **Research Courses:** at least 3 credits

- Please be sure to take 3 credit hours of graduation research.
 - ※ Students having a double major are exempt.
 - Up to 2 credits of individual study can be included in the credits elective major course
 - Required LRP, Undergraduate Colloquium

□ **Transitional Measures**

Students admitted in 2015 or before may choose to be governed by the completion requirements listed above if desired.

Major requirements for Department of Chemistry

For Master's students admitted in 2017 or before

Thesis Master's Degree Program

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 33 credits

■ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
- CC020 Ethics and Safety I(1AU)

■ **Mandatory Major Courses:** none

■ **Elective Courses:** at least 18 credits

- Mandatory : 9 credits (500 levels from more than two subfields)
- Elective : at least 9 credits

■ **Research Courses:** at least 12 credits (including seminar credits)

Major requirements for Department of Chemistry

For Master's students admitted in 2018 and after

Thesis Master's Degree Program

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 33 credits

■ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
- CC020 Ethics and Safety I(1AU)

■ **Mandatory Major Courses:** none

■ **Elective Courses:** at least 18 credits

- Mandatory : 15 credits (CH400, CH500, CH600 levels from more than two subfield)
- Elective : at least 3 credits

■ **Research Courses:** at least 12 credits (including seminar credits)

□ **Transitional Measures**

Applicable to graduate students admitted in 2018 and after

Major requirements for Department of Chemistry

For Doctoral students admitted in 2017 or before

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 60 credits

■ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC020 Ethics and Safety I(1AU)

■ **Mandatory Major Courses:** none

■ **Elective Courses:** at least 18 credits

- Mandatory : 9 credits(500 levels from more than two subfields)
- Elective : at least 9 credits

■ **Research Courses:** at least 39 credits (including seminar credits)

- ※ The course credits earned in the Master's course work can be used towards the Doctoral degree(except research credits).

Major requirements for Department of Chemistry

For Doctoral students admitted in 2018 and after

Please check the common graduation requirements.

☒ **Credit Requirement for Graduation:** Required to complete a total of more than 60 credits

☒ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC020 Ethics and Safety I(1AU)

☒ **Mandatory Major Courses:** none

☒ **Elective Courses:** at least 18 credits

- Mandatory : 15 credits (CH400, CH500, CH600 levels from more than two subfield)
- Elective : at least 3 credits

☒ **Research Courses:** at least 39 credits (including seminar credits)

- ※ The course credits earned in the Master's course work can be used towards the Doctoral degree(except research credits).

☐ **Transitional Measures**

Applicable to graduate students admitted in 2018 and after

Major requirements for Department of Chemistry

For MS-PhD Integrated students admitted in 2017 or before

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 60 credits

■ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
- CC020 Ethics and Safety I(1AU)

■ **Mandatory Major Courses:** none

■ **Elective Courses:** at least 18 credits

- Mandatory : 9 credits (500 levels from more than two subfields)
- Elective : at least 9 credits

■ **Research Courses:** at least 39 credits (including seminar credits)

Major requirements for Department of Chemistry

For MS-PhD Integrated students admitted in 2018 and after

Please check the common graduation requirements.

■ **Credit Requirement for Graduation:** Required to complete a total of more than 60 credits

■ **Mandatory General Courses:** 3 credits and 1AU

- Select 1 course among the Common Courses. (CC)
- CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
- CC020 Ethics and Safety I(1AU)

■ **Mandatory Major Courses:** none

- Mandatory : 15 credits (CH400, CH500, CH600 levels from more than two subfield)
- Elective : at least 3 credits

■ **Research Courses:** at least 39 credits (including seminar credits)

□ **Transitional Measures**

Applicable to graduate students admitted in 2018 and after