

**Major Course Requirements for  
Dept. of Civil and Environmental Engineering  
(For undergraduate students admitted in 2015 or before)**

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**Please check the common graduation requirements.**

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

■ **Major:** At least 45 credits are required

○ **Mandatory Major Courses:** 12 credits

(CE201 Mechanics, CE230 Soil Mechanics and Laboratory I , CE350 Introduction to Transportation systems Engineering, CE371 Environmental Science and Engineering)

○ **Elective Major Courses:** At least 33 credits are required

- Designated Elective Courses: The selected courses (up-to 15 credits) from other departments are accepted as Elective Course Credit of Civil and Environmental Engineering. The selected list is available at the department office or the department homepage. It can change each year.

\* Mechanical Engineering

ME221(Fluid Mechanics), ME231(Mechanics of Materials), ME301(Numerical Analysis), ME312(Energy and Environment), ME330(Foundation of Stress Analysis), ME351(Mechanical Vibrations), ME420(Applied Fluid Mechanics)

\* Industrial & Systems Engineering

IE363(Introduction to Modeling and Simulation)

\* Chemical & Biomolecular Engineering

CBE471(Introduction to Environmental Engineering)

\* Chemistry

CH211(Physical Chemistry I), CH221(Organic Chemistry I), CH241(Inorganic Chemistry I), CH263(Introduction to Analytical Chemistry)

■ **Minor :** At least 21 credits are required

- At least 21 credits courses are required including 12 credits of required mandatory major courses

■ **Double Major :** At least 40 credits are required

- At least 40 credits courses are required including 12 credits of required mandatory major courses.

■ **Research Courses:** At least 3 credits are required (CE490)

- Students having a double major are exempt.

**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.

- This major requirements are applicable to students admitted in 2014. For those who have entered KAIST before 2014, have a free choice of course requirements refer to the Course Completion Requirements by Year of Admission.

**Others**

- If the subtitle of Special Topic subject is identical to the regular subject's (sub-)title, they will be treated as the same subjects.

**Major Course Requirements for  
Dept. of Civil and Environmental Engineering  
(For undergraduate students admitted in 2016 and after)**

■ **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.

■ **Major:** At least 45 credits are required

○ **Mandatory Major Courses:** 12 credits

(CE201 Mechanics, CE230 Soil Mechanics and Laboratory I , CE350 Introduction to Transportation systems Engineering, CE371 Environmental Science and Engineering)

○ **Elective Major Courses:** At least 33 credits are required

- Designated Elective Courses: The selected courses (up-to 15 credits) from other departments are accepted as Elective Course Credit of Civil and Environmental Engineering. The selected list is available at the department office or the department homepage. It can change each year.

\* Mechanical Engineering

ME221(Fluid Mechanics), ME231(Mechanics of Materials), ME301(Numerical Analysis), ME312(Energy and Environment), ME330(Foundation of Stress Analysis), ME351(Mechanical Vibrations), ME420(Applied Fluid Mechanics)

\* Industrial & Systems Engineering

IE363(Introduction to Modeling and Simulation)

\* Chemical & Biomolecular Engineering

CBE471(Introduction to Environmental Engineering)

\* Chemistry

CH211(Physical Chemistry I), CH221(Organic Chemistry I), CH241(Inorganic Chemistry I), CH263(Introduction to Analytical Chemistry)

■ **Advanced Major:** At least 12 credits are required

※ At least 12 credits courses are required among elective major courses

■ **Individually Designed Major:** : At least 12 credits are required

- At least 12 credits are required in more than 2 other majors except the CEE department

■ **Minor :** At least 18 credits are required

※ At least 18 credits courses are required including 12 credits of required mandatory major courses

※ No major course credit from other majors is approved.

■ **Double Major :** At least 40 credits are required

- At least 40 credits courses are required including 12 credits of required mandatory major courses.

※ Major course credits from other majors are only approved up to 6 credits.

■ **Research Courses:** At least 3 credits are required (CE490)

- Students having a double major are exempt.

**Transitional measures**

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

**Others**

- If the subtitle of Special Topic subject be identical to the regular subject's (sub-)title, they will be treated as the same subjects.

**Major Course Requirements for  
Dept. of Civil and Environmental Engineering  
(For Master's Program)**

**Thesis Master's Degree Program**

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

■ **Mandatory General Courses:** 3credits and 1AU  
- take 1 subject among CC510, CC511, CC512

■ **Mandatory Major Course :** None

■ **Elective Courses:** At least 18 credits are required

■ **Research Courses:** At least 12 credits are required  
(including 2 seminar credits)  
(2 seminar credits are not required for General Scholarship Student)

**Transitional Measures**

- This major requirements are applicable to all students; for those who have entered KAIST before 2012 Fall, have a free choice of course requirements refer to the Course Completion Requirements by Year of Admission

**Others**

- If the subtitle of Special Topic subject be identical to the regular subject's (sub-)title, they will be treated as the same subjects.

**Major Course Requirements for  
Dept. of Civil and Environmental Engineering  
(For Doctoral Program)**

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

■ **Mandatory General Courses:** 3 credits and 1AU are required  
- take 1 subject among CC510, CC511, CC512

■ **Mandatory Major Courses:** None

■ **Elective Courses:** At least 27 credits are required

■ **Research Courses:** At least 30 credits are required  
- At least 30 credits are required(including 2 seminar credits,  
2 seminar credits are not required for General Scholarship Student)

□ **Transitional Measures**

This major requirements are applicable to all students; for those who have entered KAIST before 2012 Fall, have a free choice of course requirements refer to the Course Completion Requirements by Year of Admission

□ **Others**

- The course credits earned in the Master's course work can be used towards the Doctoral degree(including 2 seminar credits, except the rest of research credits).
- If the subtitle of Special Topic subject is identical to the regular subject's (sub-)title, they will be treated as the same subjects.