

## Major Course Completion Requirements for Graduate School of Data Science (For Master's Program)

### Thesis Master's Degree Program

---

**Please check the common graduation requirements.**

---

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

**■ Mandatory General Courses: 3 credits and Ethics and Safety**

○ Department designated subjects: 1 course of CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure, CC532 Collaborative System Design and Engineering

○ CC010 Special Lecture on Leadership(Non-credit)

○ Completion of Ethics and Safety is mandatory

**■ Elective Courses: at least 21 credits**

○ At least 15 credits from IE/DS courses

**■ Research Courses: at least 9 credits**

○ At least 9 credits including Seminar (1 credit)

**□ Transitional measures**

○ This requirement is applied to all students admitted in the Spring 2023 semester and later. (Including the Graduate School of Knowledge Service Engineering students admitted before the Spring 2023 semester) However, students admitted in 2021 or before must acquire at least 9 credits in research courses including 2 credits of Seminar.

○ KSE code courses completed before the Spring 2023 semester are considered as DS codes.

○ Foreign students admitted in the 2022 and before are exempted from completing the seminar course if they have completed the HSS586 course.

## Major Course Completion Requirements for Graduate School of Data Science (For Doctoral Program)

---

**Please check the common graduation requirements.**

---

**■ Credit Requirement for Graduation: Required to complete a total of 63 or more credits**

**■ Mandatory General Courses: 3 credits and Ethics and Safety**

○ Department designated subjects: 1 course of CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure, CC532 Collaborative System Design and Engineering

○ Completion of Ethics and Safety is mandatory

**■ Elective Courses: at least 30 credits**

○ At least 18 credits from IE/DS courses

**■ Research Courses: at least 30 credits**

○ At least 30 credits including Seminar (1 credit)

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

**□ Transitional measures**

○ This requirement is applied to all students admitted in the Spring 2023 semester and later. (Including the Graduate School of Knowledge Service Engineering students admitted before the Spring 2023 semester) However, students admitted in 2021 or before must acquire at least 30 credits in research courses including 2 credits of Seminar.

○ KSE code courses completed before the Spring 2023 semester are considered as DS codes.

○ Foreign students admitted in the 2022 and before are exempted from completing the seminar course if they have completed the HSS586 course.

## Major Course Completion Requirements for Graduate School of Data Science (For MS-PhD Integrated Program)

---

**Please check the common graduation requirements.**

---

**■ Credit Requirement for Graduation: Required to complete a total of 63 or more credits**

**■ Mandatory General Courses: 3 credits and Ethics and Safety**

○ Department designated subjects: 1 course of CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure, CC532 Collaborative System Design and Engineering

○ Completion of Ethics and Safety is mandatory

**■ Elective Courses: at least 30 credits**

○ At least 18 credits from IE/DS courses

**■ Research Courses: at least 30 credits**

○ At least 30 credits including Seminar (1 credit)

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

**□ Transitional measures**

○ This requirement is applied to all students admitted in the Spring 2023 semester and later. (Including the Graduate School of Knowledge Service Engineering students admitted before the Spring 2023 semester) However, students admitted in 2021 or before must acquire at least 30 credits in research courses including 2 credits of Seminar.

○ KSE code courses completed before the Spring 2023 semester are considered as DS codes.

○ Foreign students admitted in the 2022 and before are exempted from completing the seminar course if they have completed the HSS586 course.