

### **Learn & Apply Data Science and Al**

University-wide Education Program in Data Science and Artificial Intelligence

# DS&AI

Center for Data Science and Artificial Intelligence Education

Specialty of the school and your promising future?

# FY2025 Call for Applications for the Education Programs

400-Level Courses are also open to 4th-year undergraduate students!

(\*Registration for the Education Program is possible after entering the master's program.)

**Expert level (for master and doctoral students)** 

**Expert level plus (for master and doctoral students)** 

The open badge will be issued as a certificate to those who have completed the program.





The open badges can be appealed in your Job hunting.

# Registration is Now Open

https://www.dsai.titech.ac.jp/en/program/





Course scene of "Applied and Practical Data Science and Artificial Intelligence"



DS&AI forum held as part of "Applied and Practical Dat Science and Artificial Intelligence"



Course scene of "Exercise in Fundamentals of Data Science"

## University-wide Education Program in Data Science and Artificial Intelligence (for science and engineering students)

In today's fast-paced digital transformation (DX) world, data science and AI constitute indispensable knowledge and technologies in diverse areas such as social dynamics, industry, and R&D. The Center for Data Science and Artificial Intelligence Education provides a University-Wide Education Program that aims to cultivate "co-creative experts" who can (1) make full use of DS & AI, (2) interact with DS & AI, and (3) teach DS & AI, regardless of the specialty of the School they belong to.

#### **Expert level**

The goal of students is to acquire competencies required of "co-creative experts" in data science and AI technology, who are able to use it to solve societal problems, apply it across different disciplines, and teach the subject to others.

#### **Completion Requirements**

#### Master students

Master students must earn two credits from course group (A) and two or more from (B).

#### Course group (A)

Fundamentals Courses - Fundamentals of Data Science Fundamentals of Artificial Intelligence

#### Course group (B)

Fundamentals Courses - Exercises in Fundamentals of Data Science

Exercises in Fundamentals of Artificial Intelligence

Applied Practical Courses - Applied Practical Data Science and Artificial Intelligence I - III

Co-creative Courses - Internship A, B (DS&AI)

#### **Doctoral students**

Doctoral students must earn two credits from course group (A') and two or more from (B').

#### Course group (A')

Fundamentals Courses - Fundamentals of Progressive Data Science Fundamentals of Progressive Artificial Intelligence

#### Course group (B')

Fundamentals Courses - Exercises in Fundamentals of Progressive Data Science Exercises in Fundamentals of Progressive Artificial Intelligence

Applied Practical Courses - Progressive Applied Practical Data Science and Artificial Intelligence I - III

Co-creative Courses - Internship C (DS&AI)

Please refer to our web site for details.

#### **Expert level plus**

The goal for students is to emerge as top-level researchers and engineers equipped with expertise in cutting-edge data science and AI technologies such as generative AI essential for problem-solving, as well as a profound understanding of AI ethics, information-related legal frameworks, and technologies facilitating the responsible use of AI in society.

#### Completion Requirements

It is possible to take Expert level plus without having completed Expert level.

#### **Master students**

Master students must earn one credit from course group (A) and one or more from (B). The completion requirements are to take three or more credits from course group (A) (B) (C).

#### Course group (A)

Advanced courses - Advanced Data Science and Artificial Intelligence III

Course group (B)

Advanced courses - Advanced Data Science and Artificial Intelligence I Advanced Data Science and Artificial Intelligence II

#### Course group (C)

Advanced courses - Advanced Data Science and Artificial Intelligence IV

#### **Doctoral students**

Doctoral students must earn one credit from course group (A') and one or more from (B'). The completion requirements are to take three or more credits from course group (A') (B') (C').

#### Course group (A')

Advanced courses - Progressive Advanced Data Science and Artificial Intelligence III

#### Course group (B')

Advanced courses - Progressive Advanced Data Science and Artificial Intelligence I

Progressive Advanced Data Science and Artificial Intelligence II

#### Course group (C')

Advanced courses - Progressive Advanced Data Science and Artificial Intelligence IV

Co-creative courses - DS&Al Doctorial Forum 1 - 3

Please refer to our web site for details.

#### **Course Registration and Completion Evaluation**

#### Course Registration

In addition to course registration, please register for the Education Programs on our web site.

#### **Completion Evaluation**

The open badge will be issued twice a year as a certification electronically to those who have completed this program.

#### Course structure

**Expert** level plus

Graduate degree

(Progressive) Advanced Data Science and Artificial Intelligence I

(Progressive) Advanced Data Science and Artificial Intelligence II

(Progressive) Advanced Data Science and Artificial Intelligence III

(Progressive) Advanced Data Science and Artificial Intelligence IV

DS&Al Doctorial Forum 1 - 3



Graduate degree

(Progressive) Fundamentals of

Exercises in (Progressive) Fundamentals of Data Science

(Progressive) Fundamentals of Artificial Intelligence

Exercises in (Progressive)
Fundamentals of Artificial Intelligence

(Progressive) Applied and Practical Data Science and Artificial Intelligence I - III

Internship A - C (DS&AI)