

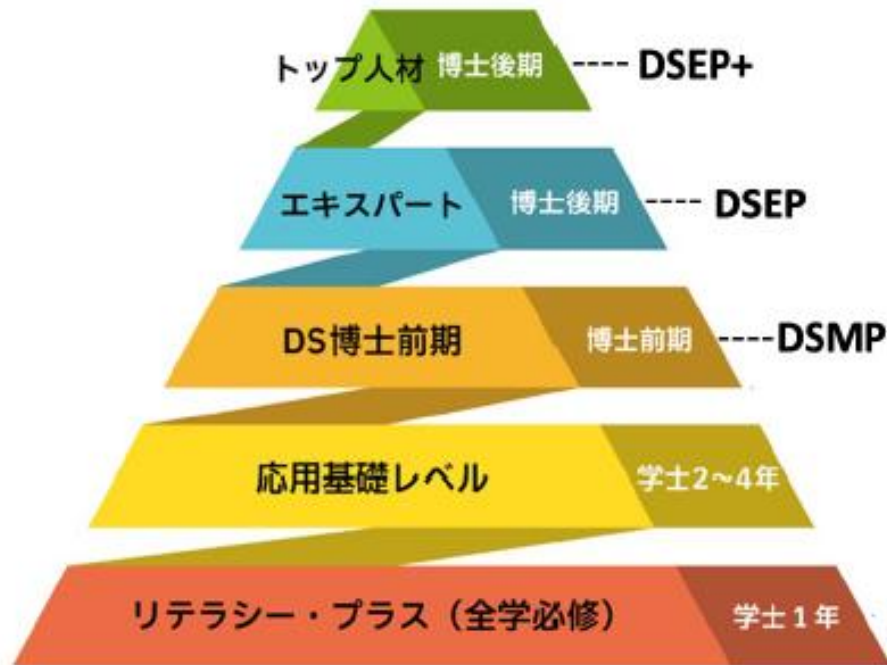
Data Science Master Program (DSMP)

MDA EDUCATION PROMOTION OFFICE



Mathematics, Data Science, and AI (MDA) education in University of Tsukuba

MDA education programs from the undergraduate to doctoral levels



Start from 2026 April

■ DSMP (Data Science Master Program)
This course assumes students have a foundation of basic knowledge and skills and aims to help them acquire the applied knowledge and skills commonly required of data science experts in specialized fields.

Data Science Master Program

Students acquired the necessary competence points will be certified

Acquisitions of advanced knowledge and skills

From foundational knowledge of data science, AI, and machine learning, students broaden their understanding of deep learning, large language models, and generative AI, and acquire practical skills in data analysis methods, machine learning models, and generative AI through exercises.

Understanding of global research and corporate needs

Students acquire specialized knowledge needed to work in applied fields as data science experts in future, while broadening their perspectives through exposure to initiatives and challenges at overseas universities, research institutions, and industries.

Enrollment procedure

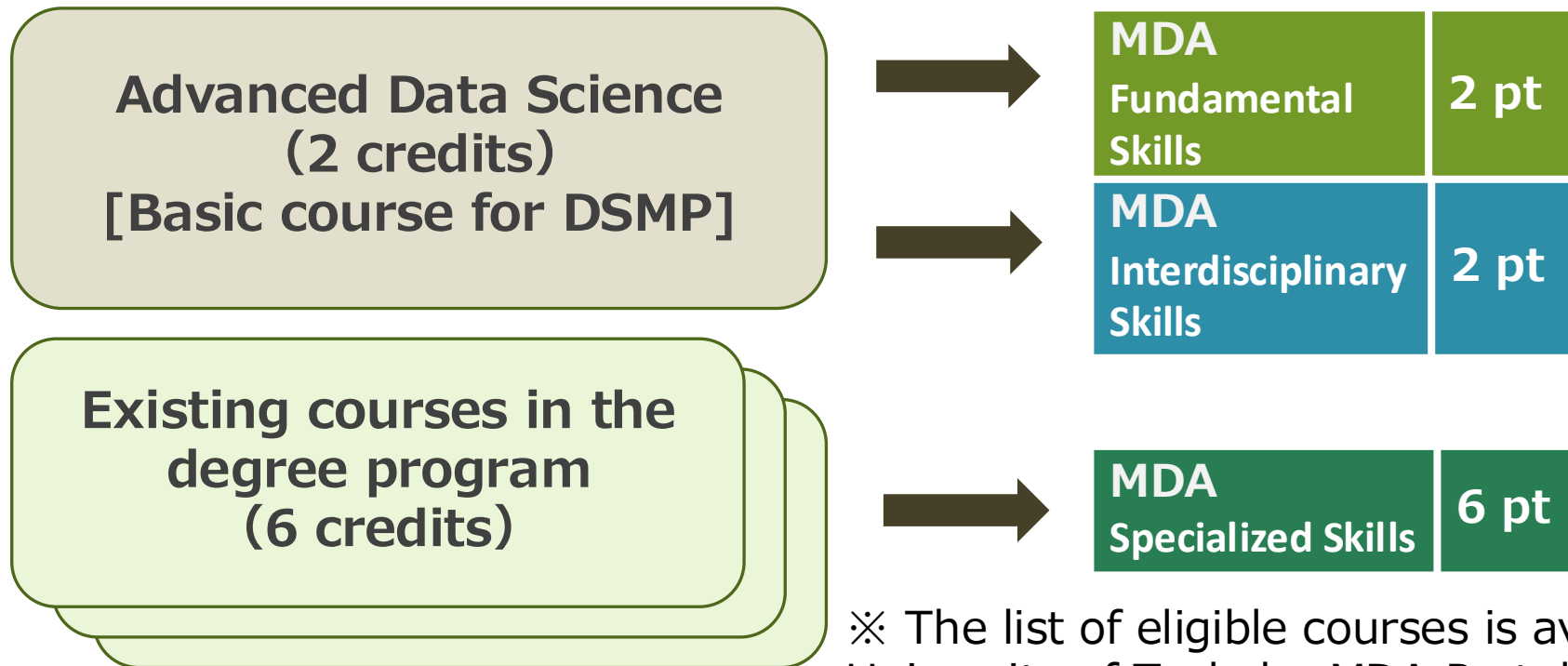
- Enrollment**
- Students who enrolled in the Master's program at the University of Tsukuba on or after April 2016
 - It is recommended that you have completed the foundational level of data science studies.

Completion Acquire all the necessary MDA competence points (pt)

MDA Fundamental Skills	2 pt	Fundamental knowledge and practical abilities in data science and AI required to become a Data Science Expert
MDA Specialized Skills	6 pt	Ability to apply data science and AI knowledge and skills through exposure to advanced research and real-world challenges faced by leading domestic and international research institutions and companies
MDA Interdisciplina ry Skills	2 pt	Specialized knowledge and practical abilities related to data science and AI within the student's major field of each degree program

Standard course model (Recommended)

You can easily complete the program by taking “Advanced Data Science” along with the existing courses in the degree program.



※ The list of eligible courses is available on the University of Tsukuba MDA Portal

Advanced Data Science

Acquire the fundamental knowledge and skills needed to master data science, machine learning, and generative AI

NT course in Spring

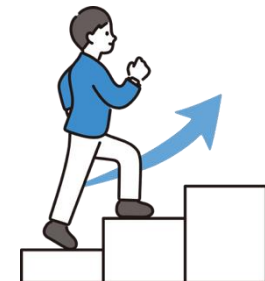
There are no restrictions on the day or time of the lectures, so you can take them whenever you like.

The Fast Track to DSMP Certification

By taking this course, students will simultaneously acquire foundational MDA skills and MDA integration skills.

The first step to becoming a data science expert

Step up by using Global Multi-Mentor System (GMMS) and Learning and Career Hybrid Support System (LCHS)



Other course models

It is also possible to take these courses through the MDA core courses offered in each degree program

MDA Fundamental Skills	<u>2</u> credits	Fundamental Theory of Intelligent Interaction Systems, Tools and Practices for Intelligent Interaction Systems A, Machine Learning, Artificial Intelligence, Natural Language Processing and Information Access	Machine Learning and Pattern Recognition
MDA Interdisciplinary Skills	<u>2</u> credits	Advanced Project Research, Metaverse Engineering Workshop, MDA Interdisciplinary Collaborative Seminar, MDA Special Exercise for Top-level Human Resource Training, Seminar in Intelligent and Mechanical Interaction Systems I, MDA Practical Research Exercises	
MDA Specialized Skills	<u>6</u> credits	Existing courses related to data science in the degree program	

Enrollment method and inquiry

Enrollment method

- Please take the courses that grant MDA competencies.
 - You can check the list of eligible courses on the [Graduate School's course catalog](#) page.
- At the end of each semester, students' completion status is determined based on the credits they have earned.
(There is no specific procedure for DSMP enrollment)
- You can also find detailed information about taking DSMP courses on the Manaba course page.
 - Use the following registration key: 1703750

Inquiry

- [MDA education portal site](#)
- Inquiry about DSMP
 - MDA education promotion office mdainfo@un.tsukuba.ac.jp

