

MEXT's Program for the Creation of
Double Major Graduate School Courses that include Data Science: X Program.

Economic **Data Science** Professionals Development Program to promote **Economic Development** in the Tohoku Region

About the Economic Data Science Professionals Development Program to promote Economic Development in the Tohoku Region.

The Tohoku Gakuin University's Economic Data Science Professionals Development Program to promote Economic Development in the Tohoku Region is one of only six programs nationwide selected for the Ministry of Education, Culture, Sports, Science and Technology's (MEXT) Program for the Creation of Double Major Graduate School Courses that include Data Science: X Program. This program, which is still in development, is to be offered by Tohoku Gakuin University Graduate School of Economics. It is an interdisciplinary program that provides students with expertise in economics and data science analytical skills required to achieve sustainable economic revitalization of the Tohoku region.

The specifics of this program are currently tentative. The curriculum and other particulars are subject to change.



TOHOKU GAKUIN UNIVERSITY

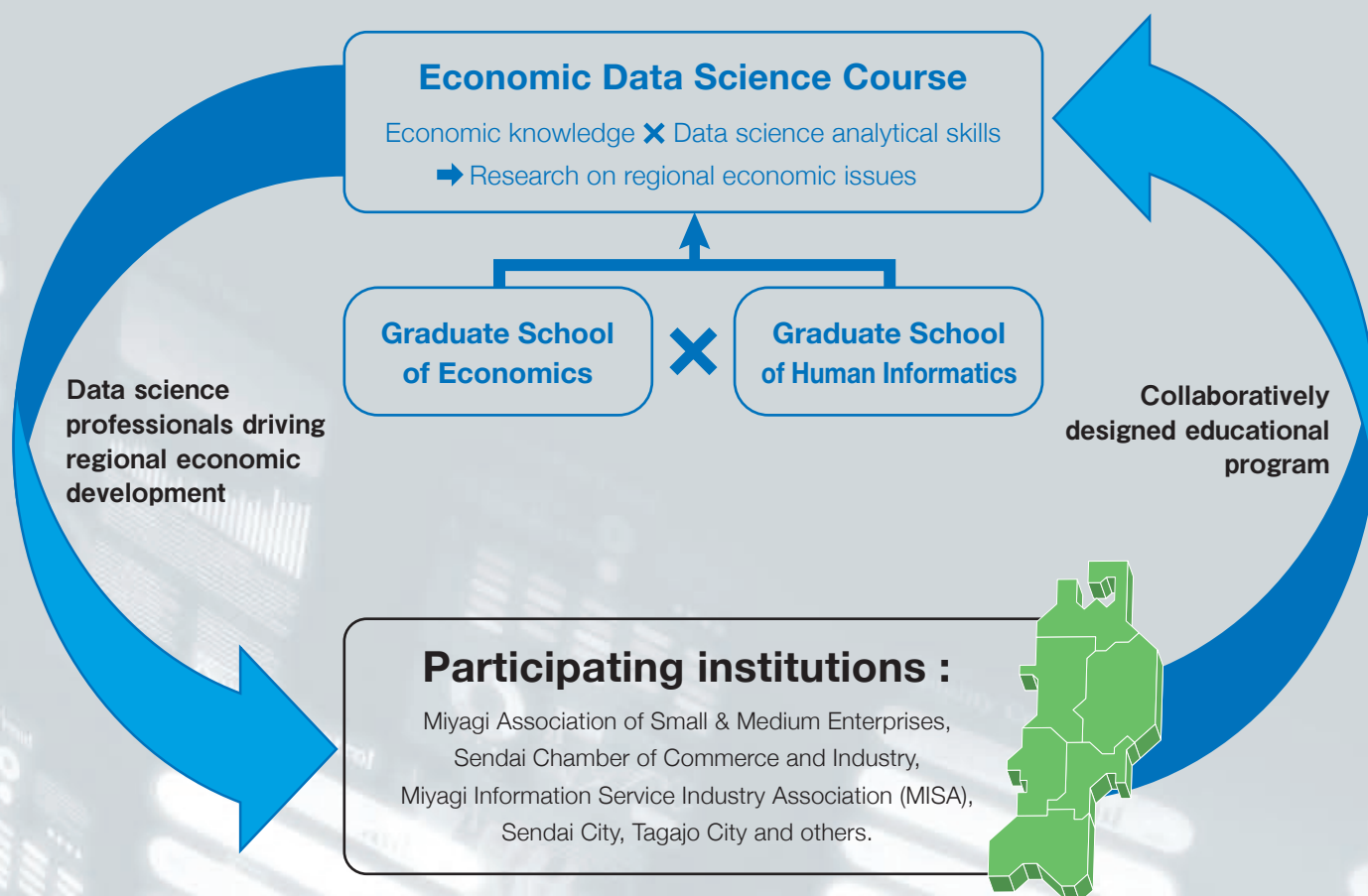
Economic Data Science Professionals Development Program to promote Economic Development in the Tohoku Region

Overview

Although the specifics of the Tohoku Gakuin University Graduate School of Economics' Economic Data Science Course, are currently in the planning stage, this interdisciplinary course combines economics with computing and data science to give students the ability to undertake quantitative analysis of regional economic issues. Students will be required to solve quantitative problems based on economic theory and models relating to individual, corporate and government decision-making and thus gain an in-depth understanding of the regional economy. This will equip graduates with the economic knowledge and data science analytical skills necessary to propose more effective policies for sustainable regional development.

This program will graduate highly-skilled professionals that the Tohoku region requires by (1) developing an educational program that provides students with both an expertise in economics and data science analytical skills, (2) an educational program developed in collaboration with participating regional companies, local governments and organizations which are the pillars of the local economy, (3) an emphasis on solving problems related to the regional economy, and (4) creating an environment that allows students from the regional companies, local governments and organizations to study and then return to the regional community to play an active role in policy discussions.

Graduate School of Economics: Economic Data Science Course (tentative)



The specifics of this program are currently tentative. The curriculum and other particulars are subject to change.

Purpose

Although the Japanese Government's blueprint for a super-smart society, Society 5.0, and the digital transformation of society is progressing, the digital transformation of the Tohoku economy still lags behind the rest of Japan. Companies in the Tohoku region have increased capital investment in response, and an increase in the demand for highly skilled professionals possessing both an expertise in economics and data science analytical skills is expected.

Professionals with economic and data science skills are able to propose better policy responses to economic situations. It has been more than 10 years since the Great East Japan Earthquake, and a wealth of data has accumulated on economic and social changes since the disaster. By analyzing such data, it is possible to design better policy responses when another disaster occurs somewhere in the future. This is important role that should be performed by research and educational institutions in the Tohoku region.

This program establishes a new interdisciplinary course incorporating data science subjects into the curriculum of the Tohoku Gakuin University Graduate School of Economics. The program's purpose is to enable graduates, who have acquired an expertise in economics and specialized knowledge and skills in mathematics, data science and AI, to make use of their skills to play an active role in regional companies, local governments and other organizations local governments and other organizations to develop sustainable revitalization policies tailored to the Tohoku economy to develop sustainable revitalization policies tailored to the Tohoku economy.

The program will develop highly skilled professionals who have a comprehensive understanding of the regional economy and the ability to make quantitative based policy decisions. In addition, the program aims to create a collaborative environment that allows employees from regional businesses, local governments and organizations to study and then return to their company or institution and to actively participate in regional economic policy discussions. This will also help resolving a difficulty faced by local businesses of retaining talented personnel, and thus facilitate sustainable economic revitalization of the Tohoku region.

The specifics of this program are currently tentative. The curriculum and other particulars are subject to change.

Program Highlights

- Economic Data Science Course to be established in the Graduate School of Economics (currently under design)
- Educational program collaboratively built with partner institutions
- Creating an environment that allows employees from the regional businesses, local governments and organizations to study and then return to the regional community
- Employment placement program
- Lectures, seminars and other academic forums
- Creating an environment that enables graduates to actively participate in regional economic policy discussions

Message from the Graduate School Double Major System Implementation Committee

We are very pleased to announce that Tohoku Gakuin University's application to the Ministry of Education, Culture, Sports, Science and Technology's (MEXT) Program for the Creation of Double Major Graduate School Courses that include Data Science: X Program was one of only six selected from all of the applications submitted throughout Japan. This program is part of MEXT's efforts to promote the inclusion of mathematics, data science and AI in education. The selection of our university for this program is significant in that it recognizes Tohoku Gakuin University as an institution playing a key role in the promotion of mathematics, data science and AI education, all fundamental aspects of MEXT's long-term plan.

The Economic Data Science Professionals Development Program to promote Economic Development in the Tohoku Region, which our university has been selected to offer, will further encourage and consolidate our role in regional collaboration. Through this program, not only the Graduate School of Economics, but also the entire university will place more emphasis on the inclusion of mathematics, data science and AI in education. We hope you will follow us as our program grows in the months and years ahead.



Haruki Onishi, President
Tohoku Gakuin University



Kenzo Sakurai, Chair
Graduate School Double Major
System Implementation Committee

Correspondence

TOHOKU GAKUIN UNIVERSITY
Registrar's Office
Graduate School Double Major System Office

General Research Building, Tsuchitai Campus
1-3-1 Tsuchitai, Aoba-ku, Sendai, Miyagi 980-8511
TEL : 022-264-6761
E-mail : doublemajor_grad@mail.tohoku-gakuin.ac.jp
URL : <https://www.tohoku-gakuin.ac.jp/graduate/economics>