

Japan-Mexico-USA Consortium for Engineering Education



Top Engineer Cultivation With Interdisciplinary Program



Outline and Feature:

Based upon strategies and concepts aimed at universities' internationalization through the Academic International Collaboration/Cooperative Support (Interdisciplinary) Program, Nagaoka University of Technology has organized and developed engineering education programs accelerating internationalization under the sponsorship by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). These programs include selected measures to support and strengthen international competitiveness of higher education at the master's course level and to enhance international acceptability and commonality in Japan. Increasing educational quality and standards as well as generating an environment for friendly competition among Japanese and foreign students are our purposes for this interdisciplinary program, which is newly introduced in 2008 to stimulate further acceleration of internationalization in higher education in Japan, Mexico, and the USA.

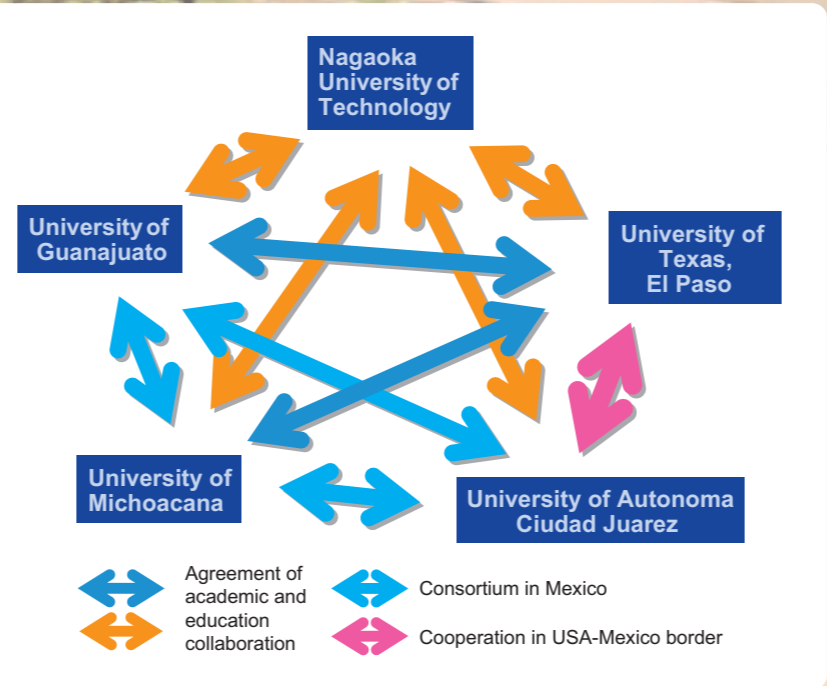
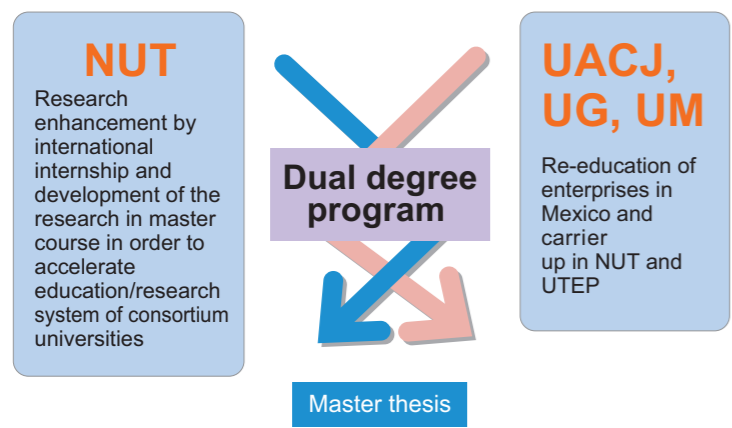
What is the Japan-Mexico-USA Consortium for Engineering Education?

This interdisciplinary program develops interactive educational collaboration, such as a credit transfer system and double-degree programs with foreign partners: University of Guanajuato, University of Michoacan, University of Ciudad Juarez, and University of Texas El Paso. Based upon comprehensive and systematic education programs, it promotes cultivation approaches to leading-edge engineering at each university. Through such an interdisciplinary program, we, the five universities of the consortium, can promote international contributions. Cooperation that makes the best use of regional characteristics enables engineers and researchers to obtain training that includes practical skills through close mutual academic exchange programs at the universities.

Structure of Tripartite Consortium:

In this consortium, five universities will promote a new mode of international collaboration and contribution for the development of leading engineers with practical and creative abilities. To undertake education of engineers and researchers with practical ability through an international collaboration system, Nagaoka University of Technology leads the international collaboration system with mutual academic and educational cooperation under an interactively developed network (Figure) with the University of Guanajuato (UG) and University of Michoacan (UM) as well as utilizing the local distinctiveness of the University of Texas at El Paso (UTEP), and the University of Ciudad Juarez (UACJ).

- Implement interdisciplinary engineering education among consortium universities through the Master's Double Degree Program, especially streamlining collaboration through overseas internships and training engineers at enterprises in the areas of Mexico and the United States of America to achieve practical reeducation during graduate school.
- Support for enhancement of international competition in accordance with the contribution toward human resources in overseas enterprises, especially in Japanese enterprises.
- Accelerate interdisciplinary education and research globalization through practical cooperation and development of joint international industry - academic research.



Goals and Spillover Effects:

Achievement of these goals will contribute to both the development and acceleration of internationalization in graduate education and promote the following.

- Interdisciplinary education and research through a Dual Degree Program by operation of the distinctive consortium.
- International consortium network enhancing education and research through close cooperation.
- Establishment of a reeducation system for practicing professionals in Mexico, resolution of social issues through an efficient system, and production of an important international contribution.