

Research Organization of Electrical Communication

Mission

The Research Organization of Electrical Communication contributes to the prosperity of information communication and electronics industries located in the disaster areas of Tohoku by convening the wisdom of researchers and technical experts in the fields of electricity, communication and electronics of our university, through the construction of a disaster-resilient information communication network, and through the world leading innovative research development. The organization further contributes to the creation of new industries in our country in the fields of new information communication and electronics, promoting strategic research responding to social issues and contributing to community and national policy, and to the promotion of industry-academia collaborative research.

Division of Engineering and Technical Staff

Mission

The division organizes engineering and technical staff for academic studies and provides coordinated support to strengthen the infrastructure for education and research activities of Tohoku University. To this end, it promotes skill development and appropriate job assignment of the engineering and technical staff.

Micro System Integration Center (μ SIC)

Mission

As an R&D center for Integration of micro-systems, we aim, through cooperation with industry, to promote the development of micro-system integration techniques, and to contribute to the strengthening of Japan's international competitiveness in the field of integrated circuits. In addition, we aim to apply the technologies in diverse fields such as information-communication, manufacturing, and medicine.

Center for Spintronics Integrated Systems

Mission

This center aims to contribute to the realization of a low-carbon and energy-saving society and to the strengthening of international competitiveness in the field of next generation VLSIs, through the development of innovative energy-saving logic VLSIs that fuse spintronics devices and logic-integrated circuits under the collaboration among industries, universities and government focusing on these technologies.

Center for Collaborative Research on Materials Science

Mission

As a base of research and development of materials science, and through the cooperation with Shanghai Jiao Tong University, the Center for Collaborative Research on Materials Science promotes joint research in the field of materials science, and while investing in the training of leaders and in the production of research results on highest world standard, the Center contributes to the development of science and industrial technology.

Center for Innovative Integrated Electronic Systems

Mission

The Center aims to contribute to the enhancement of global competitiveness in the field of next-generation integrated electronics systems, and further, work toward the creation of practical applications and new industries, through the research and development of innovative devices and its integrated electronic systems and constructing a consortium for this field under the international collaboration among industries, universities and government.

Material Solutions Center (MaSC)

Mission

The Material Solution Center (MaSC) contributes to the strengthening of the global competitiveness in the industrial recovery of the Tohoku area as well as the material field of our country by building the cooperation system by industry, academia and government, and by promoting the commercialization and R&D of technology in each process of processing, manufacture, treatment, analysis, and evaluation concerning a new material supporting the society of the future.

Research Center for Rare Metal and Green Innovation

Mission

We will contribute to realize a sustainable low-carbon society with energy-efficient technologies and a smarter industrial structure with cost-effective uses in rare-earth metals and promote Green Innovation through research activities based on collaboration between academic, industrial and governmental alliance, as well as focusing on education and training for the next-generation.

Center for the Advancement of Open Online Education

Mission

This center carries out research development, planning, and support related to Massive Open Online Courses in cooperation with relevant departments. It also contributes to further development of Tohoku University's education and research by disseminating and showcasing their results via online education both in and outside of Japan.