



- Robotics

-Electrical and Electronic Engineering

- Structural Materials Engineering

## **ABOUT TESP**

Tohoku University continues to offer students a world's top class education, and to succeed in conducting pioneer research. TESP is designed to inspire graduate level students in the field of Engineering. The program provides a series of lectures and hands-on activities on the advanced topics, all are taught in English. In addition, the program includes various activities that expose the participants to Japanese culture and enrich their academic experience. The program overall promises students that the summer will be a rich academic and cultural experience and gives them an insight for their academic future and their future as a global citizenship.



# TOHOKU UNIVERSITY ENGINEERING SUMMER PROGRAM

2017

July 24<sup>th</sup> –

August 4<sup>th</sup>



# **Core Lecture and Activity**

### **Robotics:**

Field and Space Robotics, Rescue Robotics, Human-Robot Interaction, Haptic Interface, Robot Vision, Medical Robotics, Molecular-size Robotics, Biologically Inspired Robotics

### **Electrical and Electronic Engineering:**

Design and make a prototype of a smart wireless power transfer system which can generate the solar electric power and transfer the power wirelessly to the electric devices.

### **Structural Materials Engineering:**

Alloy Design and Synthesis by Arc Melting, Spark-Plasma Sintering and 3D Printing, Microstructure Observation and Analysis by Optical and Electron Microscopy and X-ray Diffractometry, Mechanical Property Measurement by Nano-Indentation, Vickers Hardness, Tensile and Compression Tests

# **Application Deadline:**

**April 28, 2017** 

Participation Fee: 15,000 JPY

### \*NOTE:

Those who get any type of scholarships more than 80,000(JPY) for the program should bear half of the accommodation fee (approx. 36,000 JPY for 13 nights, as of 2016).

CONTACT INFORMATION at YOUR UNIVERSITY