

We strive to cultivate leaders who can dependence on petroleum-based

Currently, at least five billion people globally depend on petroleum to produce the food they live on, and it is clear that feeding the entire global population of seven billion people by traditional farming methods alone has become

In recognition of this "food" crisis, our program aims to cultivate leading human resources armed with the conceptual ability and practical skills to transform food productivity and revolutionize our dependence on petroleum-based energy. By fully applying the knowledge of agriculture and engineering, our graduates will acquire an understanding of the inextricable ties among food, the environment, and energy.

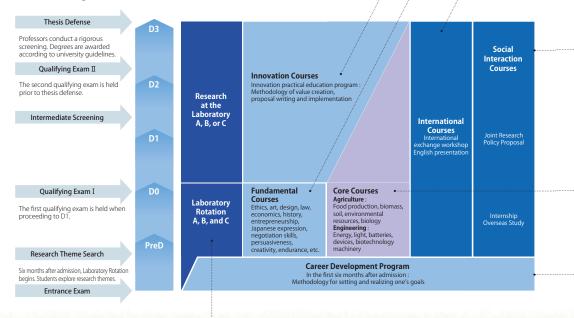


# Curriculum

# Expanding partnerships with innovative institutions around the world and developing a five-year integrated program to cultivate practical skills.

Our program is a five-year education from PreD through D3 that enables strategic practice-based learning by eliminating the separation of master's program and doctoral program. It will equip graduates with a combined foundation in agriculture and engineering, which are the main areas of "practical science", as well as develop innovation creativity, international networking abilities, and human skills.

# **Education Program**



#### INNOVATION COURSES

Acquiring practical skills by participating in workshops and seminars by leaders in Japanese and foreign enterprises, government agencies, and international organizations.

#### **FUNDAMENTAL COURSES**

Improving human skills by taking liberal arts subjects.

#### INTERNATIONAL COURSES

Developing skills in communication, speech, presentation, debating, and networking that are essential to the international business environment.

#### SOCIAL INTERACTION COURSES

Internships at companies and international organizations in Japan and abroad to experience a wide range of activities; study abroad at research institutes performing leading research.

#### **CORE COURSES**

Enhancing specialization in agriculture or technology by having experience in cutting-edge research and development; acquiring an understanding of a wider range of fields by taking classes other than one's major.

## **CAREER DEVELOPMENT PROGRAM**

Learning the methodology for setting and achieving their own career goals; receiving the guidance from their academic or business mentors.

### LABORATORY ROTATION

Expanding perspectives and getting broader knowledge about agriculture and engineering through research activities at three different laboratories.

#### LEARNING FROM EXPERIENCED LEADERS

Students can have many opportunities to talk with business people or global leaders who are active at the leading edge of each field. They can learn success stories as well as failure stories from these leaders in order to



get hints for setting and achieving their goals.

#### PURSUING SPECIALIZATION WITH A BROAD VISION

Students engage in advanced research activities at each laboratory according to their specializations.

At the same time, during the first two years, they join other two laboratories.

Through this laboratory rotation system, they 
acquire new knowledge and technologies to expand their research possibilities and effectiveness.

## **UNDERSTANDING DIFFERENT VALUES IN THE WORLD**

Besides their specializations, students increase literacy through workshops, lectures, and field trips abroad.

Learning history, culture, arts, and values of Japan and the world will deepen their understanding of different societies and allow them to develop new ideas.



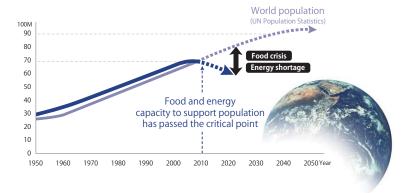
#### TRAINING TO BE GLOBAL INNOVATION LEADERS

Through workshops in Japan and abroad, students can improve their practical skills of innovation, such as objective and logical thinking, advanced presentation, team-building, and business planning. Those experiences

help them to propose and spread new values to global society.







# We will cultivate global leaders who can face the worldwide food crisis by bringing innovative changes in productivity and energy-dependence of food production.

The world's population is rapidly rising, the current total of seven billion being a 2.8 times the 1950 figure. To respond to this increase, the global food production have doubled since 1970, with the global demand for energy, including consumption of food production reaching a level more than twice as high.

In recent years, although the amount of energy input into food production has multiplied, energy production has only slightly increased. Human beings cause a negative energy balance by producing huge amounts of food to nourish the increased population.

Furthermore, problems of environmental destruction closely involved with human activities have been aggravated.

Food problems cannot be considered separately from global energy and environmental issues, which we have to view from a broader perspective.

# Message from Program Coordinator



Kazuhiro Chiba Professor at the Graduate School of Agriculture

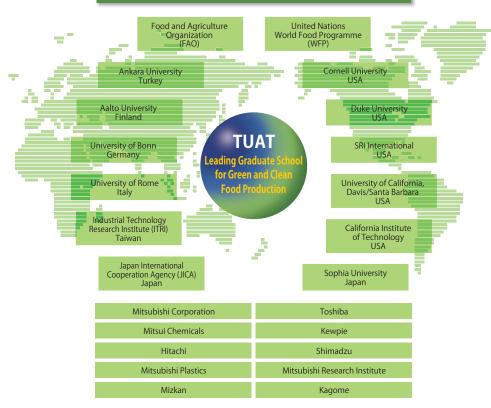
Innovation means to create a new idea or value leading to a sustainable improvement of society. This is what Japanese society currently needs most in order to exert its presence throughout the international community and to develop the country.

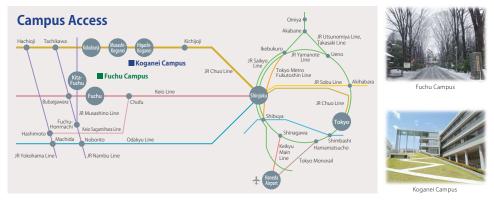
The aim of Leading Graduate School is to nurture leaders who can drive innovation. To be an innovation leader, a student needs to acquire intelligence and persuasiveness backed by strong communication skills and emotional intelligence.

For students who wish to pursue academic careers, an innovative mind is naturally indispensable. It is clear, for instance, that to publish high-quality articles constantly, we need more than just knowledge, techniques, and experience.

We at TUAT will provide global education to nurture innovation leaders who can make changes in the real world. We believe that is the mission for Universities to contribute to Japanese society and the world.

# Global Education Network with Industries, Universities, and International Organizations





#### ■Fuchu Campus

Tokyo to Kokubunji station by JR Chuo Line, 40-minute train ride, then 10-minute bus ride to campus gate

#### ■Koganei Campu

Tokyo to Higashi Koganei station by JR Chuo Line, 40-minute train ride, then 10-minute walk to campus gate

http://www.tuat.ac.jp/~leading/