Strategic Management of University
- for Creative Human Resource Developments in International Environment -

January 29, 2010

Prof. Ichiro Okura
Executive Vice President
Tokyo Institute of Technology
Outline

1. Overview
2. Excellent education programs
3. Outstanding research programs
4. International Strategy and Collaboration
1881 Established as The Tokyo Vocational School.
1929 Promoted to a degree-conferring university as Tokyo Kogyo Daigaku (Tokyo Institute of Technology)
2004 Reorganized as an independent administrative institution "National University Corporation Tokyo Institute of Technology"

<table>
<thead>
<tr>
<th>As of May 1st, 2009</th>
<th>Number (rounded)</th>
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<tbody>
<tr>
<td>Undergraduate Students</td>
<td>4,900 (300)</td>
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<tr>
<td>(International students)</td>
<td></td>
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<tr>
<td>Graduate Students</td>
<td>5,000 (800)</td>
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<tr>
<td>(International students)</td>
<td></td>
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<tr>
<td>Faculty</td>
<td>1,100</td>
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<tr>
<td>Administrative Staff</td>
<td>500</td>
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We, Tokyo Institute of Technology, aim at

- creating **global human capabilities** *par excellence*:
  - to pioneer research and higher education in science and engineering
  - to lead industrial technology and management.

- **educating** students to acquire scientific expertise, liberal arts and ethics;

- **researching** thoroughly from basic theory to practical application;

- **advancing** science and technology by academic mastery, thereby contributing to civilization, peace and prosperity in the world.
Global Leaders

1-year exchange program for senior students

Creativity Education

Integrated Master’s-Doctoral Program
doctoral degree in a shorter period

Joint Graduate School Programs
Tsinghua Univ. (China)
NSTDA (Thailand)

Global Edge Institute
New career system to be an assistant prof. or professor

Students exchange and internships

International Graduate Program
Advanced studies leading to Ph.D.
Classes in English, Scholarships

YSEP
1-year exchange program for senior students

Graduate

Undergraduate

Young Researchers

Higher Education Open to the World

Global Edge Institute
New career system to be an assistant prof. or professor

Integrated Master’s-Doctoral Program
doctoral degree in a shorter period

Joint Graduate School Programs
Tsinghua Univ. (China)
NSTDA (Thailand)

Creativity Education
The first “dual degree” program on graduate level between China and Japan
Joint supervision by professors of both universities
Master’s degrees awarded by both universities in 3 years
Expenses in Japan supported by scholarship

**Tokyo Institute of Technology – Tsinghua University Joint Graduate Program**

- **Tsinghua University**
  - Studying in China 1-1.5 year
  - Lectures by Tokyo Tech Professors
  - Studying in China 0.5 year

- **Tokyo Tech**
  - Studying in Japan 1-1.5 year

**Timeline:**
- Sep.’08
- Oct. ’09
- Sep. ’10
- Aug.-Sep. ‘11
The Program includes:

- Individual research project at research lab under the guidance of a faculty supervisor.
- Japanese language and society/culture courses.
- Opportunities for a scholarship provided by Japan Student Services Organization (JASSO).
- A variety of events such as Factory Study Tours.

- Evolving Education and Research Center for Spatio-Temporal Biological Network (2007)
- Education and Research Center for Material Innovation (2007)
- Education and Research Center for Emergence of New Molecular Chemistry (2007)
- Computationism as Foundations of Sciences (2007)
- Photonics Integration - Core Electronics (2007)
- Nanoscience and Quantum Physics (2008)
- Multidisciplinary Education and Research Center for Energy Science (2008)
- From the Earth to “Earths” (2009)
Strategic Plan and Goal

Development of International research center (team) for high-level research on the world emerging issues of science & technology as an Asian hub.

In the era of accelerating globalization, the borderless collaboration among universities is becoming more important. An establishment of a strategic network of the leading universities of science and technology (in Asia) is proposed. This will act as a hub for innovation and contribute to realize sustainable world through the advancement of research and human resource development in science and technology. Through this network, our mutual cooperation in the field of research, education and innovation is further enhanced. The collaboration with similar consortia in other parts of the world, such as Europe and America, will be pursued.
Consortium of the World Leading Universities of Technology

Asia
The Hong Kong University of Science and Technology
Korea Advanced Institute of Science and Technology
Nanyang Technological University
Tsinghua University
Tokyo Institute of Technology

Europe
Imperial College London
ETH Zurich
Paris Tech
RWTH Aachen
TU Delft
Example: Research and Collaboration Method

- Establishment of evolutional and Flexible System based on Social Needs

Project Research
COE, et al

Basic Research

Tokyo Tech

Research Group of Other Universities

Collaboration

Research Group
- Bio-Measurement
- Environmental Biotechnology
- Chem-Bio et al

Bio-Support Center
- Isotope-Center
- Animal-Center
- Genomics
- Bio-Informatics

Research and Collaboration Method
Initiating Global Leadership in Research and Education

Tokyo Institute of Technology
The 130th Anniversary in 2011
Thank you