

NIAD-UE国際セミナー 質保証が支える東アジアの大学間交流

「キャンパス・アジア」プログラムの紹介①

日中韓先進科学技術大学教育環

東京工業大学

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平成24年11月22日 一橋講堂



東京工業大学
Tokyo Institute of Technology

NIAD-UE International Seminar
Understanding QA Mechanism, Empowering HE Exchange in East Asia

Introduction of CAMPUS Asia Program ①

TKT CAMPUS Asia Consortium

Tokyo Institute of Technology

Satoru Endo, University Management Center

November 22, 2012 Hitotsubashi Hall, Tokyo

1. 東京工業大学TIERプログラムについて①

▶ TIERプログラムとは

- ・正式名称は、Tokyo Institute of Technology International Education and Research (TIER) Program。東工大が世界展開力強化事業で実施する「日中韓先進科学技術大学教育環(TKT CAMPUS Asia Consortium)」と「グローバル理工系リーダー養成協働ネットワーク(Tokyo Tech International Research Opportunities Program: TiROP)」の総称。

▶ TIERプログラムの基本的な考え方

- ・米欧亜の高い研究水準を有する大学間で実施する研究重視型の教育プログラム



1. About Tokyo Tech TIER Program ①

▶ About TIER Program

- Tokyo Institute of Technology International Education and Research (TIER) Program is the collective term for “TKT CAMPUS Asia Consortium” and “Tokyo Tech International Research Opportunities Program: TiROP”, which are implemented under the “Reinventing Japan Program”.

▶ Basic Idea of TIER Program

- Research oriented educational program implemented between the world class universities in Asia, Europe and the U.S.



1. 東京工業大学TIERプログラムについて②

TIERプログラムの特徴

▶ 研究を重視した教育プログラム

- ・一人ひとりの学生(学部学生を含む)に対し、双方の大学の指導教員が共同で指導
- ・この目的のため、「ラーニングアグリーメント」に代わる、「修学・研究計画書 (Study and Research Plan/ Record)」を使用

▶ 全学を対象として実施するプログラム

- ・全学部、研究科の学生を対象として実施(このため、「日中韓先進科学技術大学教育環」で実施する合同学位プログラム等の場合を除き、特定のテーマの下で共同でカリキュラムを構築したり、予め相互に認定可能な科目を指定したりする等のことは行っていない。)

▶ 各大学が持つ高い質の保証制度を基盤としたプログラム

- ・各相手大学が持つ独自の高い質の保証制度に基づき教育を行っていることから、相手大学の質の保証制度を尊重したうえで、自身の大学においてその成果を適正に読み替える制度を整備し、プログラムを実施

1. About Tokyo Tech TIER Program ②

Characteristics of TIER Program

▶ Educational Program Focusing on Research

- Faculty members of the partner universities jointly supervise each individual student (including undergraduate students)
- “Study and Research Plan/ Record” format is used for joint supervision

▶ A Program Covering all Schools and Departments

- Students in all schools and departments are eligible to join the program (For this purpose, no joint curriculum is established nor any specific courses are designated for mutual credit recognition, except in the case of implementing dual degree programs under “TKT CAMPUS Asia Consortium”).)

▶ A Program Founded on Each Partner University’s own Quality Assurance System

- Due to the uniqueness of each university’s quality assurance system, the program is implemented in such a way that a home university respects its partner university’s quality assurance system and recognizes its academic records.

2. 「日中韓先進科学技術大学教育環」プログラムの背景と実施までの取り組み

▶ 「日中韓先進科学技術大学教育環」プログラムの背景

- ・理工系を中心とした大学という共通性
- ・大学間交流協定校としての実績（東工大－清華大学合同学位プログラムを含む）
- ・ASPIRE League加盟大学としての緊密な研究教育面の協力関係（ASPIRE Leagueとは、東工大、KAIST、清華大、香港科技大、南洋理工大が加盟するコンソーシアム）
- ・三大学の教員の間における研究面での繋がり

▶ 実施までの取り組み

- ・2009年：アジアの先導的な理工系5大学により、ASPIRE Leagueの前身となるコンソーシアムを創設し、教育研究協力を開始
- ・2010年：三大学の副学長のもとで、日中韓政府によるCAMPUS Asia構想に沿ったプログラムの実施の可能性を協議。三大学の教育システムについて情報を交換
- ・2011年：三大学の副学長のもとで、プログラムの構想を取りまとめ、申請
- ・2012年：「日中韓先進科学技術大学教育環」プログラムを開始。学生の交流を行うとともに、2～3か月に1回程度の頻度で2大学間、3大学間協議を実施

2. Background of “TKT CAMPUS Asia Consortium” and Efforts made by Partner Universities

- ▶ Background of “TKT CAMPUS Asia Consortium”
 - Universities focusing on science and technology
 - Achievements in research and education under the university-wide agreement for cooperation including Tokyo Tech–Tsinghua University Joint Graduate Program
 - Close research and educational collaboration within the ASPIRE League (Partner universities of the ASPIRE League are; Tokyo Tech, KAIST, Tsinghua University, Hong Kong University of Science and Technology, Nanyang Technological University)
 - Active research collaborations among three universities
- ▶ Efforts Made towards the Establishment of the Program
 - 2009: 5 leading universities of science and technology in Asia established a consortium and started cooperative activities on research and education.
 - 2010: Deliberations for the possible implementation of the program under the “CAMPUS Asia” set by three governments were carried out among three universities’ Vice Presidents. Information of educational system of the three universities were exchanged.
 - 2011: The idea of “TKT CAMPUS Asia Consortium” was developed under the leadership of the three universities’ Vice Presidents. Program proposals were submitted to each government.
 - 2012: “TKT CAMPUS Asia Consortium” started. Students were exchanged under the program and bilateral and trilateral meetings were held every two or three months.

3. 「日中韓先進科学技術大学教育環」プログラムの特徴

▶ 全学を対象とした3つのプログラム

・研究経験を含むサマープログラム

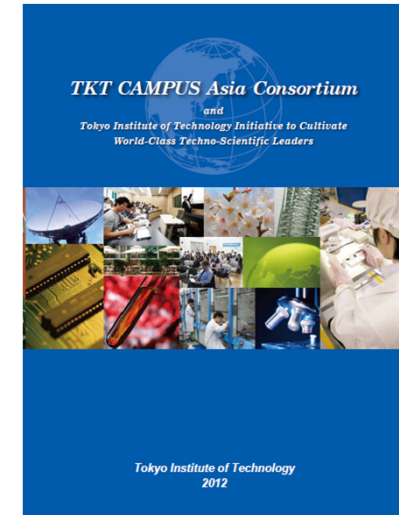
本学では、学部3・4年次および修士課程学生を対象とし、TIERプログラムの一環として実施

・セメスター単位の科目履修や研究室での実験等のプログラム

各大学の学生が、半年～1年の期間で相互に交流

・大学院課程研究重視型教育プログラム

グローバル人材の養成のための、学位(修士号、博士号)の取得を目的としたプログラム。合同学位プログラムを構想(東工大－清華大間では実施中)



KAIST、清華大学学生向けに、本学が実施するプログラムに関する冊子を作成・配布

参考：東京工業大学－清華大学大学院合同プログラム

2004年9月にスタートした、相互に大学院生を派遣し、一定期間、相手国で教育・研究活動を受けさせることで、デュアル・ディグリー(双方学位)を取得できるシステム。ナノテクノロジーコース、バイオコース、社会理工学コースの3コースを設定。東工大の学生は2年半かけて、清華大の学生は3年かけて両大学の修士号を取得。日中韓先進科学技術大学教育環の下で学生を交流。

3. Characteristics of “TKT CAMPUS Asia Consortium”

▶ A Program that Covers all Schools and Departments

▪ Summer Program with Research Experience

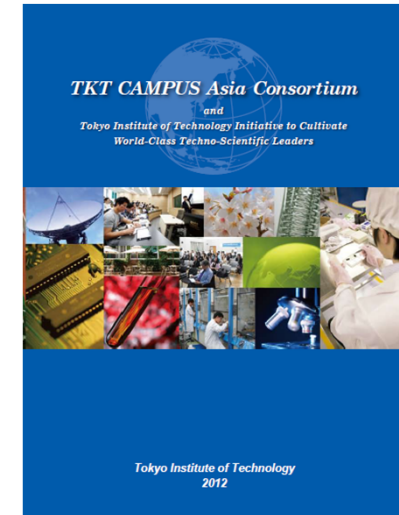
At Tokyo Tech, summer program is held as a part of TIER program, which is participated by undergraduate junior and senior students and master course students.

▪ Semester Long Exchanges with Course Study and/or Lab Work

Students are exchanged for one semester ~ one year.

▪ Research-oriented Joint Educational Programs

The program aims to foster global human leaders through completing the master and doctoral courses. Establishment of dual degree program is envisioned (the program is already underway between Tokyo Tech and Tsinghua University)



Pamphlet was published for the use of KAIST and Tsinghua students

Tokyo Tech – Tsinghua University Joint Graduate Program

Tokyo Tech–Tsinghua Joint Graduate Program is a twinning program that educates and confers degrees for Chinese and Japanese students enrolled in three advanced interdisciplinary courses of both universities: Nanotechnology, Bioscience and Biotechnology, and Decision Science and Technology. A master degree can be obtained in 2.5 years for Tokyo Tech students and 3 years for Tsinghua students. Participating students are exchanged under “TKT CAMPUS Asia Consortium” program.

4. TIERサマープログラム

- ・2012年6月～8月の間に第1回を実施
- ・日中韓先進科学技術大学教育環およびTiROPの両プログラムにおいて実施した研究を重視した教育プログラム
- ・研究室に所属し本学教員が指導。また、4週間の科目履修(サマースクール)も実施。
- ・参加学生の所属大学は、KAIST、清華大、MIT、ワシントン大、ウィスコンシン大、ミネソタ大、ブラウン大、インペリアルカレッジロンドン、デルフト工科大、アーヘン工科大、パリテック、南洋理工大、香港科技大



4. TIER Summer Program

- The first summer program was held between June – August, 2012
- Research oriented educational program implemented under the “TKT CAMPUS Asia Consortium” and “TiROP”.
- Students did lab work under the supervision of Tokyo Tech faculty members. Four weeks’ course work (summer school) was also held.
- Participating students were from KAIST, Tsinghua U., MIT, U. of Washington, U. of Wisconsin, U. of Minnesota, Brown U., Imperial College London, TU Delft, RWTH Aachen, ParisTech, Nanyang Technological U., Hong Kong UST.



5. 「日中韓先進科学技術大学教育環」における質保証の取り組み

(1) 主な取り組み

「日中韓先進科学技術大学教育環」は、各大学の質保証制度を基盤とし、特定の課程や科目を対象とした質保証を行うのではなく、全学を対象としたプログラムとして、共通の交流の枠組みの構築を目指す。 ➡ 本プログラムを通して得られたノウハウが、東アジアの理工系分野における大学間交流の参考となることを期待

▶ 3大学で共通に用いられる学習・研究成果の認定のためのツールの開発

- ・「修学・研究計画書」により、参加学生が事前に派遣先大学での学習・研究内容について十分に理解し、派遣計画を立案。双方の大学の指導教員はその計画立案を支援。

▶ ひとり一人の学生に対する3大学の教員による共同指導

- ・「修学・研究計画書」において合意された研究計画をとおして、双方の指導教員が共同して指導

▶ それぞれの大学の教育制度の相違を超えた共通の質の保証への取り組み

- ・各大学の教育制度の相違点(例えば研究活動に対し付与される単位の相違や学位審査の手順の相違等)について理解を共有し、協調的に解決に向けた取り組みを実施

5. Tokyo Tech's Efforts toward Quality Assurance under the "TKT CAMPUS Asia Consortium"

(1) Major Activities

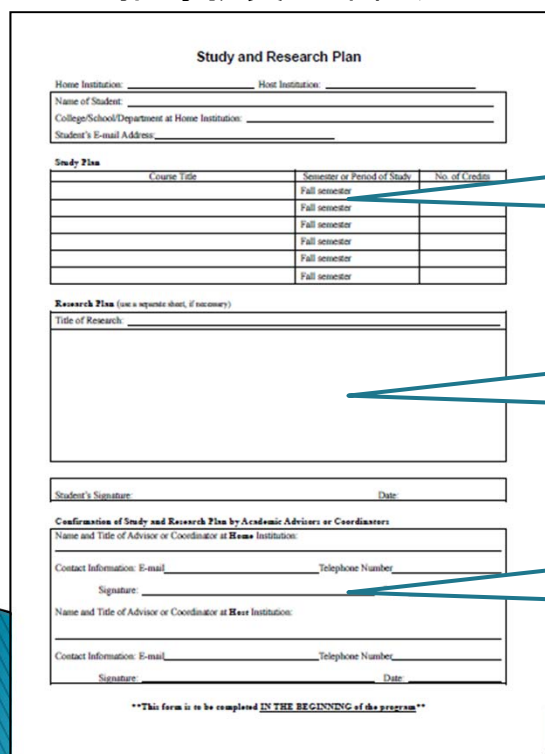
The aim of "TKT CAMPUS Asia Consortium" is to implement quality assured program not by targeting specific curriculum or courses but by covering all courses. ➡ Tokyo Tech is expecting that the know-how obtained from this program will contribute to the development of exchange programs between universities in science and technology in East Asia.

- ▶ Development of tools to recognize the study and research results, which will be used by all 3 universities
 - "Study and Research Plan/Record" is expected to help the participating students to understand host university's education and research system and plan their activities. Faculty members of both home and host universities will assist students in planning it.
- ▶ Joint supervision to each individual student by faculty members of partner universities
 - Faculty members of both universities jointly supervise the students by using "Study and Research Plan/Record"
- ▶ Quality assurance overcoming differences of each university's educational system
 - Partner universities will jointly make efforts to deepen the understanding of differences of each university's educational system such as credit recognition for research and different procedure for conferring degrees and to solve these problems.

5. 「日中韓先進科学技術大学教育環」における質保証の取り組み (2) 修学・研究計画書 (Study and Research Plan/ Record)

3大学間の共通の認識のもと、ラーニングアグリーメントにおける科目履修に加え、研究活動についても学生が立案し、教員が共同で指導を行うために用いるフォーマットである「修学・研究計画書 (Study and Research Plan/ Record)」を、全参加学生が使用

Study and Research Plan
(派遣前に作成し、双方の
指導教員が確認)



Study and Research Plan

Home Institution: _____ Host Institution: _____

Name of Student: _____

College/School/Department at Home Institution: _____

Student's E-mail Address: _____

Course Title	Semester or Period of Study	No. of Credits
	Fall semester	
	Fall semester	
	Fall semester	
	Fall semester	
	Fall semester	
	Fall semester	

Research Plan (use a separate sheet, if necessary)

Title of Research: _____

Student's Signature: _____ Date: _____

Confirmation of Study and Research Plan by Academic Advisers or Coordinators

Name and Title of Adviser or Coordinator at Home Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____

Name and Title of Adviser or Coordinator at Host Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____ Date: _____

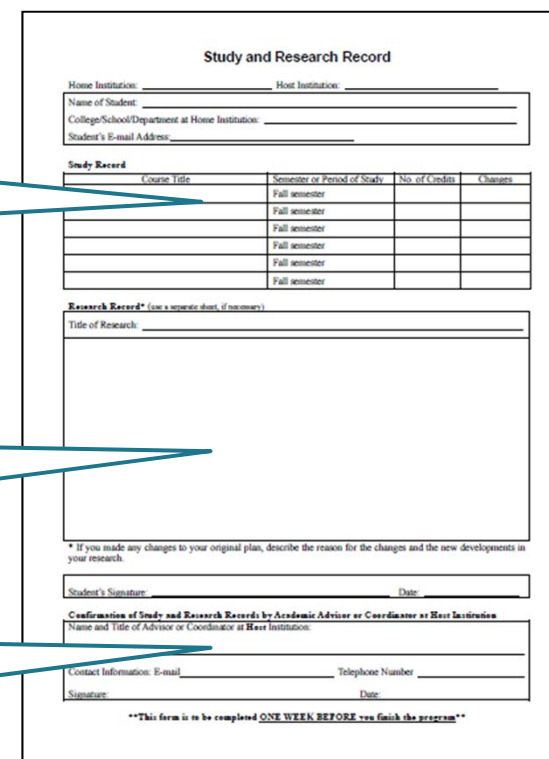
****This form is to be completed IN THE BEGINNING of the program****

履修科目

研究計画、
研究成果

指導教員の
確認欄

Study and Research Record
(終了時に作成し、受入れ側の指導教員
が確認し、派遣元の指導教員に提出)



Study and Research Record

Home Institution: _____ Host Institution: _____

Name of Student: _____

College/School/Department at Home Institution: _____

Student's E-mail Address: _____

Course Title	Semester or Period of Study	No. of Credits	Changes
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		

Research Record* (use a separate sheet, if necessary)

Title of Research: _____

* If you made any changes to your original plan, describe the reasons for the changes and the new developments in your research.

Student's Signature: _____ Date: _____

Confirmation of Study and Research Records by Academic Adviser or Coordinator at Host Institution

Name and Title of Adviser or Coordinator at Host Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____ Date: _____

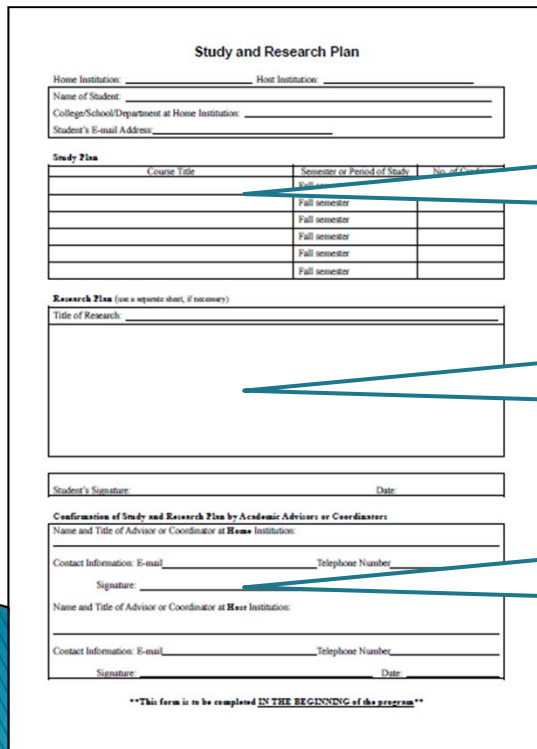
****This form is to be completed ONE WEEK BEFORE you finish the program****

5. Tokyo Tech's Efforts toward Quality Assurance under the "TKT CAMPUS Asia Consortium"

(2) Study and Research Plan/ Record

All participating students use "Study and Research Plan/Record". This form is used not only to do course work (which is similar to the "Learning Agreement"), but also to plan and implement research activities, which are supported by faculty members of both universities.

Study and Research Plan (before departure)



Study and Research Plan

Home Institution: _____ Host Institution: _____

Name of Student: _____
College/School/Department at Home Institution: _____
Student's E-mail Address: _____

Study Plan

Course Title	Semester or Period of Study	No. of Credits
	Full semester	
	Fall semester	
	Fall semester	
	Fall semester	
	Fall semester	
	Fall semester	

Research Plan (use a separate sheet, if necessary)

Title of Research: _____

Student's Signature: _____ Date: _____

Confirmation of Study and Research Plan by Academic Advisors or Coordinators

Name and Title of Advisor or Coordinator at Home Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____

Name and Title of Advisor or Coordinator at Host Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____ Date: _____

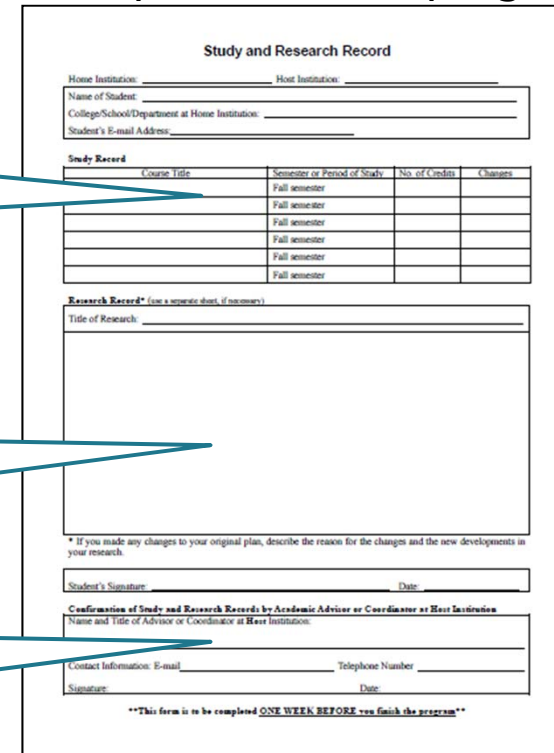
****This form is to be completed IN THE BEGINNING of the program****

course work

research plan,
research results

confirmation by
supervisors

Study and Research Record (after completion of the program)



Study and Research Record

Home Institution: _____ Host Institution: _____

Name of Student: _____
College/School/Department at Home Institution: _____
Student's E-mail Address: _____

Study Record

Course Title	Semester or Period of Study	No. of Credits	Changes
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		
	Fall semester		

Research Record* (use a separate sheet, if necessary)

Title of Research: _____

* If you made any changes to your original plan, describe the reasons for the changes and the new developments in your research.

Student's Signature: _____ Date: _____

Confirmation of Study and Research Records by Academic Advisor or Coordinator at Host Institution

Name and Title of Advisor or Coordinator at Host Institution: _____

Contact Information: E-mail: _____ Telephone Number: _____

Signature: _____ Date: _____

****This form is to be completed ONE WEEK BEFORE you finish the program****

5. 「日中韓先進科学技術大学教育環」における質保証の取り組み (3) TiROP相手大学を含むフォローアップ・調査

- ▶ TKT CAMPUS Asia Consortium、TiROP参加学生に対するフォローアップ：単位認定に加え、研究成果の評価に関する調査を実施

調査項目：

- ・ 単位の認定(履修科目の認定に加え、研究実施に対する単位(independent study等の単位)の認定)
- ・ 単位以外の形による研究成果の評価
- ・ 学位取得に向けた研究への有効性
- ・ 所属大学において求められる研究成果を証明する文書、等



相手大学(KAIST、清華大および米欧亜の17大学)の履修および学位に関する規則等を調査することと併せ、理工系分野における質の保証を伴った研究成果の認定の手順や方策を検討

Participant Survey of the
TKT CAMPUS Asia Consortium and TiROP
2012 Summer Program at Tokyo Tech

Dear Student,

Tokyo Tech would like to conduct a survey of the students who participated in the TKT CAMPUS Asia Consortium and TiROP 2012 Summer Program. The survey is conducted with the objective of improving the program in the following two ways:

(1) To ensure that the program meets the educational needs of participants
(2) To make the program more compatible with partner universities' educational systems

In order to collect the necessary information, we ask you to answer several questions. The answers will include some personal information such as credit earned at Tokyo Tech and transferred or recognized at your university. We will not disclose your answers to third parties, with the exception of relevant persons at your home university (your advisor, supervisor, officer in charge of educational programs and/or other persons who are involved in the TKT CAMPUS Asia Consortium or TiROP Program). Your answers may be shared with these relevant persons at your home university in order to improve the program as mentioned above. We thank you for your understanding and cooperation.

Your Name and University
Name: _____ University: _____

Q1. Were the credits you obtained at Tokyo Tech recognized at your university?
☐ Recognized --- go to Q1a
☐ I applied for recognition, but not recognized --- go to Q1b
☐ I did not apply for recognition --- go to Q1c

Q1a. How were your Tokyo Tech credits recognized?

Title of Tokyo Tech course	Number of Tokyo Tech Credits	Title and number of course recognized at your home university	Number of credits or units transferred at your home university
Advanced Japanese 1	1		
Advanced Japanese 2	2		
Advanced Japanese 3	1		
Advanced Technology at Tokyo Tech	2		
Master's Thesis	1		

Name of the office at your university which handles the transfer of credits (in Registrar's Office): _____

Q1b. Please describe the reasons for not being recognized, if known:

Q1c. Why did you not apply for recognition? (Check all that apply.)
☐ I did not intend to transfer the credits earned at Tokyo Tech from the beginning.
☐ There were no credits offered in the Tokyo Tech Summer Program that could be recognized at my university.
☐ I did not apply for recognition because the credit(s) was/were graded on a pass/fail basis, and this could have a negative effect on my overall academic record.
☐ Other: _____

Q2. Was your research at Tokyo Tech recognized as credit-bearing coursework at your university?
☐ My research was recognized as credit-bearing coursework at my university (such as "independent study" or so on "independent"). --- go to Q2a
☐ I did not apply for recognition.
☐ I applied for recognition, but not recognized. (Please describe the reasons for not being recognized, if known: _____)

Q2a. How did your university recognize your research results (for example, by giving university credit, by counting it as an "independent study" or "independent study" with no credit)?

Title and number (in SEI/ISS) of course recognized at your university	Number of credits or units transferred at your university	How your research was assessed
		<input type="checkbox"/> Documents submitted/signals by Tokyo Tech advisor <input type="checkbox"/> Number of hours of research work at Tokyo Tech <input type="checkbox"/> Passed an examination at home university <input type="checkbox"/> Other: _____

Name of the office at your university which handles the transfer of credits (in Registrar's Office): _____

Q3. Do you think your research will have a positive impact on your work toward your degree?
☐ My research will have a positive impact on my work. --- go to Q3a
☐ My research will not have a positive impact on my work. --- go to Q3b

Q3a. In which ways do you think your research will have a positive impact on your work at your university? (Check all that apply.)
☐ My research at my university will be enhanced.
☐ My research results from Tokyo Tech will be reflected or incorporated into my degree thesis.
☐ My research results from Tokyo Tech will be recognized as practical experience, which is required for the conferral of my degree.
☐ My research results from Tokyo Tech will be referred to in the document(s) submitted to the examination committee for the conferral of my degree.
☐ Other: _____

Q3b. Please describe why you think your research results will not have a positive impact on your work at your home university:

Q4. Could your research at Tokyo Tech be recognized at your home university in an appropriate manner or have a positive impact on future research at your home university if Tokyo Tech would issue additional documents? If so, please describe the kind of documents which are needed from Tokyo Tech.

Any additional comments

Thank you for your cooperation.

Please return by November 3, 2012. If you have any questions, please feel free to contact:
 Daisuke Kudo, Professor, University Management Center, Tokyo Institute of Technology
 E-mail: kudo@uim.titech.ac.jp

5. 「日中韓先進科学技術大学教育環」における質保証の取り組み (4) プログラムの実施を通して明らかとなった利点

▶ 様々な交流形態における円滑な単位の相互認定

- ・ 3大学の教育システムは共通性が高いことから、単位に関する基本的な考え方に差異は見られず、学部学生の短期間の交流から、修士・博士の学位取得に向けた履修まで、様々な交流形態において円滑な単位の相互認定が可能であることが明らかとなっている。

＜この背景には、例えば1時間の講義を1セメスター受講することにより1単位を付与するといった東アジアの大学に共通したカリキュラムの構造がある(米国の多くの大学とも高い共通性がある)＞

▶ 特に学部学生を対象とした研究体験型プログラムの有効性

- ・ 研究体験型のプログラムは、双方の大学の指導教員が研究計画立案の段階から指導を行うなどしており、十分な研究経験のない学部学生に対しても、将来の研究の発展に向け、貴重な経験と強い動機づけを提供している。

5. Tokyo Tech Efforts toward Quality Assurance under the “TKT CAMPUS Asia Consortium”

(4) Merit Found through the Implementation of the Program

- ▶ Mutual recognition of credit in various forms of exchanges
 - Educational systems of the three universities have common educational aspects in many ways, and mutual credit recognition is possible in various forms of exchanges such as short-term undergraduate exchanges and graduate degree programs.
 <Many universities in East Asia (and also in the U.S.), have similar curriculum structure, in which one credit will be given by taking one hour lecture course for one semester.>
- ▶ Effects of research experience program for undergraduate students
 - Under the research experience program, faculty members in both universities supervise the students from the planning stage. This gives precious experience and strong incentive to the students without much research experience, which is very important for their future research.

5. 「日中韓先進科学技術大学教育環」における質保証の取り組み

(5) 課題とその解決への取り組み

- ▶ 3大学の教育理念や制度の細かな相違に起因する単位認定における課題
 - 3大学の単位制度は共通性が高いが、各学科、専攻等におけるカリキュラムや認定手順の相違は、経験を蓄積することによる解決が必要
- ▶ 特に研究成果に対する評価の考え方や方法の相違
 - 研究成果の評価については、大学や専攻により異なる面がある
- ▶ 合同学位プログラム実施に際しての学位授与に関する制度上の差異
 - 学位の授与については、各大学において異なる制度に基づき行われているため、合同学位プログラムへの展開において十分な検討が必要

単位認定と質の保証：米欧の先導的大学の事例

米国およびヨーロッパのTiROPの相手大学においては、自大学のみで充足する質の高いカリキュラムを構築し、他大学で取得した単位を認定することは厳格にしている大学も多い(換言すると安易な単位の相互認定は、質の低下をもたらすリスクがあると認識されている)。しかしそのような大学でも、研究を中心とした学生の国際交流については積極的であり、TiROPプログラムも高く評価されている。

TIERプログラムは、必ずしも相互に認定する単位数を増やすことを目指すのではなく、研究に重点を置いた質の高い交流を行うことを重視しプログラムを推進している。

5. Tokyo Tech's Efforts toward Quality Assurance under the "TKT CAMPUS Asia Consortium"

(5) Issues and Tokyo Tech's Efforts to Solve them

- ▶ Issues related to credit recognition which are generated from the differences of educational policy and other rules
 - The three universities have common credit systems, but each department has its own curriculum and credit recognition system. The differences shall be minimized by accumulating experiences.
- ▶ Different way of thinking concerning the evaluation of research results
 - Each department has its own way of evaluating research results.
- ▶ Different degree conferral system in implementing joint degree program
 - Each university has its own degree conferral system, and further consideration is necessary.

Credit Recognition and Quality Assurance: Cases of Leading Universities in the U.S. and Europe

TiROP partner universities in the U.S. and Europe have very high quality assurance systems within their universities and have very strict policy on recognition of credit obtained at other universities (This means that such universities recognize that easy recognition of credit will lead to degradation the quality of education). However, such universities are very active in involving in international research oriented educational programs and TiROP is highly evaluated.

In implementing the TIER program, Tokyo Tech will not pursue only to increase the number of mutually recognized credits, but will make every effort to offer high-quality research oriented programs.

おわりに:「日中韓先進科学技術大学教育環」および「TiROP」の実施をととして構築されることが期待される国際交流の枠組み

- ▶ 東アジアの理工系大学間における、質が保証された交流の枠組みの構築、およびその枠組みの、米国やヨーロッパ等の理工系大学への拡大
- ▶ 国際的な大学間協力を通して、学部レベルから学生が研究室に所属し、学位(修士、博士)の取得に向け研究を行う枠組みの構築

Expected Framework of International Exchanges through the Implementation of “TKT CAMPUS Asia Consortium” and “TiROP”

- ▶ Establishment of quality assured framework of exchanges between the universities in science and technology in East Asia, and its expansion to the universities in the U.S. and Europe
- ▶ Establishment of the framework of enhancing the students' research experiences at labs toward graduate degrees, which will be achieved through international collaborations of universities.

