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Press Release

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The start of a “Comprehensive Analysis Informatics Course” at the Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies, the University of Tokyo for fostering human resources in a ubiquitous information society

The Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies at the University of Tokyo will begin a new course, the “Comprehensive Analysis Informatics Course” from the academic year 2006. This Comprehensive Analysis Informatics Course will target people who have mainly studied the basics of computer science and computer networking through education and business in fields such as information science/engineering, electrical/electronic engineering and communication engineering, and provide interdisciplinary professional training for analysis informatics for analyzing large amounts of digital information based on computer science. Specifically, in this course, for instance, the students will practice methods for finding vulnerabilities and defense measures in computer network systems based on pieces of various types of information over a computer network, and will analyze vast amounts of digital information acquired from observation satellites, such as the Synthetic Aperture Radar satellite that is capable of measuring the height and width of objects on the ground in a wide area at a resolution of a few dozen cm regardless of the climate. The course will cultivate personnel interested in such technical issues which are deeply related to modern society and can take responsibility for public policies and business development as CIOs (Chief Information Officer) in the real world as well as researchers in the fields of analysis informatics and computer science.

Since this course is scheduled to be established in April 2006, the entrance examination will

[Information 13]

be conducted within this academic year. Guidelines and information on the examination for examinees are distributed via the Internet from the beginning of November this year. Additionally, an information session for the course will be held at the TRONSHOW2006 on December 14th. Please visit the web site of the Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies at the University of Tokyo for information on the entrance examination, etc.

We would appreciate it if you could publicize the establishment of this new course and participate in the information session.

Information

Outline of Comprehensive Analysis Informatics Course, Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies at the University of Tokyo

1. Purpose of the Establishment

Recently, as IT infrastructures have improved, it has become possible to obtain large amounts of varied digital information and it has become a global trend to analyze such digital information from a broad perspective and various angles (Analysis Informatics). This field of study is applied in a wide variety of fields such as the academic field, including agriculture, fisheries, environmentology, resource sciences, sociology and archeology, and measures of national-level, including disaster relief, rescue from distress, social security and the management and maintenance of the national and social infrastructure. Furthermore, it covers the establishment of information security policies and control of cyber space, such as the Internet.

It is strongly desirable to foster human resources who are capable of analyzing such information and have the ability to use this new information in government policies or in the business development of private companies, in other words, human resources who are capable of analyzing information and utilizing it in a high-level decision-making process in order to increase the social infrastructure related to information communication and also to develop technologies to acquire and distribute information to improve the quality of people's life, revitalize economic activities and realize the safety and security of the nation.

However, although there is a need for human resources who can analyze and assess vast amounts of information and act based on the results, a mission achievement-type interdiscipline, i.e. integrating, analyzing and assessing information and developing a strategy to handle such information, which needs extensive knowledge has not been systemized and academized, and the current situation has been left to personal and experience-based skills. Especially in Japan, there is an urgent need to apply advanced technologies towards measures for the safety and security of the nation; disaster relief after earthquakes and typhoons, etc. and it is necessary to immediately systemize and academize information applications and foster specialists with skills to achieve such tasks in parallel with conducting fundamental studies and developing information communication technologies.

Therefore, the University of Tokyo will establish a new course, the Comprehensive Analysis Informatics Course, at the Interfaculty Initiative in Information Studies, Graduate School of Interdisciplinary Information Studies in order to foster human resources who have a

high-level capability to analyze and utilize information based on knowledge in various fields and who are capable of taking responsibility for government policies and the business development of private companies as CIOs (Chief Information Officer). In order to achieve this goal, in this course, research on the basics of analysis informatics to process, analyze and assess a large amount of digital information will be conducted and interdisciplinary professional training regarding analysis informatics will be provided.

2. Candidates

For the Master's course, we are mainly expecting students who studied the basics of computer science and computer networking in specialized courses in fields, such as information science/engineering, electrical/electronic engineering and communication engineering. Additionally, people who have received such professional training and have experience working in the field for which they have received education would be candidates.

For the Doctorate course, we are expecting students who have learned the basic knowledge on analysis informatics and are aiming to become researchers in the field of analysis informatics or to take leadership roles in this field.

3. Education and Research Details

The educational policy of this course is to foster human resources who could become CIOs in various organizations in Japan, such as companies, local governments, in other words, people who are qualified to process and analyze large amounts of information and have a perspective for the social and cultural contexts based on their science and technological knowledge.

(1) Master's Course

In the Master's course, assuming that the students have studied high-level computer science, education regarding **diagnosis**, integration, analysis and evaluation of vast amounts of varied information, comprehensive design of both information systems and social systems, and how to handle information policies and information technology strategies as a CIO of an organization will be provided with an aim to producing human resources who are highly capable of putting their knowledge into practice with both an interdisciplinary and international approach. It is expected that students who complete the course will work in various fields in government, in which a quick response is required to emergency situations, such as disasters and distress, in governments and IT companies which are responsible for information policies, as well as becoming researchers in the fields

[Information 13]

of computer science and analysis informatics.

(2) Doctoral Course

In the Doctoral course, assuming that the students have learned the basics of computer science and analysis informatics, students will receive training to learn higher-level analysis informatics and will join in the world leading research with the lecturers of this course, and will take their first step as researchers.

It is expected that the students who complete this course will become researchers in the field of analysis informatics and be active mainly at universities, national laboratories, and fundamental research laboratories of private companies, etc.