Certified Evaluation and Accreditation Results for Professional Graduate Business School

Department of Industrial Technology and Innovation, Graduate School of Engineering, Tokyo University of Agriculture and Technology



Basic Information of the Institution	
Ownership: National	Location: Tokyo, Japan
Accreditation Status	
Year of the Review: 2019	
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The Department of Industrial Technology and Innovation, Graduate School of Engineering, Tokyo University of Agriculture and Technology (hereinafter referred to as the "Department"), has made it as its purpose to train engineers, researchers, and managers capable of strategically providing industrial and technological ideas. A distinctive feature of the Department is that it offers, in line with its unique purpose, a curriculum consisting of eight possible combinations produced by two learning programs (Technology Development Practical Program intended for new graduates, and the Human Resource Development Program for Research Management intended for working students) and four specialized courses (the Bio Industrial Technology Course, Environment and Materials Industrial Technology Course, Advanced Machinery Industrial Technology Course, and Information Processing Industrial Technology Course). Regarding this curriculum structure, the Department presents multiple learning models that correspond to the general attributes of students in the freshman orientation.

Subjects consist of lecture subjects ("Common Courses") and "Research Project" subjects, in accordance with the curriculum design and implementation policy (curriculum policy). It is commendable that the Department adopts a system whereby each pair of a main supervisor and sub-supervisor in charge of providing guidance in "Research Project" consists of a practitioner faculty member and researcher faculty member who can supplement each other. Moreover, "Research Project" is carried out by the main supervisor through direct guidance or in a seminar-style, and, as indicated by the graduate questionnaire, student satisfaction is generally high. In addition, a unique endeavor of the Department is that it provides practical subjects such as Introduction to Grant Proposals and Applied Exercise for Grant Proposal that involve applying for or winning a research development funding.

The Department received a favorable evaluation in the National University Corporation Assessment for the education for the second mid-term target period (April 1, 2010 to March 31, 2016). This is a notable achievement in relation to the fact that the Department of Technology Risk Management, Graduate School of Technology Management, which was established as an independent graduate school in 2005, was incorporated into the Graduate School of Engineering (nine departments in total) as a department in 2011 in accordance with a university-wide policy.

However, although the Department has the distinctive features described above, several issues must be pointed out.

First, the Department has a problem in its curriculum structure. Compulsory subjects are currently limited to "Research Project" subjects and Management of Technology, which is an omnibus-lecture given by all practitioner faculty members. In the Progress Report Consideration Results issued after the AY2014 certified evaluation and accreditation, it was pointed out that the Department only provided "Research Project" as compulsory subjects designed to provide the basic knowledge and skills that all graduates needed to acquire, and the report requested the Department to improve the curriculum. As a result, the Department added Management of Technology as a compulsory subject for all new enrollees from AY2019 as a measure to improve the curriculum. However, the curriculum is still designed in a way that enables students to complete the program by only learning some of the basic core knowledge in technology management that they should master. Thus, the actual situation has not changed. Therefore, further improvement is needed in order to enable students to acquire a broad-range of management-related basic knowledge.

According to its mid- to long-term vision and strategy, the Department intends to implement education and human resource development from a global perspective. However, no organizational efforts have been made in this respect. In the current situation, global perspectives are only incorporated into class content at the discretion of individual faculty members. Students are recommended to actively give oral presentations or poster presentations in international conferences and participate in exhibitions, but this only applies to some students. Therefore, subjects aimed at developing global perspectives and knowledge should be incorporated into the curriculum in a clear manner.

Next, there is the problem of the mid- to long-term vision. In order to achieve its unique purpose, the Department has established a mid- to long-term vision and strategy. However, the strategy lacks concreteness, and an implementation plan has not been presented. Therefore, the Department should promptly review its mid- to long-term vision and strategy with regard to the consistency and suitability thereof and put the strategy into practice.

Next, when the faculty is viewed from the perspective of "bridging between theory and practice," which is the main purpose of the professional degree course, it is apparent that all eight researcher faculty members who are full-time faculty members of the Department also serve as faculty members in other departments of the Graduate School of Engineering as well as the Faculty of Engineering, and there are more researcher faculty members than practitioner faculty members in charge of management-related subjects. Therefore, in view of ensuring the quality of education in the professional degree course, the Department should assign a certain number of management-related researchers as faculty members dedicated to the professional degree course. The Department is requested to consider this issue as an issue toward the further realization of its basic mission as a professional graduate business school.

In its admission policy, the Department states that it accepts both new graduates and working students. However, the enrollment status of the past few years shows that new graduates constitute the majority of new enrollees. The Department has made efforts to increase working students, such as holding consultation meetings by practitioner faculty members each year, and the percentage of working students among new enrollees in AY2019 has slightly increased. However, this is still insufficient. The Department needs to clarify the reason why not many working students enroll, and implement measures accordingly. In addition, the Department needs to make creative efforts so that information reaches to potential enrollees. In order to widely disseminate information on the activities carried out according to the Department's unique purpose, faculty members should disseminate more information through conferences and seminars, and the Department should put more effort into promoting its strengths, distinctive features, curriculum, and faculty structure to companies.

Finally, going forward, we hope that appropriate measures are taken in response to the matters noted herein, in order for the Department to keep on developing as a professional graduate business school (department) focusing on industrial technology.