

## **Graduate School of Management Department of Management of Technology (MOT)**

### **Diploma Policy**

The Department of Management of Technology (professional degree program) provides an education that promotes the practical fusion of science and technology (integrating science and engineering) with management. The aim is to cultivate highly specialized professionals with advanced practical expertise, ethical standards, the ability to contribute to society, and a global perspective. These individuals will be capable of responding rapidly and innovatively to the dramatic changes in society (including industry) and leading societal transformation. Students that enroll in the program for two years or more, acquire the following knowledge (wisdom) and abilities, and earn the forty credits the department requires will be recognized as having completed the program and awarded the degree of Master of Management of Technology (professional).:

1. (Specialized knowledge) Advanced practical expertise in technology management and related fields.
2. (Problem identification) The ability to independently identify and grasp issues related to innovation from both theoretical and practical perspectives.
3. (Cause analysis) The ability to analyze and elucidate the causes and mechanisms of identified issues related to innovation.
4. (Solution design) The ability to propose systematic solutions for issues related to innovation.
5. (Practical execution) The ability to generate innovations and play a proactive role in professional settings by applying their advanced practical expertise, capabilities and general education—as well as maintaining high ethical standards and a global outlook—through the practice of technology management that bridges science, technology and the market.

### **Curriculum Policy**

The Department of Management of Technology (professional degree program) is for students with diverse backgrounds. The goals are to foster highly specialized professionals capable of driving innovation who possess a global perspective and high professional ethics, through the practical fusion of science and technology (integrating science and engineering) with management. To achieve these goals, we collaborate with the Tokyo University of Science Graduate School Curriculum Collaboration Council, responding to social needs and seeds. We also develop and implement curricula that enable the creation of individualized study programs tailored to each student's career path and capabilities, so that they can achieve their learning objectives.

- (1) Based on the program's human resource development aims, the department established eight areas of education—developmental knowledge, innovative knowledge, entrepreneurial knowledge, managerial knowledge, industrial knowledge, economic knowledge, financial knowledge, and governance knowledge—to guide the development of courses. Courses are categorized into foundational courses, specialized courses, social collaboration courses, and practical courses, and are allocated effectively for the organization and implementation of the

curricula.

- (2) The foundational courses provide the foundation necessary for integrating technology and management, and support study and practice in the specialized courses, social collaboration courses, and exercise courses.
- (3) The specialized and social collaboration courses are arranged to ensure balance across the eight areas of education, which allows students to progressively acquire advanced, up-to-date practical expertise aligned with the diploma policy, ensuring effective and focused acquisition of knowledge in one or more of the eight areas.
- (4) The practical courses offer the subjects mentioned below to help students achieve their individual goals based on the program's human resource development aims and acquire the ability to play a proactive role both domestically and internationally as highly specialized professionals with a global perspective.
  - A In MOT Seminar 1–4 and the MOT Seminar Exercise, students, based on the specialized knowledge acquired through the foundational, specialized and social collaboration courses and under the supervision of academic instructors with practical experience, identify their individual research topics through the theorization of practice, corporate research activities, various interviews with corporate executives and other professionals, etc. They then analyze underlying causes, formulate solutions, and evaluate how to put them into practice, cultivating comprehensive abilities. As the culmination of these activities, they prepare a final product (graduation paper) in accordance with their individual research topic.
  - B In the CXO and Entrepreneur Case Study, students attend presentations by executives, entrepreneurs and program alumni, then analyze and examine these presentations as case studies. They develop an understanding of how differences in background lead to differences in thinking and knowledge, and engage in discussion, thereby cultivating their own abilities and insights related to problem identification, cause analysis, solution design, and practical execution.
- (5) The exercise courses are designed to cultivate the students' ability to play a proactive role both domestically and internationally as highly specialized professionals with a global perspective.

## **Admissions Policy**

The Department of Management of Technology (professional degree program) adheres to the university's founding spirit and meritocratic tradition, as well as its educational and research philosophy. We broadly seek individuals of outstanding potential, primarily working professionals from technology-related industries who have completed a bachelor's, master's or doctoral program and possess practical experience or equivalent distinguished achievements. We place an emphasis on ensuring diversity, regardless of their field of academic study or career path, through a variety of selection methods.

Types of abilities required and the method of evaluation of those abilities in each entrance examination:

### **(General entrance examination)**

With an emphasis on ensuring diversity, applicants are selected through application screening, interviews and the like, irrespective of their academic field of study. Candidates must possess practical knowledge and other specialized capabilities suited to the characteristics of this department. They must also have excellent capabilities in analysis, logic, thinking and creativity, management and communication, and have a firm grasp of the program's human resource development aims.

### **(Special admissions based on corporate recommendation)**

We also select applicants recognized as outstanding by companies or professional organizations that support the goals and policies of this program through document screening, interviews and similar processes. Candidates must demonstrate advanced practical knowledge and other specialized skills as well as capabilities in analysis, logic, thinking and creativity, management and communication, and have a firm grasp of the program's human resource development aims.