# University Accreditation Results (Results for Certified Evaluation and Accreditation for university)

Tokyo University of Science



Basic Information of the Institution

Ownership: Private

Location: Tokyo, Japan

Accreditation Status

Year of the Review: 2013

Accreditation Status: accredited (Accreditation Period:April.01.2014 – March.31.2021)

# Certified Evaluation and Accreditation Results for Tokyo University of Science

# **Notable Strengths**

#### Faculty and faculty organization

• It is commendable that Tokyo University of Science (hereafter, the University) uses an innovative evaluation method to enhance the education and research activities of the University as a whole. Using "RIDAI (Rikadai Integrated Database of Academic Information)," the researcher information database developed by the University, the University has evaluated its faculty members in terms of education, research, and service over thirty-five years. Based on the scores of specific evaluation items, it gives points for outstanding achievements. The University informs each faculty member of the results of the evaluation, and uses the results as a reference for regular pay increases and or special recognition.

#### Educational content, methods, and outcome

- It is commendable that the University emphasizes liberal arts education, human science education, and the teaching of English, and that these efforts have produced successful results. The Faculty of Industrial Science and Technology implements "all-around liberal arts education" and freshmen are sent to the residential school in Oshamambe Campus. This nurtures humanity and creativity and exposes students to the natural world; it also cultivates students' cooperation and spirit of independence through residential life. In addition, the University's emphasis on human science and small-group instruction of English demonstrate successful results such as an increase in the number of applicants for the University-sponsored one-year study abroad program at the University of California, an increase in the number of successful competitors for the essay contest sponsored by the Parents' Association of the University, and improved performance of students who have not taken basic subjects in math and science education.
- It is commendable that the University has prepared a system of constant communication with graduate students, and has provided opportunities to listen to their requests on a regular basis. In the Graduate School of Mathematics and Science Education, an information exchange meeting with the Chair, program coordinators, and a graduate student representative of each course is held regularly. In light of the student feedback on issues pertaining to the graduate school, the Graduate School Meeting and FD (Faculty Development) Committee have examined plans for improvement.

#### Social cooperation and contribution

• It is commendable that the University has made contributions to society for more than ten years through industry-academia collaboration and lifelong education. By setting up the Technology Licensing Organization (RIDAI SCITEC) as the major actor, the University has returned its research results to society through many commissioned research projects as well as collaborative research. In addition, the University has been actively involved in collaborative activities, for example in its introduction of technology and intellectual property of different fields and boundary areas through the industry-academia-government collaboration model proposed by the Ministry of Economy, Trade, and Industry (METI), as well as in its contributions to the promotion of global standards. Also, through the initiative of the Steering Committee of the Center for Extension Education, the University has become involved in lifelong learning for the general public. It has been part of the planning and operation of a long-lasting open lecture series since 1985, has carried out science and technology lectures intended for elementary and junior-high school students, and has also promoted science education activities and the revitalization of local communities in collaboration with Katsushika Ward, Tokyo.

• It is commendable that the following efforts initiated by the University are making great social contributions. In terms of lifelong education and widening participation, the Research Center for Math and Science Education has conducted an analysis of high school students' competencies in mathematics, and the University has also implemented "Madonna Science Project," a program adopted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Science and Technology Agency (JST) to encourage female junior-high and high school students to select science and technology as their future area of study.

## Administration and finance

• It is commendable that the University fosters competent administration staff by offering training abroad. In order to train administrative staff that can support the globalization of university education, the University implements assigned training abroad including a residence in the San Francisco office, and sends two or three staff members overseas for six months every year. Returning staff work as student supervisors or in public relations with the parents and they make good efforts to achieve the purpose of the administration, "to build a 'capable organization' that contributes to the development of the University."

## **Suggestions for Improvement**

## Faculty and faculty organization

- In order to improve the quality of its teaching staff, the University as a whole only encourages faculty members to attend various seminars. Some faculties and graduate schools have made their own efforts, but these are not systematic. The University's efforts to improve the quality of teaching staff are not sufficient. This should be improved.
- Regarding the criteria for hiring graduate school faculty members, the University as a whole defines such hires in the "Regulation for the Standard Eligibility Criteria for the Teaching Staff of the Graduate Schools of Tokyo University of Science." However, with the exception of the Graduate School of Engineering, graduate schools do not clearly state hiring criteria of their own. Each graduate school should define its own criteria.

#### Educational content, method, and outcome

- The curriculum of the doctoral programs of the Graduate School of Science and the Department of Pharmacoscience in the Graduate School of Pharmaceutical Sciences do not include appropriate coursework. Considering the purpose of the credit-based degree-granting system, the curriculum should include appropriate coursework.
- The maximum number of credits students can register for per year has been set high at 60 for freshmen after 2011 in the Department of Medicinal and Life Science in the Faculty of Pharmaceutical Sciences, at 55 for freshmen in the Faculty of Industrial Science and Technology, and there is no limit for sophomores in the Department of Applied Electronics, the Department of Materials Science and Technology, and the Department of Biological Science and Technology in the Faculty of Industrial Science and Technology. These situations should be improved in accordance with the purpose of having a credit system.

# Enrollment

• In 2013 the ratio of enrolled students to the student enrollment cap is high at 1.20 in the Department of Mathematics, at 1.21 in the Department of Mathematical Information

Science, at 1.20 in the Department of Applied Physics in the Faculty of Science Division I, and at 1.30 in the Department of Architecture in the Faculty of Engineering Division II. These situations should be improved.

## **Area of Serious Concern**

## Enrollment

• In 2013, the ratio of enrolled students to the student enrollment cap was high at 1.26 in the Department of Information Sciences, at 1.22 in the Department of Architecture and Building Engineering, at 1.25 in the Department of Industrial Administration, and at 1.20 in the Department of Civil Engineering in the Faculty of Science and Technology. These situations need to be corrected.