**University Accreditation Results**

**(Results for Certified Evaluation and Accreditation for University)**

# Okayama University of Science

| Basic Information of the Institution | |
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| Ownership: Private | Location: Okayama, Japan |
| **Accreditation Status** | |
| Year of the Review: 2020<br>Accreditation Status: accredited （Accreditation Period: April.1.2021 – March.31.2028） | |

# Certified Evaluation and Accreditation Results for Okayama University of Science

## Overview

Okayama University of Science holds “To draw out each and every youth’s abilities to their maximum potential, and to educate individuals to contribute to society as skilled professionals and as members of their communities” as the founding mission shared among the schools of Kake Educational Institution. Likewise, the same institution has clearly proclaimed “Kake Educational Institution provides an ‘opportunity for education’ where everyone can learn throughout their lives, nurtures interest in science via education, and mass produces human resources capable of contributing to world peace by cultivating a harmonious character and global-mindedness” as its mission statement. Based on these missions, the purpose of its faculties and graduate schools have been established.

In order to achieve its founding mission and purpose, the University formulated Okayama University of Science Vision 2026 (hereinafter referred to as “Vision 2026”) as a mid- to long-term plan in 2016, and has been striving to enhance its education and research activities while verifying the results of its action plan (five-year mid-term objectives and plan). To that end, the University established the University-Wide Assessment and Planning Committee as a University-wide internal quality assurance organization, and it takes charge of the formulation and promotions of University-wide policies and plans, the implementation of checks and reviews, and the formulation of improvement plans. In addition, the Faculty Assessment and Planning Committee is responsible for checks and reviews as well as improvements at the level of the undergraduate and graduate divisions, and it tends to the internal quality assurance framework. Under this system, the University verifies the degree of attainment and results of the operational plans of a single academic year based on the mid-term plan, and makes a cycle leading to the improvements and progress of those results in the following academic year function. Moreover, the University Accreditation Committee, whose members include external experts, members of the University-Wide Assessment and Planning Committee and members of the Faculty Assessment and Planning Committee, objectively verifies the effectiveness and appropriateness of the internal quality assurance system.

In particular, with regard to education, the University established the Committee for the Promotion of University-Wide Educational Reforms in 2017 as an organization that promotes quality assurance of education throughout the University, and has been

constructing a system that makes PDCA cycles function by assigning “educational developers”—faculty members who assume the central role in formulating educational policies, designing curricula, and improving educational programs—to each department. Under this system, the Educational Development Center—which was placed within the Organization for Educational Promotion, the University-wide organization involved in educational planning and management—checks the sequential and systematic nature of curricula in addition to establishing the degree award policies (diploma policies) and curriculum design and implementation policies (curriculum policies) in each degree program.

With regard to the measurement of educational outcomes, the University established the Policy on Assessing Learning Outcomes (Assessment Policy), and has been multilaterally assessing the educational outcomes of students that are indicated in the degree award policies using direct and indirect assessments in each degree program. Among which, the fact that “educational developers” take the lead in implementing “curriculum assessment and check” and “curriculum consulting” to ascertain how well students have acquired the learning outcomes and have actually been tying them to educational improvements can be described as an excellent initiative.

Furthermore, with regard to social cooperation and contribution, the University established the Organization for Research Development and Outreach to prepare a framework for promoting research that contributes to community development, and the fact that it has been actively endeavoring in social cooperation and contribution activities while ascertaining the needs of the local community is highly commendable.

However, there are several issues that should be addressed. Concerning education, inadequacies are evident in the curriculum design and implementation policies of some undergraduate divisions and departments, and we would like to see the University make improvements considering the fact that measures to substantiate credits are insufficient. Also, some departments that have failed to secure enough students and the ratio of student enrollment to the student enrollment cap is low can be found. Furthermore, in the 2020 entrance examination for prospective students with recommendations of the Department of Veterinary Medicine at the Faculty of Veterinary Medicine, considering the fact that there were serious problems in its operational framework—such as the process for admission decisions having not been clearly indicated in the regulations and the data concerning the entrance examination having not been securely managed in addition to the fact that the interview examinations were conducted under vague evaluation criteria—we would like to see the department correct course so that it suitably improves its operational framework and methods for fairly and equitably conducting its

selection of prospective students.

At Okayama University of Science, an internal quality assurance system was constructed on the opportunity of the formulation of Vision 2026, and a system for University-wide educational management not divided by department has been developed. Hereafter, we hope that the University further endeavors in the quality assurance of its education in addition to solving the aforementioned issues through the effective usage of said system.

**Notable Strengths**

*Educational Program and Learning Outcomes*

- In order to improve its curricula, the University established the Policy on Assessing Learning Outcomes (Assessment Policy), and under a system of cooperation between the Educational Development Center and "educational developers," it has been conducting "curriculum assessment" in which each department and major self-assesses its curricula, and then the "educational developers" of other departments and majors evaluate whether the results of those self-assessments are valid. Moreover, it is commendable that the University has been actively promoting its progressive initiatives for improving its curricula and has indeed been tying them to improvements, such as by conducting "curriculum consulting" in which it directly listens to feedback from future graduates concerning its curricula.

*Social Cooperation and Contribution*

- Based on a vision for social cooperation and contribution, the University established its mid-term objectives and plan as well as the matters it ought to focus its endeavors upon, and the Organization for Research and Development and Outreach has been actively and continuously developing various activities such as holding a "Science Museum," etc. while cooperating with the Research Support, such as a revitalization project for tourism with institutions including the local government and a promotional project for local sports. In particular, as to its implementation of joint research projects with the local government in order to return the fruits of its research, it is commendable in light of the policy of the University that it has been endeavoring to reinforce cooperation through interfacing with the local government and entrepreneurs at forums such as OUS (Okayama University of Science) Forum in

addition to understanding the needs of the local community through regular interactions.

**Suggestions for Improvement**

*Educational Program and Learning Outcomes*

- Improvements are needed as the curriculum design and implementation policies do not indicate the basic approach to curriculum design in the Graduate School of Engineering (Doctoral Program) and curriculum implementation in the Faculty of Education.

- Although the maximum number of credits that students can register in a year has been set in the Faculty of Science and the Faculty of Biosphere-Geosphere Science, the University permits students to register credits in excess of the maximum number with regard to such subjects as those concerned with acquiring qualifications—for example, subjects related to the teaching profession. For this reason, there are a considerable number of students who actually register for many credits in excess of the limit. Although considerations for improvement are being promoted mainly by "education developers," improvement is required in light of the purpose of the credit system as currently the measures to substantiate credits are inadequate.

*Student Enrollment*

- With regard to the ratios of student enrollment to the student enrollment cap, improvements are needed so that student quotas are thoroughly implemented in graduate schools as the Master's Program of the Graduate School of Science is low at 0.47, the Doctoral Program of said graduate school is low at 0.21, and the Master's Program of the Graduate School of Informatics is low at 0.42.

**Recommendations**

*Student Enrollment*

- With regard to the average ratios of freshman enrollment to the freshman enrollment cap for the past five years, the Department of Chemistry at the Faculty of Science is

low at 0.85, the Department of Applied Physics at said faculty is low at 0.78, and the Department of Biomedical Engineering at the Faculty of Engineering is low at 0.80. Moreover, with regard to the ratios of student enrollment to the student enrollment cap, we would like to see the University correct its course so that student quotas are thoroughly implemented in faculties as the Faculty of Science is low at 0.87, the Department of Chemistry at said faculty is low at 0.81, the Department of Applied Physics at said faculty is low at 0.73, the Department of Biochemistry at said faculty is low at 0.86, the Department of Life Science at said faculty is low at 0.80, the Department of Applied Chemistry and Biotechnology at the Faculty of Engineering is low at 0.84, the Department of Intelligent Mechanical Engineering at said faculty is low at 0.88, and the Department of Biomedical Engineering at said faculty is low at 0.69.

- Concerning the selection of prospective students, in the entrance examination for prospective students with recommendations (A Method) of the Department of Veterinary Medicine at the Faculty of Veterinary Medicine, interview examinations were conducted under vague evaluation criteria that could have given the interviewers leeway for making arbitrary judgments, and admission decisions are not being implemented based on a process clearly indicated in the regulations, such as organizations not indicated in the regulations becoming involved even in the process for admission decisions. Moreover, the department also does not securely manage the data concerning the entrance examination, and we would like to see it correct course as we cannot say that it is suitably improving its operational framework and methods for fairly and equitably conducting its selection of prospective students.