

Faculty of Science and Technology, Department of Mechanical Engineering	
Diploma Policy	<p>The Department of Mechanical Engineering approves the graduation of and confers a bachelor's degree (engineering) to students who are enrolled for at least four years, earned the department's required minimum number of credits (124), and meet the following requirements ((1), (2), and (3)) in accordance with our founding spirit and the department's objectives in developing human resources.</p> <p>(1) The ability to make judgments from a broad perspective, based on the fundamental educational background and strong sense of ethics in fulfilling one's social responsibility as a mechanical engineer.</p> <p>(2) The ability to apply appropriate technology to the needs of the times by using basic specialized academic knowledge and technical skills as a mechanical engineer.</p> <p>(3) The ability to identify problems as an independent engineer, learn actively to explore the problem, and collaborate with others to develop successful solutions that benefit society at large.</p>
Curriculum Policy	<p>The Department of Mechanical Engineering implements the following curriculum to accomplish educational goals and nurture students with the quality and ability stated in the diploma policy.</p> <p>(1) Liberal Arts Education, comprising Foreign Language, Science of Physical Education, Humanities, Social Science, and other liberal arts subjects as well as Basic Science and Technology Subjects such as Mathematics, Physics, Chemistry, and Ethics for Engineers. These subjects are crucial and help students to cultivate a broader sense of understanding in humanity, global perspective, and self-expression.</p> <p>(2) Specialized Education comprises a framework that guides students from basic learning to application, progressing through groups of common courses in four specific areas (Heat and Fluid, Materials and Strength, Design and Manufacturing, and Mechanics and Control), to enrich the content of the curriculum and help students develop the basic academic knowledge required for mechanical engineers. In addition, design/practice lab subjects, such as Workshop Technology and Fundamentals of Machine Design, are included in the curriculum to enhance students' manufacturing expertise.</p> <p>(3) Introductory Mechanical Engineering and Workshop Technology, both first year courses, serve to build motivation and hands on experience to the educational process. Fundamentals of Machine Design, Machine Design I/II, and Mechanical Engineering Laboratory, courses extending from First year through third year, incorporate elements of active learning to nurture students' initiative and independence. The Mechanical Engineering Laboratory and the Machine Design and Manufacturing courses that students take in the third year, meanwhile, require students to use their basic specialized academic knowledge and skills to collaborate with others on solving practical problems. Graduation Research, which students conduct in their final year, requires students to identify problems as independent engineers and work on the specific solutions. Through this educational process, students establish a strong footing for learning actively, seeking mutual understanding, and exchanging opinions with others throughout their life time.</p> <p>(4) The Department of Mechanical Engineering enforces strict grading policies and approves credits in accordance with syllabus content and uses individual student grades for the purposes of academic guidance and follow up. The Department also has a system under which lead faculty members and undergraduate research advisors, etc., provide tailored individual guidance to allow students to study according to their individual progress and future goals.</p>
Admission Policy	<p>The Department of Mechanical Engineering admits applicants who understand the diploma policy and have acquired the following measures through prior education.</p> <p>(1) Students seeking admission via the general entrance examination: Strong basic academic abilities in mathematics, science, and English. Students seeking admission via an examination by recommendation/special examination: Basic academic knowledge in mathematics, science, and English, gained through steady, consistent studies in high school.</p> <p>(2) The capacity of thinking, reasoning, and self-expression that form the foundation for using one's basic academic knowledge in mathematics, science, and English to identify problems independently, explore possible solutions to the issues, and produce corresponding results.</p> <p>(3) An interest in science and technology with a central focus on the mechanical engineering field, a tenacious drive to pursue those interests through active study, and an ambition for active collaborative partnerships to make a positive difference to individuals, society, and the environment.</p>