

Faculty of Science and Technology / Department of Mechatronics Engineering  
**Curriculum**

**Basic Interdisciplinary Subjects in Science and Technology**

■ – Compulsory Elective Subjects   ■ – Elective Subjects

Classes	1st Year	2nd Year	3rd Year	4th Year
<b>Basic Interdisciplinary Subjects in Science and Technology</b>	English Communication I · II German I · II French I · II Chinese I · II Science of Physical Education I · II Basic Humanities I · II Basic Social Science I · II Basic Seminar I · II	English Communication III · IV German III · IV French III · IV Chinese III · IV Science of Physical Education III · IV Area Studies(Europe & America) I · II Area Studies(Asia) I · II	Literature Psychology Japanese Constitution International Relations International Economics Practical English I · II	

Faculty of Science and Technology / Department of Mechatronics Engineering  
**Curriculum**

**Specialized Education Department of Mechatronics Engineering**

■ – Compulsory Subjects   ■ – Compulsory Elective Subjects   ■ – Elective Subjects   ■ – Free Elective Subjects

Classes		1st Year	2nd Year	3rd Year	4th Year
Specialized Education	Basic Science and Technology Subjects	Calculu I · II Linear Algebra I · II Physics I · II Physics Exercise Experiments in Physics I · II Chemistry I · II 化学実験 I · II Biology Introduction of Science and Technology Computer Literacy Basics of Mathematics I · II Physics Review Course I · II Chemistry Review Course I · II English Review Course I · II	Earth Science I · II Experiments in Earth Science I · II Experiments in Biology Ethics for Engineers		
		Fundamentals of Mechatronic Technical Japanese Descriptive Geometry Fundamentals of Electrical Circuits Computer Architecture	Computer programming Mechanical Drawing Strength of materials I Strength of Materials II Mechanics I Mechanics II Electrical Devices Electromagnetism I Electromagnetism II Electrical Design and Drawing Mechanism Machine Elements Analog Circuits Control Engineering I Applied Mathematics I · II Fluid Mechanics I · II Thermodynamics I · II Computer Graphics Digital Circuits Biomechanics Machine elements Design Ethics for Mechanical Engineers	Control Engineering II Embedded Software Vector and Kinematics Mechatronics Experiment I · II Signal Processing Engineering Technical English Engineering Design Exercise I · II · III By wire Architecture Medical Mechanical Engineering Information Network Electric Machinery Element of Vibration Machining Processes Automotive Engineering I Automotive Engineering II Energy Engineering Heat Transfer Engineering Software Engineering Biomedical Signal Processing Power Electronics Sensor and Sensing Production Control Internship	Computer Aided Engineering Instrumentation Engineering Laws and Regulations on Electric Power Industry Versatile Design of Mechatronic Devices Graduation Research