

**Course List and Graduation Requirements for International Programs,
Automotive Engineering Program - School of Engineering (for Undergraduates Enrolled in October 2024)**
(Major : Electrical Engineering, Electronics, and Information Engineering)

Course Category	Course	Term	Credits				Minimum Requirement		
			No of Credits	Compulsory	Compulsory Elective	Elective			
Common Basic Courses	Introduction to Skills for Academic Success	G- I	1	1			1		
	First Year Seminar	G- I	2	2			2		
	Language and Culture	Japanese	Fall, Spring	8	8			8	
		Japanese/Second Foreign Languages/English	Fall, Spring	6	6			6	
	Health and Sports Science	Health and Sports Science: Lecture	G- I	2			2	2	
		Exercise and Sports A	G- I	1			1		
		Exercise and Sports B	G- II	1			1		
Data Science	Introduction to Data Science (Lecture)	G- II	1	1			1		
	Data Science Exercise B	G- II	1	1			1		
<i>Partial Sum</i>							21		
Liberal Arts and Sciences Courses	Global Liberal Arts	International Society in the Age of Globalization ★	Fall	2			2	4 Including of 2 credits from CLA.	
		Exploration of Japan: From the Outside looking Inside	Spring	2			2		
		Go in Japanese Culture	Fall	2			2		
		Studium Generale A	Fall	2			2		
		Studium Generale B	Spring	2			2		
		Special Mathematics Lecture	Fall, Spring	-			-		
		Introduction to Intercultural Competence	Fall	2			2		
	Contemporary Liberal Arts (CLA)	Humanities and Social Sciences	Immigration in Japan	G-III	2				2
			Content courses taught in Japanese (JMI Courses)	-	-				-
			Introduction to Cultural Studies ★	Spring	2				2
		Interdisciplinary/Integration of Arts and Sciences	Introduction to Political Studies ★	G-III	2				2
			Introduction to Economics ★	G-IV	2				2
			Art and Culture ★	Spring	2				2
			Introduction to Career Development Theory	Fall	2				2
			Gender Studies	G-III	2				2
			Disaster Prevention and Mitigation	G-III	2				2
			Biotechnology	Fall	2				2
Problem/Project Based Learning Seminar	Summer Camp for General Academic Skills	G-VI	2			2			
Basic Courses for Specialized Fields (Basic Courses in Natural Sciences)	Calculus I	G- I	2	2			10		
	Calculus II	G- II	2	2					
	Linear Algebra I	G- I	2	2					
	Linear Algebra II	G- II	2	2					
	Complex Analysis	G-III	2	2					
	Fundamentals of Physics I	Fundamentals of Physics I	G- I	2	2			8	
		Fundamentals of Physics II	G- II	2	2				
		Fundamentals of Physics III	G- II	2	2				
		Laboratory in Physics	Laboratory in Physics	G-III	2	2			
			Fundamentals of Chemistry I	G- I	2	2			4
			Fundamentals of Chemistry II	G- II	2	2			
<i>Partial Sum</i>							22		
Sum for Liberal Arts and Sciences Courses							47		
Basic Specialized Courses	Compulsory Courses ①	Computer Software I	G- I	2	2			36.5	
		Mathematics I and Tutorial	G-III	4	4				
		Mathematics II and Tutorial	G-III	4	4				
		Analytical Dynamics and Tutorial	G-III	2.5	2.5				
		Electrical Circuits Engineering	G-III	2	2				
		Mechanics of Materials and Tutorial	G-III	3	3				
		Thermodynamics and Tutorial	G-III	2.5	2.5				
		Electronic Circuits	G-IV	2	2				
		Electricity and Magnetism	G-IV	2	2				
		Metallic and Ceramic Materials	G-IV	2	2				
		Fluid Mechanics I and Tutorial	G-IV	2.5	2.5				
		Vibration Engineering and Tutorial	G-IV	3	3				
		Control Engineering and Tutorial	G-V	3	3				
	Scientific Measurements	G-V	2	2					
	Elective Courses ②	Fundamental Physics Tutorial I a	G- I	1			1	6	
		Fundamental Physics Tutorial I b	G- I	1			1		
		Fundamental Physics Tutorial II	G- II	1			1		
		Kinematics of Machines	G-III	2			2		
		Solid Mechanics	G-IV	2			2		
Automobile Chemical Systems I		G-V	2			2			
Material Processing	G-V	2			2				
Courses in Specialized Fields	Compulsory Courses ③	Introduction to Automotive Engineering	G- I	2	2			26	
		Computer Software II	G-IV	2	2				
		Introduction to Electrical, Electronic and Information Engineering for Automobiles	G-IV	2	2				
		Vehicle Structures	G-IV	2	2				
		Design Practice I	G-IV	1	1				
		Automobile Engineering Laboratory II	G-VI	2	2				
		Automobile Engineering Laboratory I	G-V	2	2				
		Design Practice II	G-V	1	1				
		Power Electronics	G-V	2	2				
	Graduation Research A	G-VII	5	5					
	Graduation Research B	G-VIII	5	5					
	Specialized Courses	Elective Courses ④	Mathematics Tutorial I a	G- I	1			1	17.5
			Mathematics Tutorial I b	G- I	1			1	
Mathematics Tutorial II a			G- II	1			1		
Mathematics Tutorial II b			G- II	1			1		
Analytical Chemistry			G-V	2			2		
Urban Environment and Transportation System			G-V	2			2		
Numerical Analysis			G-V	2			2		
Heat Transfer Engineering			G-VI	2			2		
Tours in Industrial Plants A			G-IV	0.5			0.5		
Tours in Industrial Plants B			G-V	0.5			0.5		
Training in Industrial Plants			G-VI	1			1		
Automobile Chemical Systems II			G-VI	2			2		
Organic Materials			G-VII	2			2		
Environment and Recycling			G-VI	2			2		
Intelligent Transportation Systems	G-VI	2			2				
Electronic Devices in Automobiles	G-VI	2			2				
Vehicle Engines and New Propulsion Systems	G-V	2			2				
Vehicle Dynamics and Control	G-VI	2			2				
Vehicle Safety	G-VII	2			2				
Vehicle Design	G-VII	2			2				
Related Specialized Courses	Elective Courses ⑤	Scientific and Technical Japanese	G-VI	2			2	4	
		Business Japanese	G-VII	2			2		
		Outline of Engineering III	G-VII	2			2		
		View of Advanced Electrical, Electronic and Information Engineering	G-VII	2			2		
		Introduction to Civil Engineering and Architecture	G-VII	2			2		
		International Lectures on Advanced Technology and Trends in Automobile Engineering U1	G-VI	1			1		
		International Lectures on Advanced Technology and Trends in Automobile Engineering U3	G-VI	3			3		
Sum for Courses in Specialized Fields				62.5	0	27.5	90		
Total Sum							137		

*Confirm the prerequisite for each subject with the syllabus.

★Some of the courses on this column are offered in every other year. Confirm the offering term with the "Liberal Arts and Sciences Class Timetable" of the said year.

* Please note that the terms and courses in Liberal Arts Courses may change for various reasons.

For the latest information, make sure to check the timetables (Timetable A and Timetable B) of the relevant term.

**Graduation Requirements for International Programs,
Automotive Engineering Program - School of Engineering (for Undergraduate)
(Major : Electrical Engineering, Electronics, and Information Engineering)**

1. Liberal Arts and Sciences Courses: A combined total of at least 47 credits must be acquired.

(1) Common Basic Courses:

A total of at least 21 credits must be acquired, consisting of 1 credit of Introduction to Skills for Academic Success, 2 credits of First Year Seminar, 14 credits from "Language and Culture", at least 2 credits each of Lecture and Exercise for Health and Sports Science, and 1 credit each of Lecture and Exercise for Data Science.

(2) Liberal Arts Courses:

A total of 4 credits must be acquired, consisting of 2 credits from Contemporary Liberal Arts (Humanities and Social Science and Interdisciplinary/Integration of Arts and Sciences), and 2 credits from Global Liberal Arts Courses or Contemporary Liberal Arts (Humanities and Social Science and Interdisciplinary/Integration of Arts and Sciences) or Problem/Project Based Learning Seminar.

(3) Basic Courses for Specialized Fields(Basic Courses in Natural Sciences):

A total of at least 22 credits must be acquired, consisting a total of at least 10 credits from Calculus I, II, Linear Algebra I, II or Complex Analysis, a total of 8 credits from Fundamentals of Physics I, II, III and Laboratory in Physics, a total of 4 credits from Fundamentals of Chemistry I and II.

2. Courses in Specialized Fields: A combined total of at least 90 course credits must be acquired from these course categories.

(1) Compulsory Courses:

A total of 62.5 course credits must be acquired, consisting of a total of 36.5 credits from Compulsory Basic Specialized Courses ① and a total of 26 credits from Compulsory Specialized Courses ③.

(2) Elective Courses:

A total of at least 27.5 course credits must be acquired, consisting of a total of at least 6 course credits from Elective Basic Specialized Courses ②, a total of at least 17.5 course credits from Elective Specialized Courses ④, and a total of at least 4 course credits from Elective Related Specialized Courses ⑤.

**Advancement Requirements for International Programs,
Automotive Engineering Program - School of Engineering (for Undergraduate)
(Major : Electrical Engineering, Electronics, and Information Engineering)**

Assesment Year	Course Categories	Minimum Courses/ Credits Required	Requirements	Students unable to advance to the next year
At the End of the Second Grade	Common Basic Courses Liberal Arts Courses Basic Courses for Specialized Fields	40 credits	1.Common Basic Courses Must acquire a total of at least 12 "Language and Culture" credits from Japanese, English or Second Foreign Language. *Please note that if you choose Second Foreign Languages for Compulsory Elective(Japanese/ English/ Second Foreign Languages) credits, you must obtain at least 4 credits in each language from German, French, Russian, Chinese, Spanish, or Korean for graduation. 2.Basic Courses in Natural Sciences Must acquire at least 18 credits from Basic Courses in Natural Sciences(*from the courses required for graduation above) .	1. Remain in the second year. 2. Must take no longer than 6 years to complete their second year.[Duration of enrollment (8 years)] minus [third to fourth years(2 years)] 3. Students unable to advance to the next year within the 6-year limit stated in 2. above will be expelled from the school.