Graduation/Promotion Requirements 2025

NAGOYA UNIVERSITY
G30 INTERNATIONAL PROGRAM
SCHOOL OF ENGINEERING

名古屋大学工学部教授要目
2025年度グローバル30国際プログラム入学生用

School of Engineering (for Undergraduates Enrolled in October 2025)

G30 International Program
グローバル30国際プログラム

（1）Graduation Requirements （卒業要件）

Course Classifications 授業科目分類		Department of Chemistry and Biotechnology 化学生命工学科 / Chemistry 化学系プログラム			
		Compulsory 必修	Compulsory Elective 選必	Elective 選択	Total 合計
Courses relating to a specialized field 工学部専門系科目	Basic Specialized Courses （専門基礎科目）				
	Number of Credits Offered （開講単位数）	28		32	60
	Minimum Credits Required （取得要求単位数）	28		16	44
	Specialized Courses （専門科目）				
	Number of Credits Offered （開講単位数）	8		20	28
	Graduation Research （卒業研究）	10		0	10
	Minimum Credits Required （取得要求単位数）	18		18	36
	Related Specialized Courses （関連専門科目）				
	Number of Credits Offered （開講単位数）			10	10
	Minimum Credits Required （取得要求単位数）			2	2
	Total （小 計）				
	Number of Credits Offered （開講単位数）	36		62	98
	Graduation Research （卒業研究）	10			10
	Minimum Credits Required （取得要求単位数）	46		36	82
	Method of Completion （履修方法）	Compulsory 36 credits （必修 36単位） Graduation Research 10 credits （卒業研究 10単位） Elective at least 36 credits （選択 36単位以上） Total at least 82 credits （合計 82単位以上）			
Liberal Arts and Sciences 全学教育科目	Commom Basic Courses （共通基礎科目） Introduction to skills for academic success （「大学での学び」基礎論） First Year Seminar （基礎セミナー） Language and Culture （言語文化科目） Japanese （日本語） Japanese/English/Second Foreign Language （日本語/英語/初修外国語） Health and Sports Sciences （健康・スポーツ科学） Data Science （データ科学） Introduction to Data Science （データ科学基礎） Data Science Exercise （データ科学基礎演習） Entrepreneurship（アントレプレナーシップ）	at least 22 credits（22単位以上） 1 credit （1単位） at least 2 credits（2単位以上） at least 14 credits（14単位以上） at least 8 credits （8単位以上） at least 6 credits （6単位以上） at least 2 credits （2単位以上） 2 credits （2単位） 1 credit （1単位） 1 credit （1単位） 1 credit （1単位）			
	Liberal Arts Courses （教養科目） Global Liberal Arts Courses （国際理解科目） Contemporary Liberal Arts （現代教養科目） Problem/Project Based Learning Seminar （超学部セミナー）	at least 4 credits （4単位以上） Must acquire 2 credits from Contemporary Liberal Arts (Humanities and Social Science and Interdisciplinary/Integration of arts and sciences). Must acquire 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. （現代教養科目（人文・社会系及び学際・融合系）から2単位必修。 国際理解科目，現代教養科目（人文・社会系及び学際・融合系）， 超学部セミナーから2単位選択必修。）			
	Basic Courses for Specialized Fields （分野別基礎科目） Basic Courses in Natural Sciences （自然系基礎科目） Mathematics （数学関係） Physics （物理学関係） Chemistry （化学関係） Biology （生物学関係）	at least 26 credits （26 単位以上） Must acquire a total of at least 8 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 are compulsory. A total of 6 credits from Fundamentals of Chemistry I, II, Laboratory in Chemistry are compulsory.A total of 4 credits from Fundamentals of Biology I, II are compulsory. （微分積分学Ⅰ，Ⅱ，線形代数学Ⅰ，Ⅱ，複素関数論から計8単位以上，物理学基礎Ⅰ，Ⅱ，Ⅲ，物理学実験の8単位は必修。化学基礎Ⅰ，Ⅱ，化学実験の計6単位は必修 。生物学基礎Ⅰ，Ⅱの計4単位は必修。）			
	Method of Completion （履修方法）	Total at least 52 credits （合計 52単位以上）			
Credits required for Graduation （卒業必要単位数）		at least 134 credits （134単位以上）			

（2）Advancement Requirements （進級要件）

Assessment year 判定年次	Course Categories （科目区分）	Minimum Courses／Credits Required （最低必要科目数／単位数）	Requirements （条 件 等）
At the end of the 2nd grade （2 年終了時）	Commom Basic Courses Liberal Arts Courses Basic Courses for Specialized Fields （共通基礎科目，教養科目,分野別基礎科目）	40credits （40単位）	1 Commom Basic Courses （一 共通基礎科目） 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. 「言語文化科目」として日本語，英語及び初修外国語から12単位以上修得すること。 ※ただし，初修外国語を含む場合は，卒業にはドイツ語，フランス語，ロシア語，中国語，スペイン語及び朝鮮・韓国語のうち1外国語につき4単位以上修得する必要がある点に留意すること。 2 Basic Courses in Natural Sciences （二 自然系基礎科目） Must acquire at least 18 credits from Basic Courses in Natural Sciences(*from the courses required for graduation above) . 自然系基礎科目は，上記の卒業に必要な科目のうちから18単位以上修得すること。

Course List　(授業科目一覧)

○　Department of Chemistry and Biotechnology, Chemistry Program

化学生命工学科（化学系プログラム）

Basic Specialized Courses　　専　門　基　礎　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
数学演習１ａ	Mathematics Tutorial Ⅰa	RICHARD Serge Charles	Designated Professor		1	1 Autumn Elective
数学演習１ｂ	Mathematics Tutorial Ⅰb	BACHMANN Henrik	Associate Professor		1	1 Autumn Elective
物理学基礎演習１ａ	Fundamental Physics Tutorial Ia	SHIGEMORI Masaki	Professor		1	1 Autumn Elective
物理学基礎演習１ｂ	Fundamental Physics Tutorial Ib	UMEHATA Hideki	Designated Assistant Professor		1	1 Autumn Elective
数学演習２ａ	Mathematics Tutorial Ⅱa	BOURNE Christopher Jack	Associate Professor		1	1 Spring Elective
数学演習２ｂ	Mathematics Tutorial Ⅱb	BACHMANN Henrik	Associate Professor		1	1 Spring Elective
物理学基礎演習２	Fundamental Physics Tutorial II	WOJDYLO John Andrew	Professor		1	1 Spring Elective
分析化学	Analytical Chemistry	SAMJESKE Gabor Arwed	Professor		2	2 Autumn Compulsory
有機化学1	Organic Chemistry I	SHIN Jiyoung	Professor		2	2 Autumn Compulsory
物理化学1	Physical Chemistry I	PHUNG Quan manh	Associate Professor		2	2 Autumn Compulsory
生化学１	Biochemistry I	KOJIMA Seiji	Professor		2	2 Autumn Elective
細胞学１	Cell Biology I	NOMA　Kentaro	Associate Professor		2	2 Autumn Compulsory
解析力学１	Analytical Mechanics I	SHIGEMORI Masaki	Professor		2	2 Autumn Elective
数理物理学１	Mathematical Physics I	WOJDYLO John Andrew	Professor		2	2 Autumn Elective
数理物理学演習１	Mathematical Physics Tutorial I	IGURO Shuhei	Designated Assistant Professor		1	2 Autumn Elective
統計物理学１	Statistical Physics I	ITO Yasumasa	Professor		2	2 Autumn Elective
無機化学１	Inorganic Chemistry I	SAMJESKE Gabor Arwed	Professor		2	2 Spring Compulsory
有機化学２	Organic Chemistry II	SHIN Jiyoung	Professor		2	2 Spring Compulsory
物理化学２	Physical Chemistry II	PHUNG Quan manh	Associate Professor		2	2 Spring Compulsory
量子化学１	Quantum Chemistry I	PHUNG Quan manh	Associate Professor		2	2 Spring Compulsory
生化学２	Biochemistry II	KOJIMA Seiji	Professor		2	2 Spring Elective
細胞学２	Cell Biology II	NOMA　Kentaro	Associate Professor		2	2 Autumn Elective
電磁気学	Electricity and Magnetism	WOJDYLO John Andrew	Professor		2	2 Spring Elective
無機化学２	Inorganic Chemistry II	SAMJESKE Gabor Arwed	Professor		2	3 Autumn Compulsory
有機化学３	Organic Chemistry III	SHIN Jiyoung	Professor		2	3 Autumn Elective
量子化学２	Quantum Chemistry II	PHUNG Quan manh	Associate Professor		2	3 Autumn Compulsory
地球惑星科学	Earth and Planetary Science	HUMBLET Marc Andre	Associate Professor		2	3 Autumn Elective
無機材料化学1	Chemistry of Inorganic Materials　I	SAMJESKE Gabor Arwed	Professor		2	3 Autumn Compulsory
量子化学３	Quantum Chemistry III	FUJIMOTO Kazuhiro	Designated Associate Professor		2	3 Spring Elective
地球環境科学	Earth Environmental Science	HUMBLET Marc Andre	Designated Associate Professor		2	3 Spring Elective
化学生命工学実験１	Chemistry and Biotechnology Laboratory 1	Faculty of Chemistry			3	3 Spring Compulsory
化学生命工学実験２	Chemistry and Biotechnology Laboratory 2	Faculty of Chemistry			3	3 Spring Compulsory
無機化学３	Inorganic Chemistry III	SAMJESKE Gabor Arwed	Professor		2	3 Spring Elective

Specialized Courses　　専　門　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
生物物理学	Biophysics	TAMA Florence Muriel Professor			2	2 Spring Elective
有機化学５	Organic Chemistry V	SHIN Jiyoung Professor			2	3 Autumn Elective
高分子化学	Polymer Chemistry	Faculty of Chemistry			2	3 Autumn Elective
化学物理学	Chemical Physics	Takayuki UCHIHASHI Professor			2	3 Autumn Elective
有機化学４	Organic Chemistry IV	SHIN Jiyoung Professor			2	3 Spring Elective
無機材料化学２	Chemistry of Inorganic Materials II	SAMJESKE Gabor Arwed Professor			2	3 Spring Elective
計算化学	Computational Chemistry	YANAI Takeshi Professor			2	3 Autumn Elective
先端有機・高分子化学	Current Organic and Polymer Chemistry	Faculty of Chemistry			2	3 Spring Elective
生化学４	Biochemistry IV	NADANO Daita Associate Professor			2	3 Spring Elective
細胞学４	Cell Biology IV	SHIBATA Hideki Professor			2	3 Spring Elective
化学生命工学実験３	Chemistry and Biotechnology Laboratory III	Faculty of Chemistry			3	4 Autumn Compulsory
化学生命工学実験４	Chemistry and Biotechnology Laboratory IV	Faculty of Chemistry			3	4 Autumn Compulsory
特別演習Ａ	Advanced Chemistry Tutorial A	Faculty of Chemistry			1	4 Autumn Compulsory
特別演習Ｂ	Advanced Chemistry Tutorial B	Faculty of Chemistry			1	4 Spring Compulsory
卒業研究Ａ	Graduation Research A	Faculty of Chemistry			5	4 Autumn Compulsory
卒業研究Ｂ	Graduation Research B	Faculty of Chemistry			5	4 Spring Compulsory

Related Specialized Courses　　関　連　専　門　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
工学概論第３	Outline of Engineering III	LELEITO Emanuel Langat Lecturer	Gang Zeng Lecturer	LI Jia Lecturer	2	3 Autumn Elective
電気電子情報先端工学概論	View of Advanced Electrical, Electronic and Information Engineering	Associated Faculty			2	3 Autumn Elective
環境土木・建築学概論	Introduction to Civil Engineering and Architecture	Associated Faculty			2	3 Autumn Elective
国際先端自動車工学 U1	International Lectures on Advanced Technology and Trends in Automobile Engineering U1	SAKAI Yasuhiko Designated Professor			1	3 Spring Elective
国際先端自動車工学 U3	International Lectures on Advanced Technology and Trends in Automobile Engineering U3	SAKAI Yasuhiko Designated Professor			3	3 Spring Elective

G30 International Program
グローバル30国際プログラム

(1)Graduation Requirements (卒業要件)

Course Classifications 授業科目分類		Department of Electrical Engineerin, Electronics, and Information Engineering 電気電子情報工学科 / Automotive Engineering 自動車工学プログラム			
		Compulsory 必修	Compulsory Elective 選必	Elective 選択	Total 合計
Courses relating to a specialized field 工学部専門系科目	Basic Specialized Courses (専門基礎科目)				
	Number of Credits Offered (開講単位数)	37		11	48
	Minimum Credits Required (取得要求単位数)	37		6	43
	Specialized Courses (専門科目)				
	Number of Credits Offered (開講単位数)	16		32	48
	Graduation Research (卒業研究)	10			10
	Minimum Credits Required (取得要求単位数)	26		17.5	43.5
	Related Specialized Courses (関連専門科目)				
	Number of Credits Offered (開講単位数)			14	14
	Minimum Credits Required (取得要求単位数)			4	4
	Total (小計)				
	Number of Credits Offered (開講単位数)	53		57	110
	Graduation Research (卒業研究)	10			10
	Minimum Credits Required (取得要求単位数)	63		27.5	90.5
	Method of Completion (履修方法)	Compulsory 53 credits (必修 53単位) Graduation Research 10 credits (卒業研究 10単位) Elective at least 27. 5 credits (選択 27. 5単位以上) Total at least 90. 5credits (合計 90. 5単位以上)			
Liberal Arts and Sciences 全学教育科目	Commom Basic Courses (共通基礎科目) Introduction to skills for academic success (「大学での学び」基礎論) First Year Seminar (基礎セミナー) Language and Culture (言語文化科目) Japanese (日本語) Japanese/English/Second Foreign Language (日本語/英語/初修外国語) Health and Sports Sciences (健康・スポーツ科学) Data Science (データ科学) Introduction to Data Science (データ科学基礎) Data Science Exercise (データ科学基礎演習) Entrepreneurship(アントレプレナーシップ)	at least 22 credits (22単位以上) 1 credit (1単位) at least 2 credits (2単位以上) at least 14 credits (14単位以上) at least 8 credits (8単位以上) at least 6 credits (6単位以上) at least 2 credits (2単位以上) 2 credits (2単位) 1 credit (1単位) 1 credit (1単位) 1 credit (1単位)			
	Liberal Arts Courses (教養科目) Global Liberal Arts Courses (国際理解科目) Contemporary Liberal Arts (現代教養科目) Problem/Project Based Learning Seminar (超学部セミナー)	at least 4 credits (4単位以上) Must acquire 2 credits from Contemporary Liberal Arts (Humanities and Social Science and Interdisciplinary/Integration of arts and sciences). Must acquire 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. (現代教養科目(人文・社会系及び学際・融合系)から2単位必修。 国際理解科目, 現代教養科目(人文・社会系及び学際・融合系), 超学部セミナーから2単位選択必修。)			
	Basic Courses for Specialized Fields (分野別基礎科目) Basic Courses in Natural Sciences (自然系基礎科目) Mathematics (数学関係) Physics (物理学関係) Chemistry (化学関係)	at least 22 credits (22単位以上) A total of 10 credits from Calculus I, II, Linear Algebra I, II and Complex Analysis are compulsory. A total of 8 credits from Fundamentals of Physics I, II, III,and Laboratory in Physics are compulsory. A total of 4 credits from Fundamentals of Chemistry I, II are compulsory. (微分積分学Ⅰ, Ⅱ, 線形代数学Ⅰ, Ⅱ, 複素関数論の計10単位は必修。物理学基礎Ⅰ, Ⅱ, Ⅲ, 物理学実験の計8単位は必修。化学基礎Ⅰ, Ⅱの計4単位は必修。)			
	Method of Completion (履修方法)	Total at least 48 credits (合計 48単位以上)			
Credits required for Graduation (卒業必要単位数)		at least 138. 5credits (138. 5単位以上)			

(2)Advancement Requirements (進級要件)

Assessment year 判定年次	Course Categories (科目区分)	Minimum Courses／Credits Required (最低必要科目数／単位数)	Requirements (条件等)
At the end of the 2nd grade (2年終了時)	Commom Basic Courses Liberal Arts Courses Basic Courses for Specialized Fields (共通基礎科目, 教養科目,分野別基礎科目)	40credits (40単位)	1 Commom Basic Courses (一 共通基礎科目) 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. 「言語文化科目」として日本語, 英語及び初修外国語から12単位以上修得すること。 ※ただし, 初修外国語を含む場合は, 卒業にはドイツ語, フランス語, ロシア語, 中国語, スペイン語及び朝鮮・韓国語のうち1外国語につき4単位以上修得する必要がある点に留意すること。 2 Basic Courses in Natural Sciences (二 自然系基礎科目) Must acquire at least 18 credits from Basic Courses in Natural Sciences(*from the courses required for graduation above). 自然系基礎科目は, 上記の卒業に必要な科目のうちから18単位以上修得すること。

Course List　(授業科目一覧)

○ Department of Electrical Engineering, Electronics and Information Engineering, Automotive Engineering Program

電　気　電　子　情　報　工　学　科　(自動車工学プログラム)

Basic Specialized Courses　　専　門　基　礎　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員					Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
計算機ソフトウェア１	Computer Software I	HASEGAWA Hiroshi	Professor	LU Shan	Lecturer		2	１Autumn　Compulsory
物理学基礎演習１ａ	Fundamental Physics Tutorial Ia	SHIGEMORI Masaki	Professor				1	１Autumn　Elective
物理学基礎演習１ｂ	Fundamental Physics Tutorial Ib	UMEHATA Hideki	Designated Assistant Professor				1	１Autumn　Elective
物理学基礎演習２	Fundamental Physics Tutorial II	WOJDYLO John Andrew	Professor				1	１Spring　Elective
数学１及び演習	Mathematics I and Tutorial	WOJDYLO John Andrew	Professor	IGURO Shuhei	Designated Assistant Professor		4	２Autumn　Compulsory
数学２及び演習	Mathematics II and Tutorial	FUJITA Takaaki	Professor	ENDO Tomohiro	Associate Professor		4	２Autumn　Compulsory
解析力学及び演習	Analytical Dynamics and Tutorial	SHIGEMORI Masaki	Professor	ARAIDAI Masaaki	Assistant Professor		3	２Autumn　Compulsory
電気回路工学	Electrical Circuits Engineering	KURIMOTO Muneaki	Associate Professor				2	２Autumn　Compulsory
材料力学及び演習	Mechanics of Materials and Tutorial	MATSUMOTO Toshiro	Part-Time Faculty				3	２Autumn　Compulsory
熱力学及び演習	Thermodynamics and Tutorial	ITO Yasumasa	Professor				2.5	２Autumn　Compulsory
機構学	Kinematics of Machines	Faculty of Automotive Engineering					2	２Autumn　Elective
電磁気学	Electricity and Magnetism	WOJDYLO John Andrew	Professor				2	２Spring　Compulsory
金属材料とセラミックス	Metallic and Ceramic Materials	KOBASHI Makoto	Professor	WANG Qian	Associate Professor		2	２Spring　Compulsory
電子回路工学	Electronic Circuits	OHNO Noriyasu	Professor	KURIMOTO Muneaki	Associate Professor		2	２Spring　Compulsory
固体力学	Solid Mechanics	CUI Yi	Associate Professor				2	２Spring　Elective
流体力学１及び演習	Fluid Mechanics I and Tutorial	ITO Yasumasa	Professor				2.5	２Spring　Compulsory
振動学及び演習	Vibration Engineering and Tutorial	CUI Yi	Associate Professor				3	２Spring　Compulsory
自動車化学システム１	Automobile Chemical Systems I	NAGAOKA Katsutoshi	Professor	MATSUO Yutaka	Professor		2	３Autumn　Elective
計測工学	Scientific Measurements	KURIMOTO Muneaki	Associate Professor				2	３Autumn　Compulsory
制御工学及び演習	Control Engineering and Tutorial	CUI Yi	Associate Professor				3	３Autumn　Compulsory
材料加工学	Material Processing	UMEHARA Noritsugu	Professor	NISHIYAMA Kiyohisa	Part-Time Faculty		2	３Autumn　Elective

Specialized Courses　　専　門　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
数学演習１ａ	Mathematics Tutorial Ⅰa	RICHARD Serge Charles Professor			1	1 Autumn Elective
数学演習１ｂ	Mathematics Tutorial Ⅰb	BACHMANN Henrik Associate Professor			1	1 Autumn Elective
自動車工学概論	Introduction to Automotive Engineering	CUI Yi Associate Professor			2	1 Autumn Compulsory
数学演習２ａ	Mathematics Tutorial Ⅱa	BOURNE Chris Associate Professor			1	1 Spring Elective
数学演習２ｂ	Mathematics Tutorial Ⅱb	BACHMANN Henrik Associate Professor			1	1 Spring Elective
計算機ソフトウェア２	Computer Software II	OTSUKA Yuichi Associate Professor	OGAWA Kohei Associate Professor	YONEZAWA Takuro Associate Professor	2	2 Spring
		IIJIMA Haruhisa Associate Professor				
自動車構造	Vehicle Structures	KURIMOTO Muneaki Associate Professor			2	2 Spring Compulsory
自動車のための電子・情報技術	Introduction to Electrical, Electronic and Information Engineering for Automobiles	Faculty of Electrical, Electronic and Information Engineering			2	2 Spring Compulsory
設計製図１	Design Practice Ⅰ	NAGASHIMA So Associate Professor	TOKOROYAMA Takayuki Associate Professor		1	2 Spring Compulsory
自動車工学実験１	Automobile Engineering Laboratory Ⅰ	TOKOROYAMA Takayuki Associate Professor	LU Shan Lecturer		2	3 Autumn Compulsory
分析化学	Analytical Chemistry	WANG Qian Professor			2	3 Autumn Elective
都市と交通	Urban Environment and Transportation System	IIZUKA Satoru Professor	KATO Hirokazu Professor	IRYO Miho Associate Professor	2	3 Autumn Elective
		HOTTA Yoshihiro Assistant Professor				
パワーエレクトロニクス	Power Electronics	KURIMOTO Muneaki Associate Professor			2	3 Autumn Compulsory
数値解析法	Numerical Analysis	ITO Yasumasa Professor			2	3 Autumn Elective
伝熱工学	Heat Transfer Engineering	ITO Yasumasa Professor			2	3 Spring Elective
設計製図２	Design Practice II	MAEDA Eijiro Associate Professor			1	3 Autumn Compulsory
工場見学Ａ	Tours in Industrial Plants A	Faculty of Automotive Engineering			0.5	2 Spring Elective
工場見学Ｂ	Tours in Industrial Plants B	Faculty of Automotive Engineering			0.5	3 Autumn Elective
工場実習	Training in Industrial Plants	Faculty of Automotive Engineering			1	3 Spring Elective
自動車工学実験２	Automobile Engineering Laboratory II	TOKOROYAMA Takayuki Associate Professor	LU Shan Lecturer		2	3 Spring Compulsory
自動車化学システム２	Automobile Chemical Systems II	NORINAGA Koyo Professor	MIKSIK Frantisek Designated associate professor		2	3 Spring Elective
有機材料	Organic Materials	Faculty of Molecular Design and Engineering			2	4 Autumn Elective
環境とリサイクル	Environment and Recycling	YOSHIDA Tomoko Professor			2	3 Spring Elective
情報通信技術と自動車交通	Intelligent Transportation Systems	NAKAMURA Hideki Professor	YAMAMOTO Toshiyuki Professor		2	3 Spring Elective
		MIWA Tomio Professor				
自動車の電子機器	Electronic Devices in Automobiles	KURIMOTO Muneaki Associate Professor			2	3 Spring Elective
自動車エンジンと新動力システム	Vehicle Engines and New Propulsion Systems	Part-Time Faculty			2	3 Autumn Elective
自動車ダイナミクスと制御	Vehicle Dynamics and Control	ITO Akira Part-Time Faculty			2	3 Spring Elective
自動車安全工学	Vehicle Safety	MIZUNO Koji Professor	SUZUKI Tatsuya Professor		2	4 Autumn Elective
車両計画と車体設計	Vehicle Design	CUI Yi Associate Professor			2	4 Autumn Elective
卒業研究Ａ	Graduation Research A	Faculty of Automotive Engineering			5	4 Autumn Compulsory
卒業研究Ｂ	Graduation Research B	Faculty of Automotive Engineering			5	4 Spring Compulsory

Related Specialized Courses　　関 連 専 門 科 目

授 業 科 目 名	Course Title	Lecturer 担 当 教 員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
科学技術日本語	Scientific and Technical Japanese	Part-Time Faculty			2	3 Spring Elective
ビジネス日本語	Business Japanese	FURUYA Reiko Associate Professor			2	4 Autumn Elective
工学概論第３	Outline of Engineering III	LELEITO Emanuel Langat Lecturer	Gang Zeng Lecturer	LI Jia Lecturer	2	4 Autumn Elective
電気電子情報先端工学概論	View of Advanced Electrical, Electronic and Information Engineering	Associated Faculty			2	4 Autumn Elective
環境土木・建築学概論	Introduction to Civil Engineering and Architecture	Associated Faculty			2	4 Autumn Elective
国際先端自動車工学 U1	International Lectures on Advanced Technology and Trends in Automobile Engineering U1	SAKAI Yasuhiko Designated Professor			1	3 Spring Elective
国際先端自動車工学 U3	International Lectures on Advanced Technology and Trends in Automobile Engineering U3	SAKAI Yasuhiko Designated Professor			3	3 Spring Elective

G30 International Program
グローバル30国際プログラム

（1）Graduation Requirements （卒業要件）

Course Classifications 授業科目分類		Department of Mechanical and Aerospace Engineering 機械・航空宇宙工学科 / Automotive Engineering 自動車工学プログラム			
		Compulsory 必修	Compulsory Elective 選必	Elective 選択	Total 合計
Courses relating to a specialized field 工学部専門系科目	Basic Specialized Courses（専門基礎科目）				
	Number of Credits Offered（開講単位数）	35		11	46
	Minimum Credits Required（取得要求単位数）	35		6	41
	Specialized Courses （専門科目）				
	Number of Credits Offered（開講単位数）	11		38	49
	Graduation Research（卒業研究）	10			10
	Minimum Credits Required（取得要求単位数）	21		22	43
	Related Specialized Courses（関連専門科目）				
	Number of Credits Offered（開講単位数）			14	14
	Minimum Credits Required（取得要求単位数）			5	5
	Total （小 計）				
	Number of Credits Offered（開講単位数）	46		63	109
	Graduation Research （卒業研究）	10			10
	Minimum Credits Required（取得要求単位数）	56		33	89
	Method of Completion （履修方法）	Compulsory 46 credits （必修 46単位） Graduation Research 10 credits （卒業研究 10単位） Elective at least 33 credits （選択 33単位以上） Total at least 89 credits （合計 89単位以上）			
Liberal Arts and Sciences 全学教育科目	Commom Basic Courses （共通基礎科目） Introduction to skills for academic success （「大学での学び」基礎論） First Year Seminar （基礎セミナー） Language and Culture （言語文化科目） Japanese （日本語） Japanese/English/Second Foreign Language （日本語/英語/初修外国語） Health and Sports Sciences （健康・スポーツ科学） Data Science （データ科学） Introduction to Data Science （データ科学基礎） Data Science Exercise （データ科学基礎演習） Entrepreneurship（アントレプレナーシップ）	at least 22 credits（22単位以上） 1 credit （1単位） at least 2 credits（2単位以上） at least 14 credits（14単位以上） at least 8 credits （8単位以上） at least 6 credits （6単位以上） at least 2 credits （2単位以上） 2 credits （2単位） 1 credit （1単位） 1 credit （1単位） 1 credit （1単位）			
	Liberal Arts Courses （教養科目） Global Liberal Arts Courses （国際理解科目） Contemporary Liberal Arts （現代教養科目） Problem/Project Based Learning Seminar （超学部セミナー）	at least 4 credits （4単位以上） Must acquire 2 credits from Contemporary Liberal Arts (Humanities and Social Science and Interdisciplinary/Integration of arts and sciences). Must acquire 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. (現代教養科目（人文・社会系及び学際・融合系）から2単位必修。 国際理解科目，現代教養科目（人文・社会系及び学際・融合系）， 超学部セミナーから2単位選択必修。)			
	Basic Courses for Specialized Fields （分野別基礎科目） Basic Courses in Natural Sciences （自然系基礎科目） Mathematics （数学関係） Physics （物理学関係） Chemistry （化学関係）	at least 22 credits （22単位以上） A total of 10 credits from Calculus I, II, Linear Algebra I, II and Complex Analysis are compulsory. A total of 8 credits from Fundamentals of Physics I, II, III,and Laboratory in Physics are compulsory. A total of 4 credits from Fundamentals of Chemistry I, II are compulsory. (微分積分学Ⅰ，Ⅱ，線形代数学Ⅰ，Ⅱ，複素関数論の計10単位は必修。物理学基礎Ⅰ，Ⅱ，Ⅲ，物理学実験の計8単位は必修。化学基礎Ⅰ，Ⅱの計4単位は必修。)			
	Method of Completion （履修方法）	Total at least 48 credits （合計 48単位以上）			
Credits required for Graduation （卒業必要単位数）		at least 137 credits （137単位以上）			

（2）Advancement Requirements （進級要件）

Assessment year 判定年次	Course Categories （科目区分）	Minimum Courses／Credits Required （最低必要科目数／単位数）	Requirements （条 件 等）
At the end of the 2nd grade （2 年終了時）	Commom Basic Courses Liberal Arts Courses Basic Courses for Specialized Fields （共通基礎科目，教養科目,分野別基礎科目）	40credits （40単位）	1 Commom Basic Courses （一 共通基礎科目） 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. 「言語文化科目」として日本語，英語及び初修外国語から12単位以上修得すること。 ※ただし，初修外国語を含む場合は，卒業にはドイツ語，フランス語，ロシア語，中国語，スペイン語及び朝鮮・韓国語のうち1外国語につき4単位以上修得する必要がある点に留意すること。 2 Basic Courses in Natural Sciences （二 自然系基礎科目） Must acquire at least 18 credits from Basic Courses in Natural Sciences(*from the courses required for graduation above). 自然系基礎科目は，上記の卒業に必要な科目のうちから18単位以上修得すること。

Course List　(授業科目一覧)

○ Department of Mechanical and Aerospace Engineering, Automotive Engineering Program

機　械・航　空　宇　宙　工　学　科　(自動車工学プログラム)

Basic Specialized Courses　　専　門　基　礎　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員					Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
計算機ソフトウェア１	Computer Software I	HASEGAWA Hiroshi	Professor	LU Shan	Lecturer		2	1 Autumn Compulsory
物理学基礎演習１ａ	Fundamental Physics Tutorial Ia	SHIGEMORI Masaki	Professor				1	1 Autumn Elective
物理学基礎演習１ｂ	Fundamental Physics Tutorial Ib	UMEHATA Hideki	Designated Assistant Professor				1	1 Autumn Elective
物理学基礎演習２	Fundamental Physics Tutorial II	WOJDYLO John Andrew	Professor				1	1 Spring Elective
数学１及び演習	Mathematics I and Tutorial	WOJDYLO John Andrew	Professor	IGURO Shuhei	Designated Assistant Professor		4	2 Autumn Compulsory
数学２及び演習	Mathematics II and Tutorial	FUJITA Takaaki	Professor	ENDO Tomohiro	Associate Professor		4	2 Autumn Compulsory
解析力学及び演習	Analytical Dynamics and Tutorial	SHIGEMORI Masaki	Professor	ARAIDAI Masaaki	Assistant Professor		3	2 Autumn Compulsory
電気回路工学	Electrical Circuits Engineering	KURIMOTO Muneaki	Associate Professor				2	2 Autumn Compulsory
材料力学及び演習	Mechanics of Materials and Tutorial	MATSUMOTO Toshiro	Part-Time Faculty				3	2 Autumn Compulsory
熱力学及び演習	Thermodynamics and Tutorial	ITO Yasumasa	Professor				2.5	2 Autumn Compulsory
機構学	Kinematics of Machines	Faculty of Automotive Engineering					2	2 Autumn Compulsory
金属材料とセラミックス	Metallic and Ceramic Materials	KOBASHI Makoto	Professor	WANG Qian	Associate Professor		2	2 Spring Compulsory
電子回路工学	Electronic Circuits	OHNO Noriyasu	Professor	KURIMOTO Muneaki	Associate Professor		2	2 Spring Elective
固体力学	Solid Mechanics	CUI Yi	Associate Professor				2	2 Spring Elective
流体力学１及び演習	Fluid Mechanics I and Tutorial	ITO Yasumasa	Professor				2.5	2 Spring Compulsory
振動学及び演習	Vibration Engineering and Tutorial	CUI Yi	Associate Professor				3	2 Spring Compulsory
自動車化学システム１	Automobile Chemical Systems I	NAGAOKA Katsutoshi	Professor	MATSUO Yutaka	Professor		2	3 Autumn Elective
計測工学	Scientific Measurements	KURIMOTO Muneaki	Associate Professor				2	3 Autumn Elective
制御工学及び演習	Control Engineering and Tutorial	CUI Yi	Associate Professor				3	3 Autumn Compulsory
材料加工学	Material Processing	UMEHARA Noritsugu	Professor	NISHIYAMA Kiyohisa	Part-Time Faculty		2	3 Autumn Compulsory

Specialized Courses　　専　門　科　目

授　業　科　目　名	Course Title	Lecturer 担　当　教　員			Credits 単位数	Starts (Elective/Compulsory) 開講時期及び 選択・必修
数学演習１ａ	Mathematics Tutorial Ⅰa	RICHARD Serge Charles Professor			1	1 Autumn Elective
数学演習１ｂ	Mathematics Tutorial Ⅰb	BACHMANN Henrik Associate Professor			1	1 Autumn Elective
自動車工学概論	Introduction to Automotive Engineering	CUI Yi Associate Professor			2	1 Autumn Compulsory
数学演習２ａ	Mathematics Tutorial Ⅱa	BOURNE Chris Associate Professor			1	1 Spring Elective
数学演習２ｂ	Mathematics Tutorial Ⅱb	BACHMANN Henrik Associate Professor			1	1 Spring Elective
計算機ソフトウェア２	Computer Software II	OTSUKA Yuichi Associate Professor	OGAWA Kohei Associate Professor	YONEZAWA Takuro Associate Professor	2	2 Spring
		IIJIMA Haruhisa Associate Professor				
自動車構造	Vehicle Structures	KURIMOTO Muneaki Associate Professor			2	2 Spring Compulsory
設計製図１	Design Practice I	NAGASHIMA So Associate Professor	TOKOROYAMA Takayuki Associate Professor		1	2 Spring Compulsory
分析化学	Analytical Chemistry	WANG Qian Professor			2	3 Autumn Elective
都市と交通	Urban Environment and Transportation System	IIZUKA Satoru Professor	KATO Hirokazu Professor	IRYO Miho Associate Professor	2	3 Autumn Elective
		HOTTA Yoshihiro Assistant Professor				
パワーエレクトロニクス	Power Electronics	KURIMOTO Muneaki Associate Professor			2	3 Autumn Elective
数値解析法	Numerical Analysis	ITO Yasumasa Professor			2	3 Autumn Elective
伝熱工学	Heat Transfer Engineering	ITO Yasumasa Professor			2	3 Spring Elective
流体力学２	Fluid Mechanics II	ITO Yasumasa Professor			2	3 Autumn Elective
自動車工学実験１	Automobile Engineering Laboratory I	TOKOROYAMA Takayuki Associate Professor	LU Shan Lecturer		2	3 Autumn Compulsory
設計製図２	Design Practice II	MAEDA Eijiro Associate Professor			1	3 Autumn Compulsory
工場見学Ａ	Tours in Industrial Plants A	Faculty of Automotive Engineering			0.5	2 Spring Elective
工場見学Ｂ	Tours in Industrial Plants B	Faculty of Automotive Engineering			0.5	3 Autumn Elective
工場実習	Training in Industrial Plants	Faculty of Automotive Engineering			1	3 Spring Elective
自動車化学システム２	Automobile Chemical Systems II	NORINAGA Koyo Professor	MIKSIK Frantisek Designated associate professor		2	3 Spring Elective
有機材料	Organic Materials	Faculty of Molecular Design and Engineering			2	4 Autumn Elective
環境とリサイクル	Environment and Recycling	YOSHIDA Tomoko Professor			2	3 Spring Elective
情報通信技術と自動車交通	Intelligent Transportation Systems	NAKAMURA Hideki Professor	YAMAMOTO Toshiyuki Professor		2	3 Spring Elective
		MIWA Tomio Professor				
自動車の電子機器	Electronic Devices in Automobiles	KURIMOTO Muneaki Associate Professor			2	3 Spring Elective
自動車エンジンと新動力システム	Vehicle Engines and New Propulsion Systems	Part-Time Faculty			2	3 Autumn Elective
自動車ダイナミクスと制御	Vehicle Dynamics and Control	ITO Akira Part-Time Faculty			2	3 Spring Elective
自動車工学実験２	Automobile Engineering Laboratory II	TOKOROYAMA Takayuki Associate Professor	LU Shan Lecturer		2	3 Spring Compulsory
設計製図３	Design Practice III	Part-Time Faculty			1	3 Spring Compulsory
自動車安全工学	Vehicle Safety	MIZUNO Koji Professor	SUZUKI Tatsuya Professor		2	4 Autumn Elective
車両計画と車体設計	Vehicle Design	CUI Yi Associate Professor			2	4 Autumn Elective
卒業研究Ａ	Graduation Research A	Faculty of Automotive Engineering			5	4 Autumn Compulsory
卒業研究Ｂ	Graduation Research B	Faculty of Automotive Engineering			5	4 Spring Compulsory

Related Specialized Courses　　関 連 専 門 科 目

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科学技術日本語	Scientific and Technical Japanese	Part-Time Faculty			2	3 Spring Elective
ビジネス日本語	Business Japanese	FURUYA Reiko Associate Professor			2	4 Autumn Elective
工学概論第３	Outline of Engineering III	LELEITO Emanuel Langat Lecturer	Gang Zeng Lecturer	LI Jia Lecturer	2	4 Autumn Elective
電気電子情報先端工学概論	View of Advanced Electrical, Electronic and Information Engineering	Associated Faculty			2	4 Autumn Elective
環境土木・建築学概論	Introduction to Civil Engineering and Architecture	Associated Faculty			2	4 Autumn Elective
国際先端自動車工学 U1	International Lectures on Advanced Technology and Trends in Automobile Engineering U1	SAKAI Yasuhiko Designated Professor			1	3 Spring Elective
国際先端自動車工学 U3	International Lectures on Advanced Technology and Trends in Automobile Engineering U3	SAKAI Yasuhiko Designated Professor			3	3 Spring Elective