

※All the classes except Spoken English and Intensive English are offered in Japanese

1st: for 1st year students  
2nd: for 2nd year students  
3rd: for 3rd year students  
4th: for 4th year students

S: Spring semester  
F: Fall semester

各学科共通講座 Common Subjects

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
英語購読 I A (Reading in English I A)	1	1							
英語購読 I B (Reading in English I B)	1		1						
英語購読 II (Reading in English II)	1			1					
口語英語 I (Spoken English I)	1	1							
口語英語 II (Spoken English II)	1			1					
教養英語 I (Intensive English I)	1		1						
教養英語 II (Intensive English II)	1				1				
体育実技 I (Physical Education I)	1	1							
体育実技 II (Physical Education II)	1		1						
数学序論 (Introductory Mathematics)	2	2							
基礎数学 (Basic Mathematics)	1	1							
基礎解析 (Basic Calculus)	1		1						
解析学 I (Calculus I)	2		2						
解析学 II (Calculus II)	2			2					
線型代数 I (Linear Algebra I)	2	2							
線型代数 II (Linear Algebra II)	2		2						
フーリエ解析 (Fourier Analysis)	2				2				
情報科学概論 (Introduction to Computer and Information Science)	1		1						
情報科学概論演習 (Practice for Introduction to Computer and Information Science)	1		1						
力学 (Mechanics)	4	4							
工学倫理 (Engineering Ethics)	2		2						

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
芸術学入門 (Adventures of Aesthetics)	2	2	2						
倫理学入門 (Introduction to Ethics)	2	2	2						
経済学入門 (Introductory Economy)	2	2	2						
法学入門 (Introduction to Legal Science)	2	2	2						
健康科学 (Health Science)	2			2					
科学技術と人間 (Science, Technology and Human Society)	2			2	2				
言語の構造と機能 (Structure and Function of Language)	2				2				
日本・地域経済論 (Japan and Regional Political Economy)	2			2	2				
国際政治学 (International Politics)	2			2	2				
科学・技術論ゼミ I (Science and Technology Seminar I)	2					2			
科学・技術論ゼミ II (Science and Technology Seminar II)	2						2		
健康とスポーツ科学ゼミ I (Health and Sports Science I)	2					2			
健康とスポーツ科学ゼミ II (Health and Sports Science II)	2						2		
現代言語学ゼミ I (Modern Linguistics I)	2					2			
現代言語学ゼミ II (Modern Linguistics II)	2						2		
産業経済論ゼミ I (Industrial Economy I)	2					2			
産業経済論ゼミ II (Industrial Economy II)	2						2		
国際関係論ゼミ I (International Relations I)	2					2			
国際関係論ゼミ II (International Relations II)	2						2		
世界の文学 (World Literature)	2				2				
批判理論入門 (Critical Theory)	2				2				
美術の歴史 (History of Fine Arts)	2			2					
ポピュラーカルチャー論 (Popular Cultures)	2			2	2				
文芸作品鑑賞ゼミ I (Appreciation of Literary Works I)	2					2			
文芸作品鑑賞ゼミ II (Appreciation of Literary Works II)	2						2		
ヨーロッパ文化ゼミ I (European Culture I)	2					2			
ヨーロッパ文化ゼミ II (European Culture II)	2						2		
芸術と社会ゼミ I (Art and Society I)	2					2			
芸術と社会ゼミ II (Art and Society II)	2						2		
美学・芸術学ゼミ I (Problems of Aesthetics I)	2					2			
美学・芸術学ゼミ II (Problems of Aesthetics II)	2						2		
安全工学概論 (Introduction to Safety Engineering)	1		1						
異文化理解 (Cross-cultural Understanding)	1	1	1	1	1	1	1		

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
論文日本語 (Japanese Writing)	2		2						
ビジネス日本語 (Business Japanese)	2		2						
初級日本語1 (Basic Japanese 1)	2	2	2						
初級日本語2 (Basic Japanese 2)	2	2	2						
初級日本語3 (Basic Japanese 3)	2	2	2						
初級漢字1 (Basic Kanji)	1	1							
初級漢字2 (Basic Kanji2)	1		1						
中級会話1 (Intermediate Japanese Conversation 1)	1	1							
中級会話2 (Intermediate Japanese Conversation 2)	1		1						
中級文法1 (Intermediate Japanese Grammar 1)	1	1							
中級文法2 (Intermediate Japanese Grammar 2)	1		1						
日本事情1 (Topics on Japan 1)	1	1							
日本事情2 (Topics on Japan 2)	1		1						

各学科専門科目	Department of Specialized Courses
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機械工学科	Dept. of Mechanical Engineering
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授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
力学基礎 (Basic Mechanics)	2	2							
地球工学概論 (Introduction to Geo-engineering)	2		2						
機械・社会環境工学入門 (Introduction to Mechanical, Civil and Environmental Engineering)	2	2							
創造基礎 (Basic Creative Engineering)	2		2						
構造力学基礎 (Fundamental of Structural Mechanics)	1		1						
工業材料学 (Industrial Materials Engineering)	2			2					
材料力学Ⅰ (Mechanics of Materials I)	2			2					
材料力学Ⅱ (Mechanics of Materials II)	2				2				
流体工学ⅠA (Fluid Mechanics I A)	2			2					
流体工学ⅠB (Fluid Mechanics I B)	2			2					
熱力学ⅠA (Thermodynamics I A)	2			2					
熱力学ⅠB (Thermodynamics I B)	2			2					
機械力学 (Dynamics of Machine Systems)	4				4				
プログラミングⅠ (Computer Programming I)	2			2					
生産加工学基礎論 (Introduction to Manufacturing Processes)	2				2				
基礎電気工学 (Basic Electric Engineering)	2				2				
統計処理法 (Statistical Processing Method)	2			2					
環境工学 (Energy and Environmental Engineering)	2				2				
機械要素設計演習Ⅰ (Machine Element Design I)	1			1					
機械設計製図Ⅰ (Machine Design and Drawing I)	1			1					
機械設計製図Ⅱ (Machine Design and Drawing II)	1				1				
創成工学Ⅰ (Creative Engineering I)	2					2			
創成工学Ⅱ (Creative Engineering II)	2						2		
CAE (Computer Aided Engineering)	2					2			
制御工学Ⅰ (Control Engineering I)	2					2			

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
基礎化学及び同演習 (Basic Chemistry & Experiment in Chemistry)	2	2							
機械要素設計演習Ⅱ (Machine Element Design II)	1				1				
プログラミングⅡ (Computer Programming II)	2				2				
流体工学Ⅱ (Fluid Mechanics II)	2				2				
熱力学Ⅱ (Thermodynamics II)	2				2				
生産管理工学 (Production and Quality Control Engineering)	2						2		
特別講義 (Recent Topics in Mechanical Engineering)	1							1	
伝熱工学 (Heat Transfer)	2					2			
エンジン工学 (Engineering of Automobile Engine)	2					2			
高速流体力学 (High Speed Fluid Mechanics)	2					2			
エネルギー変換工学 (Energy Conversion Technology)	2						2		
流体システム工学 (Fluid System Engineering)	2						2		
航空力学 (Aerodynamics and Aeronautics)	2						2		
弾塑性力学 (Theory of Elasticity and Plasticity)	2						2		
CAD/CAM基礎論 (Introduction to CAD/CAM)	2					2			
制御工学演習 (Exercise of Control Engineering)	2					2			
制御回路工学 (Circuit Engineering for Control)	2						2		
制御工学Ⅱ (Control Engineering II)	2						2		
ロボット工学 (Robotics)	2					2			
メカトロニクス (Mechatronics)	2						2		
生体工学概論 (Introduction to Bioengineering)	2						2		
CAD/CAM実習 (CAD/CAM Practice)	2						2		

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
機械・社会環境工学入門 (Introduction to Mechanical, Civil and Environmental Engineering)	2	2							
地球工学概論 (Introduction to Geo-engineering)	2		2						
力学基礎 (Basic Mechanics)	2	2							
創造基礎 (Basic Creative Engineering)	2		2						
構造力学基礎 (Fundamental of Structural Mechanics)	1		1						
電子計算機プログラミング及び同演習 (Computer Programming and Practical)	2			2					
構造力学ⅠA及び同演習 (Structural Mechanics I A and Experience)	1			1					
構造力学ⅠB及び同演習 (Structural Mechanics I B and Experience)	1			1					
構造力学ⅡA及び同演習 (Structural Mechanics II A and Experience)	1				1				
構造力学ⅡB及び同演習 (Structural Mechanics II B and Experience)	1				1				
社会環境工学基礎 (Foundation Engineering of Civil and Environment)	1			1					
オホーツク総合演習Ⅰ (Integrated study in Okhotsk region I)	1				1				
オホーツク総合演習Ⅱ (Integrated study in Okhotsk region II)	1					1			
キャリアアップ総合演習 (Integrated Study of Career Advance)	1						1		
水理学Ⅰ及び同演習 (Hydraulics I and Exercise)	2			2					
水理学Ⅱ及び同演習 (Hydraulics II and Exercise)	2				2				
流れの基礎 (Introduction to Hydraulics)	1			1					
寒地土質工学Ⅰ及び同演習 (Cold Regions Soil Mechanics I and Exercise)	2			2					
寒地土質工学Ⅱ及び同演習 (Cold Regions Soil Mechanics II and Exercise)	2				2				
雪氷学 (Glaciology)	2				2				
寒冷地土木材料学 (Construction Materials in Cold Regions)	2			2					
岩盤・地下空間工学 (Rock Mechanics and Underground Space Engineering)	2					2			
都市計画 (City Planning)	2				2				
地圏環境防災工学 (Geo-sphere Environmental Conservation and Natural Disaster Reduction Engineering)	2					2			
鉄筋コンクリート構造学 (Reinforced Concrete Structure)	2				2				
測量学 (Surveying)	2				2				
測量学実習及び製図 (Surveying Practice and Drafting)	1					1			
橋梁工学 (Bridge Engineering)	2					2			
河川工学 (River Engineering)	2					2			
海岸・湾岸工学 (Coastal Engineering)	2						2		
環境工学概論 (Introduction to Environmental Engineering)	2				2				
交通基盤工学 (Traffic Infrastructure Engineering)	2					2			
CAD演習 (Exercise in Computer Aided Drawing for Civil Structures)	1					1			
橋梁工学設計製図 (Bridge Design and Drafting)	1						1		
水環境工学デザイン (Engineering Design on Water Environment)	1						1		
マネジメント工学デザイン (Design on Engineering Management)	1						1		

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
基礎化学及び同演習 (Basic Chemistry & Experiment in Chemistry)	2	2							
確率・統計 (Probability and Statistics)	2			2					
地球環境科学 (Environmental Earth Science)	2						2		
計画数理学 (Theory of Operations Research)	2					2			
社会資本マネジメント工学 (Infrastructure Management)	2						2		
火薬学 (Explosives Engineering)	2						2		
プロジェクト評価 (Project Evaluation Engineering)	2						2		
構造解析学 (Structural Analysis)	2					2			
寒地土質工学Ⅲ (Cold Regions Soil Mechanics III)	2						2		
PC・複合構造学 (Prestressed Concrete and Hybrid Structure)	2						2		
地圏環境防災工学演習 (Exercise on Geo-sphere Environmental Conservation and Natural disaster Reduction Engineering)	1						1		
地震防災工学 (Earthquake Disaster-Mitigation Engineering)	2						2		
交通環境工学 (Highway Environmental Engineering)	2						2		
リモートセンシング論 (Remote Sensing)	2					2			
水文学 (Hydrology)	2						2		
水処理工学 (Water Treatment Engineering)	2					2			
応用生態工学 (Applied Ecological Engineering)	2						2		
寒冷地環境科学概論 (Basic Environmental Science of Cold Regions)	1						1		
氷物性概論 (Introduction to Ice Physics)	1						1		
ガスハイドレート工学入門 (Introduction to Gas Hydrate Engineering)	2						2		







授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
バイオ環境マテリアル入門 (Introduction to Biotechnology, Environmental and Materials Science)	4	4							
基礎化学Ⅰ (Principle of Chemical Science I)	2	2							
基礎化学Ⅱ (Principle of Chemical Science II)	2		2						
材料組織 (Microstructure of Materials)	2			2					
材料力学 (Strength of Materials)	2			2					
材料物性Ⅰ (Materials Physics I)	2			2					
材料物性Ⅱ (Materials Physics II)	2			2					
無機材料工学Ⅰ (Inorganic Materials Engineering I)	2				2				
無機材料工学Ⅱ (Inorganic Materials Engineering II)	2				2				
分析化学Ⅰ (Analytical Chemistry I)	2			2					
分析化学Ⅱ (Analytical Chemistry II)	2				2				
有機化学Ⅰ (Organic Chemistry I)	2			2					
有機化学Ⅱ (Organic Chemistry II)	2			2					
有機化学Ⅲ (Organic Chemistry III)	2				2				
文献ゼミナール (Seminar)	2								2

授業科目 Course title	Credit	1st		2nd		3rd		4th	
		S	F	S	F	S	F	S	F
電磁気学基礎 (Basic Electromagnetics)	2		2						
物理化学Ⅰ (Physical Chemistry I)	2			2					
物理化学Ⅱ (Physical Chemistry II)	2				2				
物理化学Ⅲ (Physical Chemistry III)	2				2				
先端材料工学 (Advanced Materials Engineering)	3					3			
科学技術英語 (English in Materials Science)	2					2			
特別講義Ⅰ (Topics in Materials Science I)	1						1		
特別講義Ⅱ (Topics in Materials Science II)	1								1
エコ材料工学 (Eco-Materials Engineering)	2					2			
高分子材料 (Polymeric Materials)	2						2		
触媒科学 (Catalytic Science)	2					2			
無機資源工学 (Inorganic Resource Engineering)	2					2			
有機構造解析 (Structural Analysis of Organic Compounds)	2						2		
分離機能化学 (Separation Chemistry)	2						2		
物理工学 (Applied Physics)	2					2			
無機構造解析 (Introduction to Structural Analysis of Inorganic Materials)	2						2		
半導体ナノ工学 (Semiconductor Nano-Engineering)	2						2		
材料表面工学 (Materials Surface Engineering)	2						2		
生体材料化学 (Chemistry for Biomaterials)	2						2		
薄膜材料工学 (Thin Film Materials Engineering)	2						2		