

# 科目一覧(修士) Class List(Master)

※All the classes except Spoken English and Intensive English are offered in Japanese  
 1st: for 1st year students  
 2nd: for 2nd year students  
 S: Spring semester  
 F: Fall semester

各専攻共通講座	Common Class
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科目名 Class title	Credit	1st		2nd	
		S	F	S	F
英語コミュニケーションⅠ (English CommunicationⅠ)	1	1			
英語コミュニケーションⅡ (English CommunicationⅡ)	1		1		
人間学特論Ⅰ (AnthropologyⅠ)	2		2		
地域社会特論Ⅰ (Studies on Regional SocietyⅠ)	2		2		
国際文化特論Ⅰ (Studies on International CulturesⅠ)	2		2		
健康科学Ⅰ-理系院生のために- (Health ScienceⅠ)	2	2			
国際理解 (International Understanding)	2		2		
工業マネジメント特論Ⅰ (Studies on Industrial ManagementⅠ)	2		2		
科学技術特論Ⅰ (Science and TechnologyⅠ)	2		2		
デザイン学Ⅰ (Studies on DesignⅠ)	2		2		
研究・開発マネジメント学 (R&D Management)	2	2			
情報とシステム 情報の取得と解析 (Information and System:Acquisition and Analysis of Information)	2	2			
情報とシステム 情報デバイスと制御 (Information and System:Devices for information and/or control)	2	2			
知能と生体・バイオ 人と知能 (Intelligence and Living-body Biotechnology:Human Oriented Intelligence)	2		2		
知能と生体・バイオ 生体とバイオ技術 (Intelligence and organism/biotechnology:Organism and biotechnology)	2	2			
エネルギーと環境 エネルギーの発生と利用 (Energy and Environmental:Generation of Energy and its Application)	2	2			
エネルギーと環境 自然と環境 (Energy and Environmental:Nature and Environment)	2	2			
材料と物質 創成と評価 (Material and Substance:Processing and Evaluation)	2	2			
材料と物質 環境との調和 (Material and Substance:Harmony with Environment)	2	2			

各専攻専門科目	Department of Specialized Courses
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機械工学専攻	Dept. of Mechanical Engineering
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科目名 Class title	Credit	1st		2nd	
		S	F	S	F
計算力学特論 (Advanced Course in Computational Mechanics)	2		2		
伝熱工学特論 (Principles of Heat Transfer)	2		2		
エネルギー工学特論 ( Basic Creative Engineering)	2	2			
燃焼工学特論 (Advanced Combustion Engineering)	2	2			
波形データ処理特論 (Data Acquisition and Signal Processing)	2	2			
粘性流体力学特論 (Advanced Mechanics of Viscous Flow)	2		2		
流体拡散制御特論 (Flow Diffusion Control)	2		2		
数値流体力学特論 (Computational Fluid Mechanics)	2	2			
精密加工工学特論 (Theory and Application of Precision Machining)	2	2			
線形システム解析特論 (Advanced Linear System Analysis)	2	2			
機械制御特論 (Advanced Mechanical Control)	2		2		
現代制御工学特論 (Modern Control Engineering for Mechanical Systems)	2		2		
工業材料工学特論 (Industrial Materials and Fracture Mechanics)	2	2			
バイオメカニクス (Biomechanics)	2	2			
知能機械特論 (Production and Quality Control Engineering)	2		2		
機械工学特別講義 (Special Lecture on Mechanical Engineering)	1		1		

社会環境工学専攻	Dept. of Civil and Environmental Engineering
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科目名 Class title	Credit	1st		2nd	
		S	F	S	F
振動解析学特論 (Advanced vibration analysis)	2		2		
構造解析学特論 (Advanced Structural Mechanics)	2	2			
寒地コンクリート工学特論 (Advanced Concrete Engineering)	2		2		
土質工学特論 (Advanced Soil Engineering)	2		2		
地盤工学特論 (Advanced Geotechnical Engineering)	2	2			
岩盤工学特論 (Rock Mechanics)	2		2		
防災地盤工学 (Advanced Disaster-Mitigation Geotechnology)	2	2			
交通工学特論 (Advanced Traffic Engineering)	2	2			
都市交通計画特論 (Advanced Urban Transport Planning and policy)	2		2		
水理学特論 (Advanced Hydraulics)	2		2		
数値流体力学 (Coastal Engineering)	2	2			
水圏地形解析学 (Hydro-Morphologic Processes)	2		2		
流域マネジメント工学 (River System Engineering and Management)	2		2		
環境工学特論 (Advanced Environmental Engineering)	2	2			
氷物性特論 (Ice Physics)	2		2		
雪氷学特論 (Advanced Glaciology)	2		2		
地球環境科学特論 (Advanced Environmental Earth Science)	2	2			
結晶成長基礎論 (Fundamentals of Crystal Growth)	2	2			
寒冷地環境科学特論 (Advanced Environmental Science of Cold Regions)	2	2			

## 電気電子工学専攻

Dept. of Electrical and Electronic Engineering

科目名 Class title	Credit	1st		2nd	
		S	F	S	F
エネルギー変換工学特論 (Advanced Course of Energy Conversion)	2	2			
電力システム工学特論 (Advanced Power Systems Engineering)	2		2		
電気電子応用特論Ⅰ (Advanced electrical and electronic applicationsⅠ)	2	2			
電気電子応用特論Ⅱ (Advanced electrical and electronic applicationsⅡ)	2		2		
集積エレクトロニクス特論 (Advanced Course in Integrated Electronics)	2	2			
集積システム工学特論 (Advanced Integrated Systems Engineering)	2		2		
波動エレクトロニクス特論 (Advanced Wave Electronics)	2	2			
情報通信システム工学特論 (Advanced Information and Communication Systems Engineering)	2		2		

## 情報システム工学専攻

Dept. of Computer Science

科目名 Class title	Credit	1st		2nd	
		S	F	S	F
知的システム設計特論Ⅰ (Advanced Intelligent System DesignⅠ)	2	2			
知的システム設計特論Ⅱ (Advanced Intelligent System DesignⅡ)	2	2			
知的システム設計特論Ⅲ (Advanced Intelligent System DesignⅢ)	2		2		
光情報工学特論Ⅰ (Advanced Optical Information EngineeringⅠ)	2	2			
光情報工学特論Ⅱ (Advanced Optical Information EngineeringⅡ)	2		2		
光情報工学特論Ⅲ (Advanced Optical Information EngineeringⅢ)	2		2		
知能工学特論Ⅰ (Advanced Engineering of Knowledge Discovery and MiningⅠ)	2	2			
知能工学特論Ⅱ (Advanced Engineering of Knowledge Discovery and MiningⅡ)	2	2			
知能工学特論Ⅲ (Advanced Engineering of Knowledge Discovery and MiningⅢ)	2		2		
情報数理学特論 (Mathematical science For information Theory)	2		2		

バイオ環境化学専攻 Dept. of Biotechnology and Environmental Chemistry

科目名 Class title	Credit	1st		2nd	
		S	F	S	F
生物化学特論 (Advanced Biochemistry)	1	1			
生物化学工学特論 (Advanced Biochemical Engineering)	2	2			
食品科学特論 (Advanced Food Science)	2		2		
栄養学特論 (Advanced Nutritional Science)	1		1		
分析化学特論 (Advanced Lectures on Analytical Chemistry)	2	2			
超分子化学特論 (Supramolecular Chemistry)	1		1		
精密合成化学 (Fine Synthetic Chemistry)	2	2			
有機構造解析特論 (Advanced Structural Analysis in Organic Chemistry)	1	1			
化学情報処理 (Information Processing for Chemists)	2	2			
環境材料設計特論 (Environmentally-Friendly Material Engineering)	1	1			
バイオ環境化学特別講義Ⅰ (Advanced Topics in Biotechnology and Environmental ChemistryⅠ)	1	1			
バイオ環境化学特別講義Ⅱ (Advanced Topics in Biotechnology and Environmental ChemistryⅡ)	1	1			
バイオ環境化学特別講義Ⅲ (Advanced Topics in Biotechnology and Environmental ChemistryⅢ)	1	1			
バイオ環境化学特別講義Ⅳ (Advanced Topics in Biotechnology and Environmental ChemistryⅣ)	1	1			

マテリアル工学専攻 Dept. of Materials Science and Engineering

科目名 Class title	Credit	1st		2nd	
		S	F	S	F
セラミックス材料特論 (Advanced Ceramics)	2	2			
機能電子材料特論 (Advanced Physics of Electronic Materials)	2	2			
金属・無機材料特論 (Advanced Metals Science)	2		2		
材料物理化学特論 (Advanced Physical Chemistry)	2		2		
有機先端材料特論 (Advanced Organic Materials)	2	2			
材料分析特論 (Advanced Analytical Chemistry)	2	2			
マテリアル工学特別講義Ⅰ (Advanced Lecture on Materials ScienceⅠ)	1	1			
マテリアル工学特別講義Ⅱ (Advanced Lecture on Materials ScienceⅡ)	1	1			