

# Materials Chemistry

Master's Course <前期課程>

応用物質化学専攻

Course Categories 科目区分	Course Format 授業形態	授業科目	Course Title	Lecturer 担当教員	Credits 単位数	Chemistry Graduate Program 化学系プログラム Starts 開講時期
Basic 基礎科目	Lecture 講義	コア無機化学特論	Core Inorganic Chemistry	Faculty of Chemistry	2	1Autumn, 2Autumn
		コア有機化学特論	Core Organic Chemistry	Jiyoung Shin Designated Professor	2	1Spring, 2Spring (offered every other year)
		コア物理化学特論	Core Physical Chemistry	Peter Butko Designated Professor	2	1Autumn, 2Autumn (offered every other year)
		コア生物化学特論	Core Biochemistry	Faculty of Chemistry	2	1Spring, 2Spring (offered every other year)
Specialized 専門科目	Seminar ゼミナール	化学系セミナー1 A	Chemistry Seminar 1A	Faculty of Chemistry	2	1Autumn
		化学系セミナー1 B	Chemistry Seminar 1B	Faculty of Chemistry	2	1Spring
		化学系セミナー1 C	Chemistry Seminar 1C	Faculty of Chemistry	2	2Autumn
		化学系セミナー1 D	Chemistry Seminar 1D	Faculty of Chemistry	2	2Spring
	Lecture 講義	アドバンス無機化学特論	Advanced Inorganic Chemistry	Faculty of Chemistry	2	1Spring, 2Spring (offered every other year)
		アドバンス有機化学特論	Advanced Organic Chemistry	Faculty of Chemistry	2	1Spring, 2Spring
		アドバンス物理化学特論	Advanced Physical Chemistry	Faculty of Chemistry	2	1Autumn, 2Autumn (offered every other year)
		アドバンス量子化学特論	Advanced Quantum Chemistry	Faculty of Chemistry	2	1Spring, 2Spring
		アドバンス高分子化学	Advanced Polymer Chemistry	Faculty of Chemistry	2	1Autumn, 2Autumn (offered every other year)
		Experiments and Exercises 実験・演習	化学系特別実験及び演習 I	Experiments and Exercises in Chemistry I	Faculty of Chemistry	4
化学系特別実験及び演習 II	Experiments and Exercises in Chemistry II		Faculty of Chemistry	4	2 Autumn/Spring	
Comprehensive engineering courses 総合工学科目	科学技術英語特論	Advanced Lectures on Scientific English	Part-Time Faculty	1	1Autumn, 2Autumn	
	コミュニケーション学	Introduction to Academic Communication	Reiko FURUYA	1	1Autumn, 2Autumn	
	研究インターンシップ1 U2	Research Internship1 U2	Faculty of Chemistry	2	1, 2 Autumn/Spring	
	研究インターンシップ1 U3	Research Internship1 U3	Faculty of Chemistry	3	1, 2 Autumn/Spring	
	研究インターンシップ1 U4	Research Internship1 U4	Faculty of Chemistry	4	1, 2 Autumn/Spring	
	研究インターンシップ1 U6	Research Internship1 U6	Faculty of Chemistry	6	1, 2 Autumn/Spring	
	研究インターンシップ1 U8	Research Internship1 U8	Faculty of Chemistry	8	1, 2 Autumn/Spring	
	研究室ローテーション1 U2	Laboratory Visit1 U2	Faculty of Chemistry	2	1, 2 Autumn/Spring	
	研究室ローテーション1 U3	Laboratory Visit1 U3	Faculty of Chemistry	3	1, 2 Autumn/Spring	
	研究室ローテーション1 U4	Laboratory Visit1 U4	Faculty of Chemistry	4	1, 2 Autumn/Spring	
	研究室ローテーション1 U6	Laboratory Visit1 U6	Faculty of Chemistry	6	1, 2 Autumn/Spring	
	研究室ローテーション1 U8	Laboratory Visit1 U8	Faculty of Chemistry	8	1, 2 Autumn/Spring	
Courses from other departments 他専攻等科目	<p>Of class courses offered by Global 30 International Programs of Graduate School of Engineering Department of other than the majors or of class courses offered by Global 30 International Programs of other graduate schools of the University, Graduate School Common Courses, class courses of graduate schools of other universities under a credit transfer agreement, or the University's undergraduate class courses relating to academic fields that have not been studied by the students, those which are approved by the students' academic advisors and the head of the department</p> <p>当該専攻以外の工学研究科専攻の国際プログラム群で開講されている授業科目及び本学大学院の他の研究科の国際プログラム群で開講される授業科目、本学大学院共通科目、単位互換協定による他の大学院の授業科目又は工学研究科入学時において当該学生が未履修の学問分野に関する本学学部の授業科目のうち、指導教員及び専攻長が認めた科目</p>					
Research supervision 研究指導						
Method of Completion and Research Supervision (履修方法及び研究指導)						
<p>1. The requirements stated in the following items (i) to (iii) must be met and a total of at least 30 credits must be acquired. (以下のi)~iii)の各項を満たし、合計30単位以上)</p> <p>i) Basic Courses/Specialized Courses :</p> <p>a. At least 2 credits from Basic courses (基礎科目2単位以上)</p> <p>b. At least 18 credits from Specialized courses, including 8 credits from seminars, and 8 credits from experiments and exercises (専門科目の中から、セミナー8単位、実験・演習8単位を含む18単位以上)</p> <p>ii) At least 4 credits from Courses of Comprehensive engineering and Courses from other departments. 総合工学科目および他専攻等科目の中から4単位以上</p> <p>iii) A maximum of 10 credits of Comprehensive engineering courses and Courses from other departments will be recognized as credits required for completion.; credits in excess of 10 credits will be treated as credits for free elective subjects. 総合工学科目及び他専攻等科目は10単位までを修了要件単位として認め、これを超えた分は随意科目の単位として扱う。</p> <p>2. Research supervision: students will be subject to instruction by academic advisors under the rules prescribed by the department. (研究指導については、専攻において定めるところにより、指導教員の指示によること)</p>						