Physical Engineering

Master’s Course ＜前期課程＞ 応用物理学専攻

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	Physical Engineering Graduate Program 物理工学プログラム Starts 開講時期
Basic Courses 基礎科目	Lecture 講義	コア応用物理学特論	Core Applied Physics	Yukio TANAKA, Yuki KAWAGUCHI, Taishi TAKENOBU, Hideo KISHIDA, Shao_Liang ZHANG, Hiroshi SAWA, Koushi TAKENAKA,Koh SAITO, Leonard CHAVAS, Satoshi KASHIWAYA	2	1, 2 Autum/Spring (Compulsory Elective)
		コア物質科学特論	Core Materials Physics	Masashi HASEGAWA, Hiroshi IKUTA, Osamu NAKATSUKA, Katsuyuki MATSUNAGA, Yuichi MASUBUCHI, Syunsuke MUTO, Kenji SHIRAISHI, Satoshi MATSUYAMA, Masao TABUCHI	2	1, 2 Autum/Spring (Compulsory Elective)
Specialized courses 専門科目	Seminar セミナー	物理工学セミナー１A	Physical Engineering Seminar 1A	Faculty of Physical Engineering	2	1Autumn (Compulsory Elective)
		物理工学セミナー１B	Physical Engineering Seminar 1B	Faculty of Physical Engineering	2	1Spring (Compulsory Elective)
		物理工学セミナー１C	Physical Engineering Seminar 1C	Faculty of Physical Engineering	2	2Autumn (Compulsory Elective)
		物理工学セミナー１D	Physical Engineering Seminar 1D	Faculty of Physical Engineering	2	2Spring (Compulsory Elective)
	Lecture 講義	物理工学輪講A	Physical Engineering Journal Club A	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		物理工学輪講B	Physical Engineering Journal Club B	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		応用物理学特論	Advanced Applied Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		量子物理学特論	Advanced Quantum Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		物質科学特論	Advanced Materials Science	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		電磁物理学特論	Advanced Electromagnetic Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		固体物理学特論	Advanced Solid State Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		半導体物理学特論	Advanced Semiconductor Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		物性物理学特論	Advanced Condensed Matter Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		材料物理学特論	Advanced Materials Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		数理物理学特論	Advanced Mathematical Physics	Faculty of Physical Engineering	2	1, 2 Autum/Spring (Compulsory Elective)
		応用物理学国際特別講義A	Applied Physics International Special Lecture A	Part-Time Faculty	1	1, 2 Autum/Spring (Compulsory Elective)
		応用物理学国際特別講義B	Applied Physics International Special Lecture B	Part-Time Faculty	1	1, 2 Autum/Spring (Compulsory Elective)
		物質科学国際特別講義A	Materials Physics International Special Lecture A	Part-Time Faculty	1	1, 2 Autum/Spring (Compulsory Elective)
		物質科学国際特別講義B	Materials Physics International Special Lecture B	Part-Time Faculty	1	1, 2 Autum/Spring (Compulsory Elective)
	Experiments and Exercises 実験・演習	物理工学特別実験及び演習	Experiments and Exercises in Physical Engineering	Faculty of Physical Engineering	4	1 Autumn/Spring 2 Autumn/Spring
omprehensive engineering courses 総合工学科目		コミュニケーション学	Introduction to Academic Communication	Reiko FURUYA	1	1Autumn, 2Autumn
		科学技術英語特論	Advanced Lectures on Scientific English	Part-Time Faculty	1	1Autumn, 2Autumn
Courses from other departments 他専攻等科目		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 当該専攻以外の工学研究科専攻の国際プログラム専攻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			

Research supervision 研究指導

Method of Completion and Research Supervision （履 修 方 法 及 び 研 究 指 導）

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）

i) Basic Courses/Specialized Courses :

a. At least 2 credits from Basic courses（基礎科目２単位以上）

b. At least 4 credits from seminars, and 4 credits from experiments and exercises
（専門科目のうち，セミナー4単位，実験・演習4単位を含むこと）

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）

iii) A maximum of 6 credits of Comprehensive engineering courses and Courses from other departments will be recognized as credits required for completion.; credits in excess of 6 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6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。）

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）