

3. 電気電子情報工学系 Electrical, Electronics and Computer Engineering Field			EEC-F2
授業科目名 Course Title	エネルギー工学 Energy Systems Engineering	単位数 Credit	2
担当教員 Instructor	王 榮龍 WANG RongLong 茂呂 征一郎 MORO Seiichiro 牧野 哲征 MAKINO Takayuki 伊藤 雅一 ITO Masakazu 重信 颯人 SHIGENOBU Ryuto	開講学期 Semester	秋学期 Fall
キーワード Keywords	Optimization, Electric circuits, Thermodynamics, Renewable energies, Power system	曜日/時限 Day & Time	

授業概要 Course summary
In this course, we will learn about fundamentals of energy systems engineering, such as optimization methods, electric circuits, thermodynamics, renewable energies, power system and other related topics.
到達目標 Course goal
To obtain fundamental knowledge in the field of energy systems engineering.
授業内容 Course description
1) Optimization methods 2) Electric circuits and electric power 3) Thermodynamics with emphasis on relation with statistical mechanics 4) Renewable energies and Life-cycle assessment 5) Power system analysis, Power system stability
準備学習 (予習・復習) 等 Preparation / Review
Students are required to work on a report assignment for each topic.
授業形式 Class style
Lecture and Seminar
成績評価の方法・基準 Method of evaluation
Reports submission
教科書・参考書等 Textbook and material
None
受講要件・予備知識 Prerequisite

- 1) Basic knowledge of programming language
- 2) Basic knowledge of electric circuits

その他の注意事項 Note