理工学部 Curriculum Tree

機能創造理工学科 グリーンエンジニアリングコース GREEN ENGINEERING COURSE, FACULTY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ENGINEERING AND APPLIED SCIENCES

※ Red letters show Compulsory Sujects.

DP1
The broad ability to address science and technology issues, acquired by studying the fundamentals of science and technology, including natural science disciplines.

DP2
The ability to contribute to the acquisition of new physical values and the creation of functions, nurtured by systematically studying physics, mechanical engineering and electrical and electronics engineering.

DP3
The ability to contribute to the development of ingenious technologies, acquired by studying physics, mechanical engineering and electrical and electronics engineering from the perspectives of "energy creation and use," "understanding substances and creating materials and devices," and "manufacturing and creating systems."

DP4
The ability to pursue original research and thus contribute to the further advancement of science and technology, with the power to solve various science and technology issues acquired by theoretically and technologically applying and developing what one has learned.

Level

400

DP4
- GRADUATION RESEARCH 2 (4th Year)
- GRADUATION RESEARCH 1 (4th Year)

DP2 DP3
- AIRCRAFT DESIGN WITH MECHANICS OF FLIGHT
- TOPICS OF GREEN ENGINEERING 3

DP1
- COMMUNICATION AND NETWORK ENGINEERING

DP2 DP3
- ELECTROMAGNETISM (3rd Year)
- FUNDAMENTALS OF SYSTEM ANALYSIS
- MOTOR DRIVE SYSTEMS
- CLEAN ENERGY
- POWER ELECTRONICS
- ELECTRIC POWER SYSTEM ENGINEERING
- NUCLEAR ENERGY ENGINEERING
- ENERGY & MATERIALS
- FLUID ENERGY CONVERSION
- THERMAL ENERGY CONVERSION
- SIMULATION ENGINEERING
- GREEN ENGINEERING LAB. 3 (3rd Year)
- GREEN ENGINEERING LAB. 2 (3rd Year)
- GREEN ENGINEERING LAB. 1 (2nd Year)
- TOPICS OF GREEN ENGINEERING 2 (3rd Year)
- TOPICS OF GREEN ENGINEERING 1 (3rd Year)

300

DP1
- STUDY ABROAD (INTERNSHIP)
- SUSTAINABLE DEVELOPMENT
- ENVIRONMENTAL SCIENCE
- FUNDAMENTAL BIOCHEMISTRY
- CELL BIOLOGY
- PHYSICAL CHEMISTRY
- ATMOSPHERIC CHEMISTRY (3rd or 4th Year)
- GEOSCIENCE (3rd or 4th Year)
- ATOMIC & MOLECULAR SCIENCES (2nd Year)
- FOURIER & LAPLACE TRANSFORMS (2nd Year)
- MATHEMATICS C1 (STATISTICAL DATA ANALYSIS) (2nd Year)
- ENGL.FOR SCI/ENGINEERING (ENVIRONMENT) (2nd Year)

DP2 DP3
- ENGINEERING AND APPLIED SCIENCES LAB. 2 (2nd Year)
- ENGINEERING AND APPLIED SCIENCES 3 (2nd Year)
- INTRODUCTION TO QUANTUM MECHANICS
- THERMODYNAMICS (2nd Year)

200

DP1
- MOLECULAR BIOLOGY (2nd Year)
- BASIC BIOLOGY (1st Year)
- CHEMISTRY OF MATERIALS
- ORGANIC CHEMISTRY
- INORGANIC CHEMISTRY(ANALYTICAL CHEMISTRY)
- BASIC CHEMISTRY (1st Year)
- BASIC PHYSICS 1 (1st Year)
- MATHEMATICS EXERCISE 1 (1st Year)
- MATHEMATICS B2 (CALCULUS OF SEVERAL VARIABLES) (2nd Year)
- BASIC INFORMATICS (1st Year)
- MATHEMATICS B(CALCULUS) (1st Year)
- MATHEMATICS A(LINEAR ALGEBRA) (1st Year)
- EXPERIMENTS & EXERCISE OF BASIC SCIENCE (1st Year)
- INTRODUCTION OF SCIENCE AND TECHNOLOGY (1st Year)

DP1 DP2
- BASIC PHYSICS 2 (2nd Year)

DP2 DP3
- ENGINEERING AND APPLIED SCIENCES LAB. 1 (2nd Year)
- ENGINEERING AND APPLIED SCIENCES 2 (2nd Year)
- ENGINEERING AND APPLIED SCIENCES 1 (2nd Year)
- BASIC DIFFERENTIAL EQUATIONS (2nd Year)

100