

**<2025> International Science and Technology Course,
Graduate School of Life and Medical Sciences
Subjects**

| Research Subjects (Compulsory Subjects) | | | | | | | | |
|---|----------|-------|---|---------|--------------------|-----------|-----------|------------|
| Major | Code | Class | Subject | Credits | Professor | Remarks | Semester | Day/Period |
| Biomedical Engineering and Biomedical Information | 31425011 | 001 | Research and Experiments in Biomedical Sciences and Informatics I (E) | 2 | | Available | Fall | Intensive |
| | 31425012 | 001 | Research and Experiments in Biomedical Sciences and Informatics II (E) | 2 | HIRYU Shizuko | Available | Spring | Intensive |
| | 31425013 | 001 | Research and Experiments in Biomedical Sciences and Informatics III (E) | 2 | HIRYU Shizuko | Available | Fall | Intensive |
| | 31425014 | 001 | Research and Experiments in Biomedical Sciences and Informatics IV (E) | 2 | KOBAYASHI Kota | Available | Spring | Intensive |
| | 31425014 | 002 | Research and Experiments in Biomedical Sciences and Informatics IV (E) | 2 | Hiwa Satoru | Available | Spring | Intensive |
| | 31425014 | 003 | Research and Experiments in Biomedical Sciences and Informatics IV (E) | 2 | AKIYAMA Iwaki | Available | Spring | Intensive |
| | 31425011 | 101 | Research and Experiments in Biomedical Sciences and Informatics I (E) | 2 | AKIYAMA Iwaki | Available | Spring | Intensive |
| | 31425011 | 102 | Research and Experiments in Biomedical Sciences and Informatics I (E) | 2 | HIRYU Shizuko | Available | Spring | Intensive |
| | 31425011 | 103 | Research and Experiments in Biomedical Sciences and Informatics I (E) | 2 | KOBAYASHI Kota | Available | Spring | Intensive |
| | 31425012 | 101 | Research and Experiments in Biomedical Sciences and Informatics II (E) | 2 | | Available | Fall | Intensive |
| | 31425013 | 101 | Research and Experiments in Biomedical Sciences and Informatics III (E) | 2 | | Available | Spring | Intensive |
| | 31425014 | 101 | Research and Experiments in Biomedical Sciences and Informatics IV (E) | 2 | | Available | Fall | Intensive |
| | 31400099 | | | Thesis | - | | Available | |
| Medical Life Systems | 31425005 | 001 | Research and Experiments in Medical Life Systems I (E) | 2 | | Available | Fall | Intensive |
| | 31425006 | 002 | Research and Experiments in Medical Life Systems II (E) | 2 | ICHIKAWA Hiroshi | Available | Spring | Intensive |
| | 31425007 | 002 | Research and Experiments in Medical Life Systems III (E) | 2 | ICHIKAWA Hiroshi | Available | Fall | Intensive |
| | 31425008 | 001 | Research and Experiments in Medical Life Systems IV (E) | 2 | NISHIKAWA Kiyotaka | Available | Spring | Intensive |
| | 31425005 | 101 | Research and Experiments in Medical Life Systems I (E) | 2 | | Available | Spring | Intensive |
| | 31425006 | 101 | Research and Experiments in Medical Life Systems II (E) | 2 | | Available | Fall | Intensive |
| | 31425007 | 101 | Research and Experiments in Medical Life Systems III (E) | 2 | YONEI Yoshikazu | Available | Spring | Intensive |
| | 31425008 | 101 | Research and Experiments in Medical Life Systems IV (E) | 2 | YONEI Yoshikazu | Available | Fall | Intensive |
| 31400099 | | | Thesis | - | | Available | | |

| Category I, Group A (Courses of Specialized Fields) | | | | | | | | | |
|---|----------|-------|--|---------|---|-----------|----------|------------|-----------|
| Major | Code | Class | Subject | Credits | Professor | Remarks | Semester | Day/Period | |
| Biomedical Engineering and Biomedical Information | 31425106 | | Advanced Lectures in Ultrasonic Electronics (E) | 2 | AKIYAMA Iwaki | Available | Spring | Intensive | |
| | 31425107 | | Advanced Organic Chemistry (E) | 2 | OTA Tetsuo | Available | Spring | Intensive | |
| | 31425108 | | Advanced Theory for Medical Imaging System (E) | 2 | AKIYAMA Iwaki | Available | Fall | Intensive | |
| | 31425109 | | Advanced Lectures in Evolutionary Computation (E) | 2 | | | | | Intensive |
| | 31425114 | | Advanced Practice in Special Project A (E) | 2 | | | | | Intensive |
| | 31425117 | | Advanced Physical Science of Life (E) | 2 | | | | | Intensive |
| | 31425118 | | Advanced Biosensing Engineering (E) | 2 | HIRYU Shizuko | Available | Fall | Intensive | |
| | 31425119 | | Advanced Lectures in Applied Chemistry (E) | 2 | OE Yohei | Available | Fall | Intensive | |
| Medical Life Systems | 31425110 | | Advanced Lectures in Neuroanatomical and Neurophysiological Basis of Neurologic Diseases (E) | 2 | IKEGAWA Masaya MISONO Hiroaki | Available | Fall | Intensive | |
| | 31425111 | | Advanced Lectures in Systems Biological Sciences in Diseases (E) | 2 | KOBAYASHI Akira NISHIKAWA Keizo | Available | Spring | Intensive | |
| | 31425112 | | Advanced Lectures in History of Japanese Medicine (E) | 2 | IWAISAKO Keiko YONEI Yoshikazu ICHIKAWA Hiroshi | Available | Spring | Intensive | |
| | 31425113 | | Advanced Lectures in Molecular Pharmacology and Cellular Signaling (E) | 2 | NISHIKAWA Kiyotaka FUNAMOTO Satoru | Available | Spring | Intensive | |
| | 31425251 | | Advanced Lectures in Special Topics(E) | 2 | | | | | Intensive |

| Category II, Group A (Common Core Subjects) | | | | | | | | |
|---|----------|-------|-----------------------------------|---------|--|-----------|----------|------------|
| Major | Code | Class | Subject | Credits | Professor | Remarks | Semester | Day/Period |
| All | 31425201 | 001 | Biology (E) | 2 | IKEGAWA Masaya | Available | Fall | Fri/4 |
| | 31425201 | 002 | Biology (E) | 2 | | | | |
| | 31425207 | | Neuroscience (E) | 2 | KOBAYASHI Kota | Available | Spring | Fri/2 |
| | 31405203 | | Electric Circuit Theory (E) | 2 | INOUE Kaoru TODA Hiroyuki KOYAMA Daisuke IBI Shinsuke | Available | Fall | Wed/2 |
| | 31405204 | | Nonlinear Physics (E) | 2 | TAKAOKA Masanori | Available | Spring | Mon/4 |
| | 31405205 | | Materials Chemistry (E) | 2 | NOMURA Akiko | Available | Spring | Wed/2 |
| | 31405206 | | Applied Mathematical Analysis (E) | 2 | OMATA Seiro | Available | Fall | Internet |
| | 31405210 | | Chemical Biology (E) | 2 | NOMURA Akiko | Available | Fall | Wed/2 |
| | 31405211 | | Advanced Distributed Systems (E) | 2 | KOITA Takahiro | Available | Spring | Fri/1 |

| Group B (Common General Courses) | | | | | | | | |
|----------------------------------|----------|-------|--|---------|-----------------------------|-----------|----------|------------|
| Major | Code | Class | Subject | Credits | Professor | Remarks | Semester | Day/Period |
| All | 31405301 | | Ethics for Scientists and Engineers (E) | 2 | PHILIP TROMOVITCH | Available | Spring | Thu/4 |
| | 31405302 | | Technology and Business Project Management (E) | 2 | SARATA Makoto | Available | Spring | Tue/3·4 |
| | 31405303 | 001 | Science and Engineering Writing I (E) | 2 | PHILIP TROMOVITCH | Available | Spring | Wed/3 |
| | 31405303 | 002 | Science and Engineering Writing I (E) | 2 | PHILIP TROMOVITCH | Available | Fall | Wed/3 |
| | 31425308 | 001 | Science and Engineering Writing 2 (E) | 2 | PHILIP TROMOVITCH | Available | Spring | Thu/3 |
| | 31425308 | 002 | Science and Engineering Writing 2 (E) | 2 | PHILIP TROMOVITCH | Available | Fall | Thu/4 |
| | 31405305 | | Presentation Skills for Scientists and Engineers (E) | 1 | PHILIP TROMOVITCH | Available | Fall | Thu/3 |
| | 31405306 | | R & D Planning for Scientists and Engineers (E) | 2 | CAMILLE-FAITH PASCUA ROMERO | Available | Fall | Thu/2 |
| | 31405307 | | Japanese Corporate Culture (E) | 2 | SARATA Makoto | Available | Fall | Tue/3·4 |

| Open class(Graduate School of Science and Engineering) | | | | | | | | |
|--|----------|-------|------------------------------------|---------|------------|-----------|----------|------------|
| Major | Code | Class | Subject | Credits | Professor | Remarks | Semester | Day/Period |
| Science and Engineering | 31610040 | | Advanced Nature-Inspired Computing | 2 | IVAN TANEV | Available | Fall | Thu/2 |

CREDIT REQUIREMENT

Students are required to earn a certain amount of credits from each category as follows;

| | | | Credit Requirement |
|-------------------------------|---|-----------|--|
| Compulsory Subjects | Research and Experiments in Biomedical Sciences and Informatics I ~ IV or Research and Experiments in Medical Life Systems I ~ IV | 8 | |
| Elective Subjects | Category I, Group A | 8 or more | *All credits from other courses are counted in this category. |
| | Category II, Group A | 6 or more | (counted up to 8 as credits) |
| | Group B | 4 or more | (counted up to 6 as credits) |
| SUBTOTAL of CREDITS | | | 22 or more |
| GRAND TOTAL of CREDITS | | | 30 or more + Thesis ※Students are required to submit thesis to complete the program. |