

Appended Table 1 – University of Yamanashi, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences: Detailed Regulations pertaining to Article 2

Standard Requirements for the Master Programs of the Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences

Engineering

| Course | Field of Subject | Compulsory- Elective | Necessary Credits |
|--|-----------------------------------|-------------------------|---------------------|
| Mechanical Engineering | Graduate School Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| Computer Science and Engineering | Departmental Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| Civil and Environmental Engineering | Major | Elective | 10 credits |
| | Major (Advanced level) | Compulsory | 12 credits |
| Applied Chemistry | Other course subjects | Elective | 2 credits |
| | Any of above subjects | Elective | 2 credits or above |
| Total | | | 30 credits or above |

Notes:

1. Total of 30 credits or more including 2 credits of Graduate School Common Courses, 2 credits of Departmental Common Courses, 10 credits of Major, 12 credits of Major (Advanced level) and 2 credits of other course subjects are required.
2. 1 subject (1 credit) of Graduate School Common Courses, 1 subject (1 credit) of Departmental Common Courses and 8 subjects (12 credits) of Major (Advanced level) are compulsory.
3. When specific designations are listed in appended Table 2, credits are awarded according to these specifications.

| Course | Field of Subject | Compulsory- Elective | Necessary Credits |
|--|-----------------------------------|-------------------------|---------------------|
| Electrical and Electronic Engineering Advanced Material Science | Graduate School Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Departmental Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Major | Elective | 8 credits |
| | Major (Advanced level) | Compulsory | 12 credits |
| | Other course subjects | Elective | 2 credits |
| | Any of above subjects | Elective | 4 credits or above |
| Total | | | 30 credits or above |

Notes:

1. Total of 30 credits or more including 2 credits of Graduate School Common Courses, 2 credits of Departmental Common Courses, 8 credits of Major, 12 credits of Major (Advanced level) and 2 credits of other course subjects are required.
2. 1 subject (1 credit) of Graduate School Common Courses, 1 subject (1 credit) of

Departmental Common Courses and 8 subjects (12 credits) of Major (Advanced level) are compulsory.

- When specific designations are listed in appended Table 2, credits are awarded according to these specifications.

| Course | Field of Subject | Compulsory- Elective | Necessary Credits |
|--------------|-----------------------------------|-------------------------|---------------------|
| Mechatronics | Graduate School Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Departmental Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Major | Compulsory | 2 credits |
| | | Elective | 8 credits |
| | Major (Advanced level) | Compulsory | 12 credits |
| | Other course subjects | Elective | 2 credits |
| | Any of above subjects | Elective | 2 credits or above |
| Total | | | 30 credits or above |

Notes:

- Total of 30 credits or more including 2 credits of Graduate School Common Courses, 2 credits of Departmental Common Courses, 10 credits of Major, 12 credits of Major (Advanced level) and 2 credits of other course subjects are required.
- 1 subject (1 credit) of Graduate School Common Courses, 1 subject (1 credit) of Departmental Common Courses, 1 subject (2 credits) of Major and 8 subjects (12 credits) of Major (Advanced level) are compulsory.
- When specific designations are listed in appended Table 2, credits are awarded according to these specifications.

| Program | Field of Subject | Compulsory- Elective | Necessary Credits |
|--|-----------------------------------|-------------------------|---------------------|
| Special Educational Program on River Basin Environmental Science | Graduate School Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Departmental Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Major | Compulsory | 10 credits |
| | | Elective | 2 credits |
| | Major (Advanced level) | Compulsory | 12 credits |
| | Any of above subjects | Elective | 2 credits or above |
| Total | | | 30 credits or above |

Notes:

- Total of 30 credits or more including 2 credits of Graduate School Common Courses, 2 credits of Departmental Common Courses, 12 credits of Major, 12 credits of Major (Advanced level) are required.
- 1 subject (1 credit) of Graduate School Common Courses, 1 subject (1 credit) of Departmental Common Courses, 5 subjects (10 credits) of Major and 8 subjects (12

credits) of Major (Advanced level) are compulsory.

3. When specific designations are listed in appended Table 2, credits are awarded according to these specifications.

| Program | Field of Subject | Compulsory- Elective | Necessary Credits |
|---|-----------------------------------|-------------------------|---------------------|
| Special Educational Program for Green Energy Conversion Science and Technology | Graduate School Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Departmental Common Courses | Compulsory | 1 credit |
| | | Elective | 1 credit |
| | Major | Elective | 10 credits |
| | Major (Advanced level) | Compulsory | 12 credits |
| | Any of above subjects | Elective | 4 credits or above |
| | Total | | 30 credits or above |

Notes:

1. Total of 30 credits or more including 2 credits of Graduate School Common Courses, 2 credits of Departmental Common Courses, 10 credits of Major, 12 credits of Major (Advanced level) are required.
2. 1 subject (1 credit) of Graduate School Common Courses, 1 subject (1 credit) of Departmental Common Courses, and 8 subjects (12 credits) of Major (Advanced level) are compulsory.
3. When specific designations are listed in appended Table 2, credits are awarded according to these specifications.

Appended Table 2 – University of Yamanashi, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences: Detailed Regulations pertaining to Article 3

The Master's program

Graduate School Common Courses

| Code | Subjects | Credits | Remarks Column |
|-------------|--------------------------------|---------|-------------------|
| G S C 5 0 1 | Research Ethics | 1 | ● |
| G S C 5 0 2 | Career Management | 1 | ○ |
| G S C 5 0 3 | Communications in Sciences | 1 | ○ |
| G S C 5 0 4 | Data Analysis for Life Science | 2 | ○ |

Notes:

1. Subjects with a ●mark in the remarks column are compulsory.
2. Subjects with a ○mark in the remarks column are elective. Students are required to obtain one credit or more in these subjects.
3. The “Data Analysis for Life Science” is a subject applicable for credit transfer between the graduate school of the Meiji University and the University of Yamanashi. In case that you complete the subject held in the graduate school of the Meiji University and get a credit, the credit will be approved as a subject of the University of Yamanashi.

Departmental Common Courses

| Code | Subjects | Credits | Remarks Column |
|-------------|--|---------|-------------------|
| G T T 5 0 1 | Advanced Multidiscipline Engineering * | 1 | ● |
| G T T 5 0 2 | Design of Experiment and Data Analysis | 1 | ○ |
| G T T 5 1 0 | Practical Data Science | 1 | ○ |
| G T T 5 0 4 | Management of Technology | 1 | ○ |
| G T T 5 0 5 | Exercises in Applied Mathematics | 1 | ○ |
| G T T 5 1 3 | Internship I | 1 | ○ |
| G T T 5 1 4 | Internship II | 2 | ○ |
| G T T 5 1 5 | Intern Training for Career development | 2 | ○ |
| G T T 5 0 8 | Presentation A | 1 | ○ |
| G T T 5 0 9 | Presentation B | 1 | ○ |
| G T T 5 1 1 | Field Research in Engineering I | 1 | ○ |
| G T T 5 1 2 | Field Research in Engineering II | 2 | ○ |

Notes:

1. Subjects with a ●mark in the remarks column are compulsory.
2. Subjects with a ○mark in the remarks column are elective. Students are required to obtain one credit or more in these subjects.
3. Subjects with a * mark in the subjects column can be taught in English or Japanese.
4. In Presentation A, students are instructed on presentation held in Japanese or paper written in Japanese. In Presentation B, students are instructed on presentation held in English or paper written in English.

5. Students can take the course of “Internship I(5 days and more)” and “Internship II(2 weeks and more)” when the students participate in such a program offered by the companies and institutions. Students can take the course of “Intern Training for Career development” when the students participate in more specialized programs offered by the companies and institutions.

The Other Lectures (excluding students in Special Educational Program on River Basin Environmental Science and Special Educational Program for Green Energy Conversion Science and Technology)

Students are required to obtain 2 or more credits of subjects offered in courses other than their own course.

Mechanical Engineering

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|------------|---|---------|----------------|
| Major | G TM 5 0 1 | Advanced Thermal Engineering * | 2 | |
| | G TM 5 0 2 | Advanced Mechanical Dynamics and Control * | 2 | |
| | G TM 5 0 3 | Advanced Fluid Mechanics * | 2 | |
| | G TM 5 0 4 | Advanced Strength of Materials * | 2 | |
| | G TM 5 0 5 | Advanced Material Processing * | 2 | |
| | G TM 5 0 6 | Advanced Mechanical Materials Engineering * | 2 | |
| | G TM 5 0 7 | Advanced Mechanical Systems Engineering * | 2 | |
| Major (Advanced level) | G TM 6 1 1 | Special Lecture in Mechanical Engineering | 1 | |
| | G TM 6 0 3 | Seminar in Mechanical Engineering IA * | 1 | ● |
| | G TM 6 0 4 | Seminar in Mechanical Engineering IB * | 1 | ● |
| | G TM 6 0 5 | Seminar in Mechanical Engineering IIA * | 1 | ● |
| | G TM 6 0 6 | Seminar in Mechanical Engineering IIB * | 1 | ● |
| | G TM 6 0 7 | Research Work in Mechanical Engineering IA * | 2 | ● |
| | G TM 6 0 8 | Research Work in Mechanical Engineering IB * | 2 | ● |
| | G TM 6 0 9 | Research Work in Mechanical Engineering IIA * | 2 | ● |
| | G TM 6 1 0 | Research Work in Mechanical Engineering IIB * | 2 | ● |

- Notes: 1. Subjects with a ● mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
2. Students are required to obtain ten or more credits in the column of Major and twelve or more credits in the column of Major (Advanced level) including compulsory subjects.
3. Subjects with a * mark in the subjects column can be taught in English or Japanese.

Electrical and Electronic Engineering

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T E 5 0 1 | Advanced Optical and Acoustic Waves Engineering * | 2 | |
| | G T E 5 0 2 | Advanced Quantum Engineering * | 2 | |
| | G T E 5 0 3 | Advanced Electronic Device Engineering * | 2 | |
| | G T E 5 0 4 | Advanced Crystal Engineering * | 2 | |
| | G T E 5 0 5 | Advanced Signal and Systems Engineering * | 2 | |
| | G T E 5 0 6 | Advanced Electronic Circuits Engineering * | 2 | |
| | G T E 5 0 7 | Advanced Measurement Engineering * | 2 | |
| | G T E 5 0 8 | Advanced Electrical Power Engineering * | 2 | |
| | G T E 5 0 9 | Advanced Power Semiconductor Modules Engineering | 2 | |
| Major (Advanced level) | G T E 6 0 3 | Seminar in Electrical and Electronic Engineering IA * | 1 | ● |
| | G T E 6 0 4 | Seminar in Electrical and Electronic Engineering IB * | 1 | ● |
| | G T E 6 0 5 | Seminar in Electrical and Electronic Engineering IIA * | 1 | ● |
| | G T E 6 0 6 | Seminar in Electrical and Electronic Engineering IIB * | 1 | ● |
| | G T E 6 0 7 | Research Work in Electrical and Electronic Engineering IA * | 2 | ● |
| | G T E 6 0 8 | Research Work in Electrical and Electronic Engineering IB * | 2 | ● |
| | G T E 6 0 9 | Research Work in Electrical and Electronic Engineering IIA * | 2 | ● |
| | G T E 6 1 0 | Research Work in Electrical and Electronic Engineering IIB * | 2 | ● |

- Notes:
1. Subjects with a ● mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
 2. Students are required to obtain eight or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
 3. Subjects with a * mark in the subjects column can be taught in English or Japanese.

Computer Science and Engineering

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|---|---------|----------------|
| Major | G T K 5 0 1 | Large-scale Discrete Structure Processing | 2 | |
| | G T K 5 0 2 | Software Engineering | 2 | |
| | G T K 5 0 3 | Parallel Computing * | 2 | |
| | G T K 5 0 5 | Machine Learning * | 2 | |
| | G T K 5 0 8 | User-centered Design Methodology * | 2 | |
| | G T K 5 0 9 | Computer Vision * | 2 | |
| | G T K 5 1 0 | Digital Speech Processing | 2 | |
| | G T K 5 1 1 | Natural Language and Image Media Processing * | 2 | |
| | G T K 5 1 3 | Global Communication for Engineers * | 2 | |
| | G T K 5 1 4 | Design Thinking Practice * | 2 | |
| | G T K 5 1 5 | Advanced Data Visualization * | 2 | |
| Major (Advanced level) | G T K 6 0 1 | Advanced Topics in Computer Science and Engineering I | 1 | |
| | G T K 6 0 2 | Advanced Topics in Computer Science and Engineering II * | 1 | |
| | G T K 6 1 1 | Advanced Topics in Computer Science and Engineering III | 1 | |
| | G T K 6 1 2 | Advanced Topics in Computer Science and Engineering IV * | 1 | |
| | G T K 6 1 3 | Advanced Topics in Computer Science and Engineering V | 2 | |
| | G T K 6 1 4 | Advanced Topics in Computer Science and Engineering VI * | 2 | |
| | G T K 6 1 5 | Advanced Topics in Computer Science and Engineering VII * | 2 | |
| | G T K 6 0 3 | Seminar in Computer Science and Engineering IA * | 1 | ● |
| | G T K 6 0 4 | Seminar in Computer Science and Engineering IB * | 1 | ● |
| | G T K 6 0 5 | Seminar in Computer Science and Engineering IIA * | 1 | ● |
| | G T K 6 0 6 | Seminar in Computer Science and Engineering IIB * | 1 | ● |
| | G T K 6 0 7 | Research Work in Computer Science and Engineering IA * | 2 | ● |
| | G T K 6 0 8 | Research Work in Computer Science and Engineering IB * | 2 | ● |
| | G T K 6 0 9 | Research Work in Computer Science and Engineering IIA * | 2 | ● |
| | G T K 6 1 0 | Research Work in Computer Science and Engineering IIB * | 2 | ● |

- Notes:
1. Subjects with a ●mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
 2. Students are required to obtain ten or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
 3. Subjects with a *mark in the subjects column can be taught in English or Japanese.
 4. “Global Communication for Engineers” is a subject only for international students.

Mechatronics

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T J 5 0 1 | Advanced Mechatronics | 2 | ● |
| | G T J 5 0 2 | Advanced Robotics | 2 | |
| | G T J 5 0 3 | Ergonomics | 2 | |
| | G T J 5 0 4 | Embedded System Design * | 2 | |
| | G T J 5 0 5 | Advanced Engineering Materials * | 2 | |
| | G T J 5 0 6 | Advanced Actuator Engineering * | 2 | |
| | G T J 5 0 7 | Advanced Electromagnetic Wave Engineering * | 2 | |
| | G T J 5 0 8 | Computer Networks of Embedded Systems | 2 | |
| | G T J 5 0 9 | Advanced Medical and Welfare Devices Engineering | 2 | |
| Major (Advanced level) | G T J 6 0 1 | Mechatronics Special Lecture I | 1 | |
| | G T J 6 0 2 | Mechatronics Special Lecture II | 1 | |
| | G T J 6 0 3 | Seminar in Mechatronics Engineering IA | 1 | ● |
| | G T J 6 0 4 | Seminar in Mechatronics Engineering IB | 1 | ● |
| | G T J 6 0 5 | Seminar in Mechatronics Engineering IIA | 1 | ● |
| | G T J 6 0 6 | Seminar in Mechatronics Engineering IIB | 1 | ● |
| | G T J 6 0 7 | Research Work in Mechatronics Engineering IA | 2 | ● |
| | G T J 6 0 8 | Research Work in Mechatronics Engineering IB | 2 | ● |
| | G T J 6 0 9 | Research Work in Mechatronics Engineering IIA | 2 | ● |
| | G T J 6 1 0 | Research Work in Mechatronics Engineering IIB | 2 | ● |

Notes: 1. Subjects with a ●mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.

2. Students are required to obtain ten or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.

3. Subjects with a *mark in the subjects column can be taught in English or Japanese.

Civil and Environmental Engineering

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T C 5 0 1 | Fundamental Management in Civil Engineering | 2 | |
| | G T C 5 0 2 | Social Practice of Civil Management and Engineering | 2 | |
| | G T C 5 0 3 | Disaster Management and Engineering * | 2 | |
| | G T C 5 0 4 | Study and Training for Leaders in Regional Disaster Management (intensive lecture) | 2 | |
| | G T C 5 0 5 | Continuum Mechanics of Solids for Civil Engineers * | 2 | |
| | G T C 5 0 6 | Infrastructure Maintenance Engineering * | 2 | |
| | G T C 5 0 7 | Practical Urban Planning * | 2 | |
| | G T C 5 0 8 | Environmental Preservation Engineering * | 2 | |
| | G T C 5 1 0 | Global Communication for Engineers * | 2 | |
| | G T R 5 0 9 | International Partnership * ※ | 2 | |
| | G T R 5 1 0 | Environmental Statistics * ※ | 2 | |
| | G T R 5 1 1 | Geographic Information Systems * ※ | 2 | |
| | G T R 5 1 2 | Life and Health * ※ | 2 | |
| | G T R 5 1 3 | River Basin Planning and Design * ※ | 2 | |
| | G T R 5 0 6 | Advanced Hydrology and Water Resources * ※ | 2 | |
| | G T R 5 0 7 | Advanced Water Quality Assessment * ※ | 2 | |
| | G T R 5 0 8 | Advanced Environmental Treatment Technology * ※ | 2 | |
| Major (Advanced level) | G T C 6 0 1 | Seminar in Civil and Environmental Engineering IA * | 1 | ● |
| | G T C 6 0 2 | Seminar in Civil and Environmental Engineering IB * | 1 | ● |
| | G T C 6 0 3 | Seminar in Civil and Environmental Engineering IIA * | 1 | ● |
| | G T C 6 0 4 | Seminar in Civil and Environmental Engineering IIB * | 1 | ● |
| | G T C 6 0 5 | Research Work in Civil and Environmental Engineering IA * | 2 | ● |
| | G T C 6 0 6 | Research Work in Civil and Environmental Engineering IB * | 2 | ● |
| | G T C 6 0 7 | Research Work in Civil and Environmental Engineering IIA * | 2 | ● |
| | G T C 6 0 8 | Research Work in Civil and Environmental Engineering IIB * | 2 | ● |

- Notes: 1. Subjects with a ● mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
2. Students are required to obtain ten or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
3. Subjects with a * mark in the subjects column can be taught in English or Japanese.
4. Subjects with a ※ mark in the subjects column are for students in Special Educational Program on River Basin Environmental Science.
5. “Global Communication for Engineers” is a subject only for international students.

Applied Chemistry

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T A 5 0 1 | Advanced Organic Chemistry * | 2 | |
| | G T A 5 0 2 | Advanced Inorganic Chemistry I * | 2 | |
| | G T A 5 0 3 | Advanced Inorganic Chemistry II * | 2 | |
| | G T A 5 0 4 | Advanced Analytical Chemistry * | 2 | |
| | G T A 5 0 5 | Advanced Physical Chemistry * | 2 | |
| | G T A 5 0 6 | Advanced Polymer Chemistry * | 2 | |
| | G T A 5 0 7 | Advanced Quantum Chemistry for Energy Conversion * | 2 | |
| | G T A 5 0 8 | Advanced Course of Materials Design for Fuel Cells * | 2 | |
| Major (Advanced level) | G T A 6 0 2 | Seminar in Applied Chemistry IA * | 1 | ● |
| | G T A 6 0 3 | Seminar in Applied Chemistry IB * | 1 | ● |
| | G T A 6 0 4 | Seminar in Applied Chemistry IIA * | 1 | ● |
| | G T A 6 0 5 | Seminar in Applied Chemistry IIB * | 1 | ● |
| | G T A 6 0 6 | Research Work in Applied Chemistry IA * | 2 | ● |
| | G T A 6 0 7 | Research Work in Applied Chemistry IB * | 2 | ● |
| | G T A 6 0 8 | Research Work in Applied Chemistry IIA * | 2 | ● |
| | G T A 6 0 9 | Research Work in Applied Chemistry IIB * | 2 | ● |

- Notes:
1. Subjects with a ● mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
 2. Students are required to obtain ten or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
 3. Subjects with a * mark in the subjects column can be taught in English or Japanese.

Advanced Material Science

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T Z 5 0 1 | Advanced Condensed Matter Physics * | 2 | |
| | G T Z 5 0 2 | Advanced Quantum Devices * | 2 | |
| | G T Z 5 0 3 | Advanced Photonics * | 2 | |
| | G T Z 5 0 4 | Lectures on Advanced Electronics * | 2 | |
| | G T Z 5 0 5 | Advanced Quantum Material Science * | 2 | |
| | G T Z 5 0 6 | Advanced Functional Materials * | 2 | |
| | G T Z 5 0 7 | Structure and Chemistry of Crystalline Solids * | 2 | |
| Major (Advanced level) | G T Z 6 0 1 | Advanced Special Lectures I * | 1 | |
| | G T Z 6 0 2 | Advanced Special Lectures II * | 1 | |
| | G T Z 6 0 3 | Seminar in Advanced Material Science IA * | 1 | ● |
| | G T Z 6 0 4 | Seminar in Advanced Material Science IB * | 1 | ● |
| | G T Z 6 0 5 | Seminar in Advanced Material Science IIA * | 1 | ● |
| | G T Z 6 0 6 | Seminar in Advanced Material Science IIB * | 1 | ● |
| | G T Z 6 0 7 | Research Work in Advanced Material Science IA * | 2 | ● |
| | G T Z 6 0 8 | Research Work in Advanced Material Science IB * | 2 | ● |
| | G T Z 6 0 9 | Research Work in Advanced Material Science IIA * | 2 | ● |
| | G T Z 6 1 0 | Research Work in Advanced Material Science IIB * | 2 | ● |

- Notes:
1. Subjects with a ●mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
 2. Students are required to obtain eight or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
 3. Subjects with a *mark in the subjects column can be taught in English or Japanese.

Special Educational Program on River Basin Environmental Science

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|---|---------|----------------|
| Major | G T R 5 0 9 | International Partnership * | 2 | ● |
| | G T R 5 1 0 | Environmental Statistics * | 2 | ● |
| | G T R 5 1 1 | Geographic Information Systems * | 2 | ● |
| | G T R 5 1 2 | Life and Health * | 2 | ● |
| | G T R 5 1 3 | River Basin Planning and Design * | 2 | ● |
| | G T R 5 0 6 | Advanced Hydrology and Water Resources * | 2 | |
| | G T R 5 0 7 | Advanced Water Quality Assessment * | 2 | |
| | G T R 5 0 8 | Advanced Environmental Treatment Technology * | 2 | |
| Major (Advanced level) | G T R 6 0 1 | Seminar in River Basin Environmental Science IA * | 1 | ● |
| | G T R 6 0 2 | Seminar in River Basin Environmental Science IB * | 1 | ● |
| | G T R 6 0 3 | Seminar in River Basin Environmental Science IIA * | 1 | ● |
| | G T R 6 0 4 | Seminar in River Basin Environmental Science IIB * | 1 | ● |
| | G T R 6 0 5 | Research Work in River Basin Environmental Science IA * | 2 | ● |
| | G T R 6 0 6 | Research Work in River Basin Environmental Science IB * | 2 | ● |
| | G T R 6 0 7 | Research Work in River Basin Environmental Science IIA * | 2 | ● |
| | G T R 6 0 8 | Research Work in River Basin Environmental Science IIB * | 2 | ● |
| Others | G T R 5 8 1 | Introduction to River Basin Environmental Science * | 1 | |
| | G T R 5 8 2 | Implementation Methodology for River Basin Environmental SDGs * | 1 | |
| | G T R 5 8 3 | Research Exercises for River Basin Environmental SDGs * | 1 | |
| | G T R 5 8 4 | Internship for River Basin Environmental SDGs * | 1 | |

- Notes: 1. Subjects with a ●mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
2. Students are required to obtain twelve or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
3. Subjects with a * mark in the subjects column are taught in English in principle.
4. Subjects in category “Others” cannot be included in the number of credits necessary for completion.

Special Educational Program for Green Energy Conversion Science and Technology

| Subject category | Code | Subjects | Credits | Remarks Column |
|------------------------|-------------|--|---------|----------------|
| Major | G T G 5 3 1 | Advanced Physical Chemistry * | 2 | |
| | G T G 5 3 2 | Advanced Inorganic Chemistry * | 2 | |
| | G T G 5 3 3 | Advanced Materials Chemistry * | 2 | |
| | G T G 5 3 4 | Advanced Course of Materials Design for Fuel Cells * ※ | 2 | |
| | G T G 5 3 5 | Advanced Course of Engineering for Solar Energy Conversion * ※ | 2 | |
| | G T G 5 3 6 | Advanced Course of Science for Surfaces and Interfaces * ※ | 2 | |
| | G T G 5 3 7 | Advanced Course of Polymer Material Chemistry * ※ | 2 | |
| | G T G 5 3 8 | Advanced Course of English for Green Energy Science and Technology, Elementary Level * | 2 | |
| Major (Advanced level) | G T G 6 1 1 | Advanced Special Lectures for Green Energy Conversion Science and Technology * | 1 | |
| | G T G 6 1 2 | Exercises for Green Energy Conversion IA * | 1 | ● |
| | G T G 6 1 3 | Exercises for Green Energy Conversion IB * | 1 | ● |
| | G T G 6 1 4 | Exercises for Green Energy Conversion IIA * | 1 | ● |
| | G T G 6 1 5 | Exercises for Green Energy Conversion IIB * | 1 | ● |
| | G T G 6 1 6 | Professional Research for Green Energy Conversion IA * | 2 | ● |
| | G T G 6 1 7 | Professional Research for Green Energy Conversion IB * | 2 | ● |
| | G T G 6 1 8 | Professional Research for Green Energy Conversion IIA * | 2 | ● |
| | G T G 6 1 9 | Professional Research for Green Energy Conversion IIB * | 2 | ● |

Notes:

1. Subjects with a ● mark in the remarks column are compulsory. Students are required to obtain all credits in these subjects.
2. Students are required to obtain ten or more credits in column of Major and twelve or more credits in column of Major (Advanced level) including compulsory subjects.
3. Subjects with a * mark in the subjects column can be taught in English or Japanese.
4. Subjects with a ※ mark in the subjects column are offered both in a Master program and PhD program. Students who have obtained the credits of these are not able to take them when they progress to the PhD program. (Even if codes are different, subjects of the same name are deemed one subject.)

Subjects Offered by Center for Instrumental Analysis

| Code | Subjects | Credits | Remarks Column |
|-------------|-------------------------------------|---------|-------------------|
| G T I 5 0 1 | Advanced Instrumental Analysis IA | 1 | |
| G T I 5 0 2 | Advanced Instrumental Analysis IB | 1 | |
| G T I 5 0 3 | Advanced Instrumental Analysis IC | 1 | |
| G T I 5 0 4 | Advanced Instrumental Analysis ID | 1 | |
| G T I 5 0 5 | Advanced Instrumental Analysis IE | 1 | |
| G T I 5 0 6 | Advanced Instrumental Analysis IF | 1 | |
| G T I 5 0 7 | Advanced Instrumental Analysis IG | 1 | |
| G T I 5 0 8 | Advanced Instrumental Analysis IIA | 1 | |
| G T I 5 1 0 | Advanced Instrumental Analysis IIC | 1 | |
| G T I 5 1 1 | Advanced Instrumental Analysis IIIA | 1 | |
| G T I 5 1 2 | Advanced Instrumental Analysis IIIB | 1 | |
| G T I 5 1 3 | Advanced Instrumental Analysis IIIC | 1 | |
| G T I 5 1 4 | Advanced Instrumental Analysis IIID | 1 | |
| G T I 5 1 5 | Advanced Instrumental Analysis IIIE | 1 | |

Note: In order to use instruments in Center for Instrumental Analysis, you must take the designated subjects and acquire the credits of them in advance. Check the designated subjects in the syllabus, and register them. When registering, the 7th digit of the code (*) should be replaced by the alphabet determined for each instrument. However, this subject cannot be included in the number of credits necessary for graduation.