Guidance for the First Year Students in Master's Program

(The abridged translation for students of international course in Management of Civil Infrastructure and international course in Urban and Regional Development)

Dept. of Civil and Earth Resources Engineering

Dept. of Urban Management

13:30-14:10, Tuesday 4th April 2023

C1-191

Contents

Dept. of Civil and Earth Resources Eng. and Dept. of Urban Management
Guidance for the First Year Students in Master's Program
(Date: 13:30-14:10, Tuesday, April 4th, 2023, Location: C1-191)

(1) **Message from the Heads of Departments** [few minutes: Opening Remarks and Introduction of Staff]

- The Heads of Departments
  Prof. Nobuhiro Uno (Urban Management, Room C1-3-262)
  Prof. Junichi Susaki (Civil and Earth Resources Eng., Room C1-1-205)
- Educational Affairs
  Assoc. Prof. Junichi Takekawa (Civil and Earth Resources Eng., Room C1-1-112)
  Contact to: takekawa.junichi.8v@kyoto-u.ac.jp
- Assistant to Educational Affairs
  Assoc. Prof. Yasuo Sawamura (Urban Management, Room C1-2-336)

(2) **Overview of Handouts**

- Guidance for the First Year Students in Master's Program (this booklet)
- Educational Guidelines (Japanese handouts)（2023 年度大学院学修要覧）
- Brochure on Research Integrity, Brochure on Research Data Management, Information Security Measures, etc.

(3) **Instructions on Registration** [Educational Affairs, 15 minutes (approx.)] (see document no.2 and 3)

- **Requirements for Completion and Credits** (Educational Guidelines: Master's Degree in Civil and Earth Resources Eng. (pp.10-14), and Urban Management (pp.15-19), Advanced Engineering Course Program of the Department of Civil and Earth Resources Eng. (pp.57-61), and Department of Urban Management (pp.62-66))
  - Number of Credits for Each Category (Core, Major, Minor, ORT etc.)
  - Compulsory Subjects (for both Departments), Elective Compulsory subjects (for Urban Management)
  - More than 30 Credits (Total) and Master Thesis
  - Major subjects: Required Subjects for Each Education Program (see document no.4-1, 4-2, 4-3, 4-4)
  - More than 20 Credits from the List of Subjects, etc.
- Notes on Subjects Offered by Other Departments, Graduate Schools, and Faculties
  - Students can register, with an approval of the supervisor, to subjects offered by (a) other Departments and (b) other Graduate Schools.
  - Students can also register to those offered by other Faculties (as a general rule, credits from these subjects will not be counted towards the 30 credits required for the completion of Degree).
- Seminar on Infrastructure Engineering A & B and on Urban Management A & B (see document no.6-1)
  - Required Points: More than 3 points a year and more than 10 points in two years.
- Information on First Lectures of Some Subjects

Subject	Date, time and location
Information Technology for Urban Society	April 13 (Thu.) 8:45AM, C1-191
Exercise on Project Planning (See document no.6-2.)	Guidance: April 13 (Thu.) 1:15PM, C1-191
Internship on Infrastructure Engineering (for Civil and Earth Resources Eng.) & Long-Term Internship (for Urban Management) (See document no.6-3.)	Guidance: April 13 (Thu.) 1:15PM, C1-191
Capstone Project (See document no.6-4.)	All information will be provided through PandA. The list of subjects is posted on PandA around April 7 (Fri.).

- Practice in Infrastructure Engineering and Practice in Urban Management
- Notes on Subjects Offered in every two years and those Offered in English (Semester/Year Offered)
- Study Areas and Certificates (see document no.5-1, 5-2)
- Application to Doctoral Program (Information Session Scheduled on May 18, 17:00-17:30 (Japanese), 17:40-18:20 (English), online)
- Code of Ethics/Conduct: How violation of codes of (research) ethics and misconducts are handled and cautionary notes on report examinations. (see document no.8)

- **Class Registration**
  - Make sure to register: Students are not permitted to take an examination without registration.
  - The classes given by the graduate school of engineering including our departments must be registered from KULASIS (a web for education). The schedule of the class registration is as follows;
    1. Timetable preparation: April 4 (Tue.) – April 18 (Tue.)
       After preparation of timetable, **print out the prepared class timetable** (document no.7-1) and **get a supervisor's signature** or **seal on it**, and then **submit the scanned file (pdf) of the timetable and the portfolio by e-mail** (Deadline: **April 11 (Tue.) 17:00**, Deadline of submitting portfolio is earlier than timetable preparation)
    2. Class registration: April 19 (Wed.) 0:00 – April 20 (Thu.) 24:00
       Note that the timetable preparation is just a preparation. Do not forget to fix the registration.
    3. Confirmation/Change April 25 (Tue.) 0:00 – April 26 (Wed.) 24:00
  - In this academic year, all classes are face-to-face in principle. The information about classes will be available through KULASIS and PandA. **Please register as soon as possible.**
  - Registration to the classes offered by the other graduate schools and faculties can be made on KULASIS with an approval of the supervisor. For classes whose registration is not possible on KULASIS, it can be done by submitting an application form to C-Cluster Office from April 4 (Tue.) to April 14 (Fri.). The application form can be obtained at the C-Cluster Office.
  - Register only for the first semester of the first year. Register for the remaining semesters during the designated registration period of the respective semester.
- **Portfolio** (see document no.7, 7-1, 7-2)
  - Fill in your goals and research plan. MS word should be used. The signature by your supervisor must be original handwriting.
  - Scan the pertinent pages of portfolio and the printed your class timetable (document no.7-1) as one PDF file, after you get a supervisor's signature on them.
    Then, send it to the designated e-mail address: **kyomu-ceum@adm.t.kyoto-u.ac.jp**
  - The submission deadline is on **April 11 (Tue.) 17:00**.
  - Students in the Master's Course in Civil and Earth Resources Eng. and Urban Management (Two-Year only) do not need to select sub-supervisors and need the signature by your supervisor.
  - Keep your original copy of printed portfolio in a safe place until the end of Master's Course Program.
  - The form of the portfolio is on the web page at the Department of Urban Management as shown below.
- Web site of Educational Affairs:
  https://www.um.t.kyoto-u.ac.jp/ja/oncampus/kyomu2023
- **Medical Checkup** (To be announced)
  - Medical questionnaire should be answered via Web by the day before the medical checkup. (https://www.hoken.kyoto-u.ac.jp/en)
  - Bring Urinalysis Container (urinalysis taken on the early morning of the checkup), and Student ID to the medical checkup.
  - Dates and Locations: Students are to have the checkup on the campus they mainly study.
    (It is also offered on Yoshida Campus. Please check the details by yourself)

Campus	Date	Location	Notes
Katsura	April 26th (Wed.) Female: 9:30-10:00 13:15-13:45 Male: 10:15-11:45 14:00-15:30	Funai Center (Second Floor)	For Students on Katsura Campus
Uji	April 25th (Tue.) Female: 9:30-10:30 Male: 11:00-13:00	Wood Composite Hall (Third Floor)	For Students on Uji Campus

- Japan Student Services Organization Scholarship (JASSO): Visit C-Cluster Office for details.
- Insurance programs for KU students
  https://www.kyoto-u.ac.jp/en/current/campus-life/health-management-and-insurance-1/insurance-programs-for-ku-students.html

(4) **Others** [few minutes]

- Research Integrity and Ethics (common to the Graduate Schools of Kyoto University)
  - The documents are also available on the web page at the Department of Urban Management. Check the web site and read them carefully.
- Information security measures

(5) **Seminar on Safety Education** (April 5 (Wed.) 15:30- in Japanese, 16:15- in English, online)
https://kyoto-u-edu.zoom.us/j/85430036546?pwd=YS92N2RjRjEwT1BpcHUxbG14VklwQT09
Meeting ID: 854 3003 6546
Pass code: 711470
<PDF>
https://fsv.iimc.kyoto-u.ac.jp/public/fJgwwA5VOAEAB88BleWHouMGLiSQ-weRab6TEL0WRdTl
<Book form>
https://www.emc.t.kyoto-u.ac.jp/ja/activities/manual

［**Master Course**］

2.1 Department of Civil and Earth Resources Engineering

(1) Educational Policy

1) Necessity of Research and Education in the Department

Our department aims to create a safe, secure, vital and sustainable society harmonizing with the environment for the living space for all living things. Our challenge is a necessary technological innovation to establish new industries and civilizations supported by social infrastructures as well as the promotion of the science technology for integrative establishment of social infrastructure (architecture) and sustainable utilization of underground resources.

2) Purpose of Education

Our purpose of education is to cultivate engineers with basic skills of engineering to deeply understand environmental problems and energy issues on a global scale and to develop technologies related to new infrastructure from international and multiple viewpoints.

3) Goal of Education

Our goal is to foster high basic skills of engineering and nurture applied skills to solve problems in the real society, setting the theme toward the following:1) Upgrading of state-of-the-art technology based on science engineering 2) Elucidation of natural disaster mechanisms and improvements on disaster mitigation technologies 3) Integrative social infrastructure architecture and improvements on its management technology, 4) Utilization of the underground energy resources in a developmental and sustainable society, and 5) Contribution to the solution of various problems for realizing low carbon societies.

(2) Credits required for Master degree

Subject category	Number of credits
Core (Basically compulsory)	2 credits
Major	10 or more credits
Minor	Not especially designated
ORT	8 or more credits
Others	Take under your supervisor’s approval
Total number of credits	30 or more credits

[NOTE]

1) To complete the program, you must acquire the number of the credits designated for each subject category and the total number of credits listed above.
2) Aside from designated credits above, additional requirements for Major subjects have been set depending on the educational program that you have selected. For the details, see Note (4) below.
3) Students of International Course in Management of Civil Infrastructure must take “International Education Program in Management of Civil Infrastructure” as mentioned in Note (4)
4) Students of International Course in Management of Civil Infrastructure must acquire the 30 credits of completion requirement in English classes.

(3) Registration Model

To be explained based on the material at the Guidance in April.

[NOTE]

(1) For the details (syllabus) of each subject, please refer to KULASIS. Students can log in to KULASIS from https://student.iimc.kyoto-u.ac.jp

(2) The subjects without a circle (○) in the Subject category are regarded as "Minor subjects".

(3) "Exercise on Project Planning" and "Seminars on Infrastructure Engineering A, B" are compulsory. Students of International Course in Management of Civil Infrastructure will be lectured in English and the subject will be regarded as "English Subject (◎)".

(4) For Major subjects, you must satisfy the requirements for one of the 6 educational programs below. For the selection of your educational program, obtain your supervisor's approval in advance. Students of International Course in Management of Civil Infrastructure must select "International Education Program in Management of Civil Infrastructure". In principle, students are not allowed to change the educational program that has been chosen at the time of admission.

1. **Structural Division Education Program:**
   - Must take all "Continuum Mechanics", "Structural Stability", "Material and Structural System & Management", "Earthquake Engineering/Lifeline Engineering", and "Structural Engineering for Civil Infrastructure".

2. **Hydrologic Division Education Program:**
   - Must take all "Hydrodynamics and Turbulence Mechanics", "Hydrologic Design and Management", "River Management", and "Sediment Hydraulics".
   - Must take at least 3 subjects among, "Hydrology", "Open Channel Hydraulics", "Coastal Wave Dynamics", "Hydro-meteorologically based Disaster Prevention", "Water Resources Systems", "River Basin Management of Flood and Sediment", "Coastal and Urban Water Disasters Engineering", "Disaster Mitigation for Sustainable Basin Environment", "Computational Fluid Dynamics", "Hydraulic Engineering for Infrastructure Development and Management", "Applied Hydrology", "Case Studies Harmonizing Disaster Management and Environment Conservation" and "Integrated Disasters and Resources Management in Watersheds".

3. **Geomechanics Division Education Program:**
   - Must take at least 5 subjects among "Geomechanics", "Computational Geotechnics", "Construction of Geotechnical Infrastructures", "Fundamental Geofront Engineering", "Environmental Geotechnics" and "Disaster Prevention through Geotechnics".

4. **Planning Division Education Program:**
   - Must take at least 2 subjects among "Public Finance", "Urban Environmental Policy", "Quantitative Methods for Behavioral Analysis", "Intelligent Transportation Systems", "Remote Sensing and Geographic Information System", "Civic and Landscape Design", "Risk Management", "Disaster Information", "Disaster Risk Management", and "Environmental Design Research".

5. **Earth Resources and Energy Division Education Program:**
   - Must take at least 3 subjects among "Resources Development Systems", "Applied Mathematics in Civil & Earth Resources Engineering", "Environmental Geosphere Engineering", "Applied Elasticity for Rock Mechanics", "Fundamental Theories in Geophysical Exploration", "Rock Stress and Physical Properties", "Lecture on

Exploration Geophysics", "Measurement in the Earth's Crust Environment", and "Energy System Management".

6. <u>International Education Program in Management of Civil Infrastructure:</u>

- Must complete 10 credits or more from English-lectured classes (subjects with ◎) provided on the Subject List. Consult with your supervisor which classes to take.

(5) You must acquire 20 credits or more in total from the subjects listed in Subject List, among the 30 credits of completion requirement. Students of International Course in Management of Civil Infrastructure must take the 20 credits (including "Exercise on Project Planning" and "Seminars on Infrastructure Engineering A, B") in English. The other 10 credits must be English classes from the Subject List or English classes equivalent to the ones on (6) below. Some of the programs offered as "Practice in Infrastructure Engineering" are provided in English. If students attend those programs as "Practice in Infrastructure Engineering", it can be regarded as "English Subjects (◎)".

(6) For the subjects not listed on the Subject List, you can select from Common Subjects of Graduate School of Engineering and/or the subjects of other Departments/ Graduate School which your supervisor approves. For the students who passed the Joint Degree System of the Graduate School of Management, apply (7) below. However, the credits will be regarded as "Minor subjects" in any of these cases. As for the international students, non-credited Japanese Language classes are available.

(7) If the students who passed the Joint Degree System of the Graduate School of Management have completed the subjects offered by the Graduate School of Management, credits are to be admitted as the credits of the subjects of the Department of Civil and Earth Resources Engineering under the approval of the supervisor. However, the number of obtainable credits must not exceed 10 credits.

(8) The subject of "Geo-Risk Management" is not provided in AY2023, while this was provided for the students enrolled before AY2019.

(9) The study areas below have also been set in the Department of Civil and Earth Resources Engineering. If you have completed the subjects designated for each study area and applied for the completion of the subject, you will obtain a certificate to prove that you have completed that study area.

- Study Area of Structural Design Engineer/Researcher Training
- Study Area of Hydraulic/Hydrologic Design Engineer/Researcher Training
- Study Area of Geo Design Engineer/Researcher Training
- Study Area of Urban Design Engineer/Researcher Training
- Study Area of Earth Resources and Energy Engineer/Researcher Training

Subject List (Master's Program of the Department of Civil and Earth Resources Engineering.)

Subject code	Subject	Instructor	Number of hours per week		Credit	Subject category		
			1st semester	2nd semester		Core	Major	ORT
10F251	▼Exercise on Project Planning （自主企画プロジェクト）	Related instructors	2	2	2	○ Compulsory		
10U055	Seminar on Infrastructure Engineering A （社会基盤工学セミナーA）	Related instructors	(4)	(4)	4			○ Compulsory
10U056	Seminar on Infrastructure Engineering B （社会基盤工学セミナーB）	Related instructors	(4)	(4)	4			○ Compulsory
10U059	Internship on Infrastructure Engineering （社会基盤工学インターンシップ）	Related instructors	Intensive		4			○
10F063	Practice in Infrastructure Engineering （社会基盤工学実習）	Related instructors		2	2			○
10F003	Continuum Mechanics （連続体力学）	Sugiura, Yagi	2		2		○	
10F067	◎Structural Stability （構造安定論）	Sugiura, Kitane	2		2		○	
10F068	◎Material and Structural System & Management （材料・構造マネジメント論）	Yamamoto, An, Takaya	2		2		○	
10F261	◎Earthquake Engineering/Lifeline Engineering （地震・ライフライン工学）	Igarashi (DPRI), Furukawa	2		2		○	
10W001	◎Structural Engineering for Civil Infrastructure （社会基盤構造工学）	Related instructors		2	2		○	
10F009	◎Structural Design （構造デザイン）	Takahashi, Kitane		2	2		○	
10F010	◎Bridge Engineering （橋梁工学）	Sugiura, Yagi, Kitane, Matsumiya, Noguchi		2	2		○	
10A019	Concrete Structural Engineering （コンクリート構造工学）	Takahashi, Yamamoto, Takaya, Nakamura (Part-time Lecturer)		2	2		○	
10F227	Structural Dynamics （構造ダイナミクス）	Takahashi, Igarashi (DPRI)	2		2		○	
10F263	Seismic Engineering Exercise （サイスミックシミュレーション）	Takahashi, Hiroyuki Goto (DPRI)		2	2		○	
10F415	Ecomaterial Design （環境材料設計学）	Yamamoto, Takaya, Sato (Part-time Lecturer)	2		2		○	
10F089	Infrastructure Safety Engineering （社会基盤安全工学）	Ohta, Yasuda		2	2		○	
10F075	Hydrodynamics and Turbulence Mechanics （水理乱流力学）	Sanjou	2		2		○	
10A216	◎□Hydrology （水文学）	Tachikawa, Ichikawa, Yorozu		2	2		○	
10F019	River Management （河川マネジメント工学）	Kishida, Onda	2		2		○	
10A040	Sediment Hydraulics （流砂水理学）	Hitoshi Gotoh, Harada	2		2		○	
10F464	Hydrologic Design and Management （水工計画学）	Tachikawa, Ichikawa, Tomohiro Tanaka	2		2		○	
10F245	◎□Open Channel Hydraulics （開水路の水理学）	Onda	2		2		○	
10F462	◎○Coastal Wave Dynamics （海岸波動論）	Hitoshi Gotoh, Harada, Khayyer, Ikari, Shimizu	2		2		○	
10F267	○Hydro-meteorologically based Disaster Prevention （水文気象防災学）	Nakakita (DPRI), Sayama (DPRI), Yamaguchi (DPRI), Naka (DPRI)	2		2		○	
10A222	○Water Resources Systems （水資源システム論）	Hori (DPRI), Kenji Tanaka (DPRI)	2		2		○	
10F077	○River Basin Management of Flood and Sediment （流域治水砂防学）	Sumi (DPRI), Kawaike (DPRI), Takebayashi (DPRI)	2		2		○	
10F269	□Coastal and Urban Water Disasters Engineering （沿岸・都市防災工学）	Igarashi (DPRI), Mori (DPRI), Yoneyama (DPRI), Shimura (DPRI)	2		2		○	
10F466	□Disaster Mitigation for Sustainable Basin Environment （流域環境防災学）	Baba (DPRI), Miyata (DPRI)	2		2		○	
10F011	◎Computational Fluid Dynamics （数値流体力学）	Ushijima (ACCMS), Hitoshi Gotoh, Khayyer, Toriu (ACCMS)		2	2		○	
10F065	◎Hydraulic Engineering for Infrastructure Development and Management（水域社会基盤学）	Hitoshi Gotoh, Tachikawa, Ichikawa, Harada, Sanjou, Khayyer, Sunmin Kim, Onda		2	2		○	
10F100	◎Applied Hydrology （応用水文学）	Hori (DPRI), Sumi (DPRI), Kenji Tanaka (DPRI), Kantoush (DPRI)	2		2		○	
10F103	◎Case Studies Harmonizing Disaster Management and Environment Conservation（環境防災生存科学）	Nakakita (DPRI), Mori (DPRI), Kawaike (DPRI), Sayama (DPRI), Yamaguchi (DPRI), Shimura (DPRI), Lahournat (DPRI)	2		2		○	
10F106	◎Integrated Disasters and Resources Management in Watersheds （流域管理工学）	Yoneyama (DPRI), Kawaike (DPRI), Takebayashi (DPRI), Baba (DPRI), Miyata (DPRI)		2	2		○	
10F025	Geomechanics （地盤力学）	Higo, Iwai, Hashimoto	2		2		○	
10K016	◎Computational Geotechnics （計算地盤工学）	Sawamura, Hashimoto, Ueda (DPRI)		2	2		○	
10F241	Construction of Geotechnical Infrastructures （ジオコンストラクション）	Kishida, Higo		2	2		○	

Subject List (Master's Program of the Department of Civil and Earth Resources Engineering.)

Subject code	Subject	Instructor	Number of hours per week		Credit	Subject category		
			1st semester	2nd semester		Core	Major	ORT
10F405	◎Fundamental Geofront Engineering (ジオフロント工学原論)	Higo, Yasuhara, Iwai	2		2		○	
10A055	Environmental Geotechnics (環境地盤工学)	Katsumi (GSGES), Takai (GSGES)	2		2		○	
10F109	◎Disaster Prevention through Geotechnics (地盤防災工学)	Uzuoka (DPRI), Ueda (DPRI)		2	2		○	
10F203	◎□Public Finance (公共財政論)	Matsushima	2		2		○	
10F207	Urban Environmental Policy (都市社会環境論)	Matsunaka, Oba	2		2		○	
10F219	Quantitative Methods for Behavioral Analysis (人間行動学)	Fujii	2		2		○	
10F215	Intelligent Transportation Systems (交通情報工学)	Uno, Yamada, Nakao		2	2		○	
10A805	Remote Sensing and Geographic Information System (リモートセンシングと地理情報システム)	Uno, Susaki, Oba	2		2		○	
10A808	Civic and Landscape Design (景観デザイン論)	Kawasaki, Yamaguchi, Yagi (Part-time Lecturer), Tanigawa	2		2		○	
10F223	◎Risk Management (リスクマネジメント論)	Cruz (DPRI), Kotani		2	2		○	
10X333	◎Disaster Risk Management (災害リスク管理論)	Tatano (DPRI), Samaddar (DPRI)	2		2		○	
693287	★Disaster Information (防災情報特論)	Yamori (DPRI), Hatayama (DPRI), Onishi (DPRI)	2		2		○	
733707	★Environmental Design Research (環境デザイン論)	Kobayashi (GSGES), Ochiai (GSGES)		2	2		○	
10A402	Resources Development Systems (資源開発システム工学)	Murata, Kashiwaya		2	2		○	
10F053	Applied Mathematics in Civil & Earth Resources Engineering (応用数理解析)	Fukuyama, Saito	2		2		○	
10A405	Environmental Geosphere Engineering (地殻環境工学)	Koike, Lin, Kashiwaya, Kinoshita (Part-time Lecturer)	2		2		○	
10F071	Applied Elasticity for Rock Mechanics (応用弾性学)	Fukuyama, Murata		2	2		○	
10F073	Fundamental Theories in Geophysical Exploration (物理探査の基礎数理)	Takekawa, Xu	2		2		○	
10F078	Rock Stress and Physical Properties (岩盤応力と地殻物性)	Lin, Ishitsuka, Yamamoto (Part-time Lecturer)		2	2		○	
10A420	◎□Lecture on Exploration Geophysics (探査工学特論)	Takekawa, Xu		2	2		○	
10F085	◎Measurement in the Earth's Crust Environment (地殻環境計測)	Fukuyama, Nara, Yamamoto (Part-time lecturer), Nagano (Part-time lecturer)	2		2		○	
10F088	◎○Energy System Management (地球資源学)	Koike, Kashiwaya		2	2		○	
10X311	◎Urban Infrastructure Management (都市基盤マネジメント論)	Ichikawa, Ohnishi, Takahashi, Tachikawa, Higo, Tinumbang	2		2		○	
10F113	◎Global Survivability Studies (グローバル生存学)	Tachikawa, Fujii, Cruz (DPRI), Sayama (DPRI), Shimizu (C-PIER), Shiraiwa (Graduate School of Agriculture), Mclellan (Graduate School of Energy Science)	2		2		○	
693291	★Emergency Management (危機管理特論)	Hatayama (DPRI), Tatano (DPRI), Samaddar (DPRI)		2	2		○	
10F201	Information Technology for Urban Society (都市社会情報論)	Related instructors	2		2			
756790	★Business Development in Energy (エネルギービジネス展開論)	Kobayashi (GSM), Nakayama		2	2			
10i049	#◎Project Management in Engineering (エンジニアリングプロジェクトマネジメント)	Hirai, Komiyama, Lintuluoto, and related instructors	2		2			
10i050	#◎Exercise on Project Management in Engineering (エンジニアリングプロジェクトマネジメント演習)	Hirai, Komiyama, Lintuluoto, and related instructors		Intensive	2			
10F299	▼Master's Thesis (研究論文(修士))							○ Compulsory

Legend
◎English Class
▼Both Japanese and English
○Biennial (Held this year)
□Biennial (Held next year)
◎■Held every year, but English and Japanese alternately every other year
◎●Held every year, but Japanese and English alternately every other year
※Subject of other Department
★Subject of other Graduate School
#Common Subjects of Graduate School of Engineering

[**Master Course**]

2.2 Department of Urban Management

(1) Educational Policy

1) Necessity of Research and Education in the Department

To realize sustainable and internationally competitive urban systems which can assure a high quality of life, comprehensive management of urban system is indispensable. Our department, subject to protect global and regional environment, strives to establish theories and systematic technologies for a comprehensive management of urban systems from interdisciplinary points of view integrating social science and humanity, consolidating engineering technology such as management, advanced information, social infrastructure and energy.

2) Purpose of Education

We aim to educate engineers with high capabilities of problem solutions and with advanced and comprehensive accomplishments based on engineering skills such as management technology, also including social science and humanity.

3) Goal of Education

Our goal is to foster comprehensive management skills and nurture high ability to solve problems toward urban infrastructure, setting the theme toward the following: 1)social infrastructure upgrading through innovation of urban information communication technology, 2) disaster risk management in advanced information society, 3) comprehensive efficient urban system management, 4) social infrastructure maintenance for internationalization, and 5) urban management based on limited energy resource theory.

(2) Credits required for Master degree

Subject category	Number of credits
Core (Basically compulsory)	4 or more credits
Major	4 or more credits
Minor	Not especially designated
ORT	8 or more credits
Others	Take under your supervisor’s approval
Total number of credits	30 or more credits

[NOTE]

1) To complete the program, you must acquire the number of the credits designated for each subject category and the total number of credits listed above.
2) Aside from designated credits above, additional requirements for Major subjects have been set depending on the educational program that you have selected. For the details, see Note (4) below.
3) Students of International Course in Urban and Regional Development must take “International Education Program in Urban and Regional Development” as mentioned in Note (4)
4) Students of International Course in Urban and Regional Development must acquire the 30 credits of completion requirement in English classes.

(3) Registration Model

To be explained based on the material at the Guidance in April.

[NOTE]

(1) For the details (syllabus) of each subject, please refer to KULASIS. Students can log in to KULASIS from https://student.iimc.kyoto-u.ac.jp

(2) The subjects without a circle (○) in the Subject category are regarded as "Minor subjects".

(3) "Information Technology for Urban Society" and "Seminars on Urban Management A/B" are compulsory. "Exercise on Project Planning" and "Capstone Project" are both elective compulsory subjects; you must select either of them. You cannot select both subjects at the same academic year.

※ Students of International Course in Urban and Regional Development must take one of the English-lectured classes (subjects with ◎) provided on the Subject List as Core subject instead of "Information Technology for Urban Society" under supervisor's approval.

※ International students, who do not speak Japanese, in normal course can also take one of the English-lectured classes (subjects with ◎) provided on the Subject List as Core subject instead of "Information Technology for Urban Society" under supervisor's approval.

※ As for "Seminar on Urban Management A/B", "Exercise on Project Planning" and "Capstone Project", students of International Course in Urban and Regional Development will be lectured in English and these subjects will be regarded as "English Subject (◎)".

(4) For Major subjects, you must satisfy the requirements for one of the 6 educational programs below. For the selection of your educational program, obtain your supervisor's approval in advance. Students of International Course in Urban and Regional Development must select "International Education Program in Urban and Regional Development". In principle, students are not allowed to change the educational program that has been chosen at the time of admission.

1. **Structural Division Education Program:**
   - Must take all "Continuum Mechanics", "Structural Stability", "Material and Structural System & Management", "Earthquake Engineering/Lifeline Engineering", and "Structural Engineering for Civil Infrastructure".

2. **Hydrologic Division Education Program:**
   - Must take all "Hydrodynamics and Turbulence Mechanics", "Hydrologic Design and Management", "River Management", and "Sediment Hydraulics".
   - Must take at least 3 subjects among, "Hydrology", "Open Channel Hydraulics", "Coastal Wave Dynamics", "Hydro-meteorologically based Disaster Prevention", "Water Resources Systems", "River Basin Management of Flood and Sediment", "Coastal and Urban Water Disasters Engineering", "Disaster Mitigation for Sustainable Basin Environment", "Computational Fluid Dynamics", "Hydraulic Engineering for Infrastructure Development and Management", "Applied Hydrology", "Case Studies Harmonizing Disaster Management and Environment Conservation" and "Integrated Disasters and Resources Management in Watersheds".

3. **Geomechanics Division Education Program:**
   - Must take at least 5 subjects among "Geomechanics", "Computational Geotechnics", "Construction of Geotechnical Infrastructures", "Fundamental Geofront

Engineering", "Environmental Geotechnics", and "Disaster Prevention through Geotechnics".

4. Planning Division Education Program:

- Must take at least 2 subjects among "Public Finance", "Urban Environmental Policy", "Quantitative Methods for Behavioral Analysis", "Intelligent Transportation Systems", Remote Sensing and Geographic Information System", "Civic and Landscape Design", "Risk Management", "Disaster Information", "Disaster Risk Management", and "Environmental Design Research".

5. Earth Resources and Energy Division Education Program:

- Must take at least 3 subjects among "Resources Development Systems", "Applied Mathematics in Civil & Earth Resources Engineering", "Environmental Geosphere Engineering", "Applied Elasticity for Rock Mechanics", "Fundamental Theories in Geophysical Exploration", "Rock Stress and Physical Properties", "Lecture on Exploration Geophysics", "Measurement in the Earth's Crust Environment", and "Energy System Management".

6. International Education Program in Urban and Regional Development:

- Must complete more than 4 credits from English-lectured classes (subjects with ◎) provided on the Subject List except for one subject as Core subject above-mentioned (3). Consult with your supervisor and decide which classes to take.

(5) You must acquire 20 credits or more in total from the subjects listed in Subject List, among the 30 credits of completion requirement. Students of International Course in Urban and Regional Development must take the 20 credits (including "Seminar on Urban Management A/B", "Exercise on Project Planning" and "Capstone Project") in English. The other 10 credits must be English classes from the Subject List or English classes equivalent to the ones on (6) below. Some of the programs offered as "Practice in Urban Management" are provided in English. If students attend those programs as "Practice in Urban Management", it can be regarded as "English Subjects (◎)".

(6) For the subjects not listed on the Subject List, you can select from Common Subjects of Graduate School of Engineering and/or the subjects of other Departments/Graduate School which your supervisor approves. For the students who passed the Joint Degree System of the Graduate School of Management, apply (7) below. However, the credits will be regarded as "Minor subjects" in any of these cases. As for international students, non-credited Japanese Language classes are available.

(7) If the students who passed the Joint Degree System of the Graduate School of Management have completed the subjects offered by the Graduate School of Management, credits are to be admitted as the credits of the subjects of the Department of Urban Management under the approval of the supervisor. However, the number of obtainable credits must not exceed 10 credits.

(8) The subject of "Geo-Risk Management" is not provided in AY2023, while this was provided for the students enrolled before AY2019.

(9) The study areas below have also been set in the Department of Urban Management. If you have completed the subjects designated for each course and applied for the completion of the subject, you will obtain a certificate to prove that you have completed that course.

- Study Area of Public Policy Planning/Management
- Study Area of International Project Management (Infrastructure/Energy

Development)

- Study Area of Urban Water/Geo Environment Management
- Study Area of Seismic Design/Management
- Study Area of Urban Transportation Policy (Urban Planning, Urban Transport Policy)
- Study Area of Earth Resources and Energy Engineer/Researcher Training

Subject List (Master's Program of the Department of Urban Management)

Subject code	Subject	Instructor	Number of hours per week		Credit	Subject category		
			1st semester	2nd semester		Core	Major	ORT
10F201	Information Technology for Urban Society (都市社会情報論)	Related instructors	2		2	○ Compulsory		
10F251	▼Exercise on Project Planning (自主企画プロジェクト)	Related instructors	2	2	2	○Elective Compulsory		
10F253	▼Capstone Project (キャップストーンプロジェクト)	Related instructors	2	2	2	○Elective Compulsory		
10F257	Seminar on Urban Management A (都市社会工学セミナーA)	Related instructors	(4)	(4)	4			○ Compulsory
10F259	Seminar on Urban Management B (都市社会工学セミナーB)	Related instructors	(4)	(4)	4			○ Compulsory
10F150	Long-Term Internship (長期インターンシップ)	Related instructors	Intensive		4			○
10U210	Practice in Urban Management (都市社会工学実習)	Related instructors		2	2			○
10F003	Continuum Mechanics (連続体力学)	Sugiura, Yagi	2		2		○	
10F067	◎Structural Stability (構造安定論)	Sugiura, Kitane	2		2		○	
10F068	◎Material and Structural System & Management (材料・構造マネジメント論)	Yamamoto, An, Takaya	2		2		○	
10F261	◎Earthquake Engineering/Lifeline Engineering (地震・ライフライン工学)	Igarashi (DPRI), Furukawa	2		2		○	
10W001	◎Structural Engineering for Civil Infrastructure (社会基盤構造工学)	Related instructors		2	2		○	
10F009	◎Structural Design (構造デザイン)	Takahashi, Kitane		2	2		○	
10F010	◎Bridge Engineering (橋梁工学)	Sugiura, Yagi, Kitane, Matsumiya, Noguchi		2	2		○	
10A019	Concrete Structural Engineering (コンクリート構造工学)	Takahashi, Yamamoto, Takaya, Nakamura (Part-time Lecturer)		2	2		○	
10F227	Structural Dynamics (構造ダイナミクス)	Takahashi, Igarashi (DPRI)	2		2		○	
10F263	Seismic Engineering Exercise (サイスミックシミュレーション)	Tachikawa, Hiroyuki Goto (DPRI)		2	2		○	
10F415	Ecomaterial Design (環境材料設計学)	Yamamoto, Takaya, Sato (Part-time Lecturer)	2		2		○	
10F089	Infrastructure Safety Engineering (社会基盤安全工学)	Ohta, Yasuda		2	2		○	
10F075	Hydrodynamics and Turbulence Mechanics (水理乱流力学)	Sanjou	2		2		○	
10A216	◎□Hydrology (水文学)	Tachikawa, Ichikawa, Yorozu		2	2		○	
10F019	River Management (河川マネジメント工学)	Kishida, Onda	2		2		○	
10A040	Sediment Hydraulics (流砂水理学)	Hitoshi Gotoh, Harada	2		2		○	
10F464	Hydrologic Design and Management (水工計画学)	Tachikawa, Ichikawa, Tomohiro Tanaka	2		2		○	
10F245	◎□Open Channel Hydraulics (開水路の水理学)	Onda	2		2		○	
10F462	◎○Coastal Wave Dynamics (海岸波動論)	Hitoshi Gotoh, Harada, Khayyer, Ikari, Shimizu	2		2		○	
10F267	○Hydro-meteorologically based Disaster Prevention (水文気象防災学)	Nakakita (DPRI), Sayama (DPRI), Yamaguchi (DPRI), Naka (DPRI)	2		2		○	
10A222	○Water Resources Systems (水資源システム論)	Hori (DPRI), Kenji Tanaka (DPRI)	2		2		○	
10F077	○River Basin Management of Flood and Sediment (流域治水砂防学)	Sumi (DPRI), Kawaike (DPRI), Takebayashi (DPRI)	2		2		○	
10F269	□Coastal and Urban Water Disasters Engineering (沿岸・都市防災工学)	Igarashi (DPRI), Mori (DPRI), Yoneyama (DPRI), Shimura (DPRI)	2		2		○	
10F466	□Disaster Mitigation for Sustainable Basin Environment (流域環境防災学)	Baba (DPRI), Miyata (DPRI)	2		2		○	
10F011	◎Computational Fluid Dynamics (数値流体力学)	Ushijima (ACCMS), Hitoshi Gotoh, Khayyer, Toriu (ACCMS)		2	2		○	
10F065	◎Hydraulic Engineering for Infrastructure Development and Management (水域社会基盤学)	Hitoshi Gotoh, Tachikawa, Ichikawa, Harada, Sanjou, Khayyer, Sunmin Kim, Onda		2	2		○	
10F100	◎Applied Hydrology (応用水文学)	Hori (DPRI), Sumi (DPRI), Kenji Tanaka (DPRI), Kantoush (DPRI)	2		2		○	
10F103	◎Case Studies Harmonizing Disaster Management and Environment Conservation (環境防災生存科学)	Nakakita (DPRI), Mori (DPRI), Kawaike (DPRI), Sayama (DPRI), Yamaguchi (DPRI), Shimura (DPRI), Lahournat (DPRI)	2		2		○	
10F106	◎Integrated Disasters and Resources Management in Watersheds (流域管理工学)	Yoneyama (DPRI), Kawaike (DPRI), Takebayashi (DPRI), Baba (DPRI), Miyata (DPRI)		2	2		○	
10F025	Geomechanics (地盤力学)	Higo, Iwai, Hashimoto	2		2		○	
10K016	◎Computational Geotechnics (計算地盤工学)	Sawamura, Hashimoto, Ueda (DPRI)		2	2		○	

Subject List (Master's Program of the Department of Urban Management)

Subject code	Subject	Instructor	Number of hours per week		Credit	Subject category		
			1st semester	2nd semester		Core	Major	ORT
10F241	Construction of Geotechnical Infrastructures (ジオコンストラクション)	Kishida, Higo		2	2		○	
10F405	◎Fundamental Geofront Engineering (ジオフロント工学原論)	Higo, Yasuhara, Iwai	2		2		○	
10A055	Environmental Geotechnics (環境地盤工学)	Katsumi (GSGES), Takai (GSGES)	2		2		○	
10F109	◎Disaster Prevention through Geotechnics (地盤防災工学)	Uzuoka (DPRI), Ueda (DPRI)		2	2		○	
10F203	◎□Public Finance (公共財政論)	Matsushima	2		2		○	
10F207	Urban Environmental Policy (都市社会環境論)	Matsunaka, Oba	2		2		○	
10F219	Quantitative Methods for Behavioral Analysis (人間行動学)	Fujii	2		2		○	
10F215	Intelligent Transportation Systems (交通情報工学)	Uno, Yamada, Nakao		2	2		○	
10A805	Remote Sensing and Geographic Information System (リモートセンシングと地理情報システム)	Uno, Susaki, Oba	2		2		○	
10A808	Civic and Landscape Design (景観デザイン論)	Kawasaki, Yamaguchi, Yagi (Part-time Lecturer), Tanigawa	2		2		○	
10F223	◎Risk Management (リスクマネジメント論)	Cruz (DPRI), Kotani		2	2		○	
10X333	◎Disaster Risk Management (災害リスク管理論)	Tatano (DPRI), Samaddar (DPRI)	2		2		○	
693287	★Disaster Information (防災情報特論)	Yamori (DPRI), Hatayama (DPRI), Onishi (DPRI)	2		2		○	
733707	★Environmental Design Research (環境デザイン論)	Kobayashi (GSGES), Ochiai (GSGES)		2	2		○	
10A402	Resources Development Systems (資源開発システム工学)	Murata, Kashiwaya		2	2		○	
10F053	Applied Mathematics in Civil & Earth Resources Engineering (応用数理解析)	Fukuyama, Saito	2		2		○	
10A405	Environmental Geosphere Engineering (地殻環境工学)	Koike, Lin, Kashiwaya, Kinoshita (Part-time Lecturer)	2		2		○	
10F071	Applied Elasticity for Rock Mechanics (応用弾性学)	Fukuyama, Murata		2	2		○	
10F073	Fundamental Theories in Geophysical Exploration (物理探査の基礎数理)	Takekawa, Xu	2		2		○	
10F078	Rock Stress and Physical Properties (岩盤応力と地殻物性)	Lin, Ishitsuka, Yamamoto (Part-time Lecturer)		2	2		○	
10A420	◎□Lecture on Exploration Geophysics (探査工学特論)	Takekawa, Xu		2	2		○	
10F085	◎Measurement in The Earth's Crust Environment (地殻環境計測)	Fukuyama, Nara, Yamamoto (Part-time lecturer), Nagano (Part-time lecturer)	2		2		○	
10F088	◎○Energy System Management (地球資源学)	Koike, Kashiwaya		2	2		○	
10X311	◎Urban Infrastructure Management (都市基盤マネジメント論)	Ichikawa, Onishi, Takahashi, Tachikawa, Higo, Tinumbang	2		2		○	
10F113	◎Global Survivability Studies (グローバル生存学)	Tachikawa, Fujii, Cruz (DPRI), Sayama (DPRI), Shimizu (C-PIER), Shiraiwa (Graduate School of Agriculture), Mclellan (Graduate School of Energy Science)	2		2		○	
693291	★Emergency Management (危機管理特論)	Hatayama (DPRI), Tatano (DPRI), Samaddar (DPRI)		2	2		○	
756790	★Business Development in Energy (エネルギービジネス展開論)	Kobayashi (GSM), Nakayama		2	2			
10i049	#◎Project Management in Engineering (エンジニアリングプロジェクトマネジメント)	Hirai, Komiyama, Lintuluoto, and related instructors	2		2			
10i050	#◎Exercise on Project Management in Engineering (エンジニアリングプロジェクトマネジメント演習)	Hirai, Komiyama, Lintuluoto, and related instructors		Intensive	2			
10F299	▼Master's Thesis (研究論文(修士))							○ Compulsory

Legend
◎English Class
▼Both Japanese and English
○Biennial (Held this year)
□Biennial (Held next year)
◎■Held every year, but English and Japanese alternately every other year
◎●Held every year, but Japanese and English alternately every other year
※Subject of other Department
★Subject of other Graduate School
#Common Subjects of Graduate School of Engineering

Master's Program of the Department of Civil and Earth Resources Engineering
Model Curriculum (International Education Program in Management of Civil Infrastructure)

1. Target students

Students who belong to the Master's program of the Department of Civil and Earth Resources Engineering and take International Education Program in Management of Civil Infrastructure.

2. Purpose of the model curriculum

Today, contributions to the enhancement of management technologies for international social infrastructure and satisfaction of the demand of the whole society including technology induction to Asian countries of rapid urbanization are required. Therefore the objective is to cultivate abilities to explore new technologies and human resources that can address flexibly the complexity in the society from international and multilateral prospective. For this purpose, students are required to take a wide range of English subjects related to Civil and Earth Resources Engineering.

3. Model curriculum

Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
M1 1st term	Exercise on Project Planning (Compulsory) 3-6 subjects from English subject group on "Subject List" of the Department of Civil and Earth Resources Engineering 0-3 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Infrastructure Engineering A/B (Compulsory, 2-year subject/ Accredited 4 credits for each, 8 credits in total, judging the study condition when completed)	12 credits
M1 2nd term	Exercise on Project Planning (Compulsory) 2-5 subjects from English subject group on "Subject List" of the Department of Civil and Earth Resources Engineering 0-3 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Infrastructure Engineering A/B (Compulsory)	10 credits
M2 1st term		Seminar on Infrastructure Engineering A/B (Compulsory)	
M2 2nd term		Seminar on Infrastructure Engineering A/B (Compulsory) Master's Thesis (Compulsory)	8 credits 0 credits
Credits	22 or more credits	8 or more credits	30 or more credits

(Note)

1) For major subjects, students are required to take 10 or more credits from English subjects provided in "Subject List". Consult with your supervisor and decide which subjects to take.
2) 5 study areas are prepared other than completion requirements in the Department of Civil and Earth Resources Engineering. Those who satisfy the completion requirements will receive the certificate when completed. Regarding details of the study areas, please refer to the documents distributed at the guidance.

Master's Program of the Department of Urban Management
Model Curriculum (International Education Program in Urban and Regional Development)

1. Targeted students

Students who belong to the Master's program of the Department of Urban Management and take International Education Program in Urban and Regional Development.

2. Purpose of the model curriculum

We aim to develop internationally competitive infrastructure, make urban policy to achieve socioeconomic development, and develop urban management technology. In this course, we will foster human resources who achieve these goals and also have professional knowledge and leadership. For this purpose, students are required to take a wide range of English subjects related to Urban Management.

3. Model curriculum

Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
M1 1st term	Information Technology for Urban Society (Compulsory) Exercise on Project Planning (Elective Compulsory) Capstone Project (Elective Compulsory) 1-6 subjects from English subject group on "Subject List" of the Department of Urban Management 0-5 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Urban Management A/B (Compulsory 2-year subject. Accredited 4 credits for each, 8 credits in total, judging the study condition when completed)	12 credits
M1 2nd term	Exercise on Project Planning (Elective Compulsory) Capstone Project (Elective Compulsory) 1-5 subjects from English subject group on "Subject List" of the Department of Urban Management 0-4 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Urban Management A/B (Compulsory)	10credits
M2 1st term		Seminar on Urban Management A/B (Compulsory)	
M2 2nd term		Seminar on Urban Management A/B (Compulsory) Master's Thesis (Compulsory)	8 credits 0 credits
Credits	22 or more credits	8 or more credits	30 or more credits

(Note)

1) For major subjects, students are required to take 4 or more credits from English-lectured subjects (subjects with ◎) provided on the "Subject List" except for one subject as Core subject as mentioned in "Guidelines for Graduate School" (see document no. 3). Consult with your supervisor and decide which subjects to take.
2) 6 study areas are prepared other than completion requirements in the Master's program of the Department of Urban Management. Those who satisfy the completion requirements will receive the certificate when completed. Regarding details of the study areas, please refer to the documents distributed at guidance.

Advanced Engineering Course Program of the Department of Civil and Earth Resources Engineering
Model Curriculum (International Education Program in Management of Civil Infrastructure)

1. Targeted students
Students who belong to Advanced Engineering Course Program (5yr Course) and take
International Education Program in Management of Civil Infrastructure in Master's program or students who belong to the Advanced Engineering Course Program (3yr Course).

2. Purpose of the model curriculum
Today, contributions to the enhancement of management technologies for international social infrastructure and satisfaction of the demand of the whole society including technology induction to Asian countries of rapid urbanization are required. Therefore the objective is to cultivate abilities to explore new technologies and human resources that can address flexibly the complexity in the society from international and multilateral prospective. For this purpose, students are required to take wide range of English subjects related to Civil and Earth Resources Engineering.

3. Model curriculum

5yr Course（Mater's Program）			
Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
M1 1st term	Exercise on Project Planning (Compulsory) 3-6 subjects from English subject group on "Subject List" of the Department of Civil and Earth Resources Engineering 0-3 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Infrastructure Engineering A/B (Compulsory / 2-year subject/ Accredited 4 credits for each, 8 credits in total judging the study condition when completed)	12 credits
M1 2nd term	Exercise on Project Planning (Compulsory) 2-5 subjects from English subject group on "Subject List" of the Department of Civil and Earth Resources Engineering/ 0-3 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Infrastructure Engineering A/B (Compulsory)	10 credits
M2 1st term		Seminar on Infrastructure Engineering A/B (Compulsory)	
M2 2nd term		Seminar on Infrastructure Engineering A/B (Compulsory) Master's Thesis (Compulsory)	8 credits 0 credits
Credits	22 or more credits	8 or more subjects	30 or more credits
5yr Course（Doctoral Program）3yr Course（Doctoral Program）			
Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
D1 1st term	Integrated Seminar on Infrastructure Engineering A (Compulsory) Practice in Advanced Infrastructure Engineering	ORT on Infrastructure Engineering (3-year subject, accredited 4 credits after judging the study condition when completed)	2 credits
D1 2nd term	Integrated Seminar on Infrastructure Engineering B (Compulsory) Practice in Advanced Infrastructure Engineering	ORT on Infrastructure Engineering	4 credits
D2 1st Term		ORT on Infrastructure Engineering	
D2 2nd Term		ORT on Infrastructure Engineering	
D3 1st Term		ORT on Infrastructure Engineering	
D3 2nd Term		ORT on Infrastructure Engineering Doctoral Thesis (Compulsory)	4 credits 0 credits
Total	6 or more credits	4 or more credits	10 or more

			credits

(Note)

1) For major subjects, students are required to take 10 or more credits from English subjects on “Subject List”. Consult with your supervisor and decide which subjects to take.

2) 5 study areas prepared other than completion requirements in the Department of Civil and Earth Resources Engineering. Those who satisfy the completion requirements will receive the certificate when completed. Regarding details of the study areas, please refer to the documents distributed at guidance.

Advanced Engineering Course Program of the Department of Urban Management
Model Curriculum (International Education Program in Urban and Regional Development)

1. Targeted students

Students who belong to Advanced Engineering Course Program (5yr Course) and take International Education Program in Urban and Regional Development in Master's program or students who belong to Advanced Engineering Course Program (3yr Course).

2. Purpose of the model curriculum

We aim to develop internationally competitive infrastructure, make urban policy to achieve socioeconomic development, and develop urban management technology. In this course, we will foster human resources who achieve these goals and also have professional knowledge and leadership. For this purpose, students are required to take a wide range of English subjects related to Urban Management.

3. Model curriculum

5yr Course（Mater's Program）			
Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
M1 1st term	Information Technology for Urban Society (Compulsory) Exercise on Project Planning (Elective Compulsory) Capstone Project (Elective Compulsory) 1-6 subjects from English subject group on "Subject List" of the Department of Urban Management, 0-5 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Urban Management A/B (Compulsory/ 2-year subject. Accredited 4 credits for each, 8 credits in total judging the study condition when completed)	12 credits
M1 2nd term	Exercise on Project Planning (Elective Compulsory) Capstone Project (Elective Compulsory) 1-5 subjects from English subject group on "Subject List" of the Department of Urban Management 0-4 subjects from English Common Subjects of Graduate School of Engineering	Seminar on Urban Management A/B (Compulsory)	10 credits
M2 1st term		Seminar on Urban Management A/B (Compulsory)	
M2 2nd term		Seminar on Urban Management A/B (Compulsory) Master's Thesis (Compulsory)	8 credits 0 credits
Credits	22 or more credits	8 or more credits	30 or more credits
5yr Course（Doctoral Program）, 3yr Course（Doctoral Program）			
Year	Subjects（Core, Major, Minor, Others）	ORT subjects	Credits
D1 1st term	Integrated Seminar on Urban Management A (Compulsory) Practice in Advanced Urban Management	ORT on Urban Management (3-year subject, accredited 4 credits after judging the study condition when completed)	2 credits
D1 2nd term	Integrated Seminar on Urban Management B (Compulsory) Practice in Advanced Urban Management	ORT on Urban Management	4 credits
D2 1st term		ORT on Urban Management	
D2 2nd term		ORT on Urban Management	
D3 1st term		ORT on Urban Management	
D3 2nd term		ORT on Urban Management Doctoral Thesis (Compulsory)	4 credits 0 credits
Total	6 or more credits	4 or more credits	10 or more credits

(Note)

1) For major subjects, students are required to take 4 or more credits from English-lectured subjects (subjects with ◎) provided on the "Subject List" except for one subject as Core subject as mentioned in "Guidelines for Graduate School" (see document no. 3). Consult with your supervisor and decide which subjects to take.

2) 6 study areas are prepared other than completion requirements in the Master's program of the Department of Urban Management. Those who satisfy the completion requirements will receive the certificate when completed. Regarding details of the study areas, please refer to the documents distributed at guidance.

Study Area Groups of the Department of Civil and Earth Resources Engineering

April 4, 2023

Students can complete any of the 5 study areas below besides their normal completion requirements. You don't have to apply to the following study areas in the normal subject registration. However, if you satisfy the completion requirements for any one or several study areas below, you are eligible to receive a completion certificate at the time of completion of your Master's Program after notifying the professor in charge of student affairs 1 or 2 months before your graduation.

[Study Area 1] Study Area of Structural Design Engineer/Researcher Training

(1) Content：

Japan has always been hit by a lot of natural disasters like earthquake and typhoon with various natural environments. Under such condition, it is not easy to construct structures which guarantee a safe, secure, and comfortable social infrastructure as civil life. Therefore, this course aims to bring up such personnel who are capable of planning, designing, constructing, maintaining, and managing the structures which realize energy-saving, eco-friendly and cost-effective aspects. First of all, the students are required to master mathematics, dynamics, and microscopic views toward materials. Then, the students will aim to acquire the skill to plan and practice both hardware and software, the evaluation and improvement of the property of such structure, input operation and static/dynamic response, and long-term maintenance and supply, expanding the object to large scale ones.

(2) Required subject groups

Compulsory subjects: 10 credits in total

Continuum Mechanics, Structural Stability, Material and Structural System & Management, Earthquake Engineering/Lifeline Engineering, Structural Engineering for Civil Infrastructure

Elective compulsory subjects (One or more among below subjects are required.)

: 2 or more credits in total

Structural Design, Bridge Engineering, Concrete Structural Engineering, Structural Dynamics, Seismic Engineering Exercise, Ecomaterial Design, Infrastructure Safety Engineering, Computational Fluid Dynamics, Applied Mathematics in Civil & Earth Resources Engineering

[Study Area 2] Study Area of Hydraulic/Hydrologic Design Engineer/Researcher Training

(1) Content：

This course aims to educate engineers and researchers who can suggest practical technologies and develop state-of-the-art technologies to solve various water-related problems and to improve, maintain, and manage such hydraulic infrastructure. Based on the understanding of turbulence phenomenon, Computational Fluid Dynamics, water circulation mechanism, and the sediment transport system from mountains to rivers (coasts), students will acquire the skill to realize advanced hydrologic design and technological development through the designing and planning of hydrologic structure.

(2) Required subject groups

Compulsory subjects: 8 credits in total

Hydrodynamics and Turbulence Mechanics, Hydrologic Design and Management, River Management, Sediment Hydraulics

Elective compulsory subjects (4 or more among below subjects are required.)

: 8 or more credits in total

Hydrology, Open Channel Hydraulics, Coastal Wave Dynamics, Hydro-meteorologically based Disaster Prevention, Water Resources Systems, River Basin Management of Flood and Sediment, Coastal and Urban Water Disasters Engineering, Disaster Mitigation for Sustainable Basin Environment, Computational Fluid Dynamics, Hydraulic Engineering for Infrastructure Development and Management, Applied Hydrology, Case Studies Harmonizing Disaster Management and Environment Conservation, Integrated Disasters and Resources Management in Watersheds

[Study Area 3] Study Area of Geo Design Engineer/Researcher Training

(1) Content：

In addition to geomechanics and basic engineering, which are the theoretical and technological fields to deal with various engineering problems of geomechanics consisting of soil, rock and flow, this course aims to cover a wider range relating to geomechanic studies. This course aims to educate engineers and researchers who would be responsible for the improvement, construction, and maintenance of the infrastructure essential to produce and preserve a comfortable life environment and lead enhanced social activity through research, design, construction, disaster prevention, environmental protection, and research and development of the technologies for energy resources.

(2) Required subject groups

Compulsory subjects: 12 credits in total

Geomechanics, Computational Geotechnics, Construction of Geotechnical Infrastructures, Fundamental Geofront Engineering, Environmental Geotechnics, Disaster Prevention through Geotechnics

Note: The class “Geo-Risk Management,” which had been held for students who enrolled in AY2019 or earlier, will not be held in AY2023.

[Study Area 4] Study Area of Urban Design Engineer/Researcher Training

(1) Content：

This course aims to acquire theoretical methods for a comprehensive understanding of global to local environments for the design of urban space and facility, both of which to harmonize with the environment. The course will further raise such personnel who would accurately support the information and propose of practical design, generalizing such information. Therefore, students are required to understand the spatial distribution of natural and human-activity-related various phenomena, elucidate the methodology to analyze physical and social mechanism, urban landscape and cultural environment, to acquire the skill to design organized space and facility.

(2) Required subject groups

Compulsory subject: 4 or credits in total

Remote Sensing and Geographic Information System, Civic and Landscape Design

Elective compulsory subjects (3 or more among below subjects are required.)

: 6 or more credits in total

Public Finance, Urban Environmental Policy, Quantitative Methods for Behavioral Analysis, Intelligent Transportation Systems, Environmental Design Research, Risk Management, Disaster Risk Management, Disaster Information, Urban Infrastructure Management

[Study Area 5] Study Area of Earth Resources and Energy Engineer/Researcher Training

(1) Content：

This course aims to create and develop technologies to explore, develop, and utilize resource energies through the integration and development within the framework of geoscience, geotechnology, computational and experimental mechanics, and theory and applied dynamics inheriting the basic earth resource and energy engineering which has supported the social infrastructure. This course educates engineers who will possess state-of-the-art intelligence which recognizes both the inside and outside of Japan with a high practical ability of focusing the education to the researchers and engineers who would take on the sustainable development of social infrastructure in the future. Therefore, students are required to enroll in subject groups to establish an engineering foundation, but also to develop application capability skills with Exercise on Project Planning.

(2) Required subject groups

Elective compulsory subjects (6 or more among below subjects are required.)

: 12 or more credits in total

Resources Development Systems, Applied Mathematics in Civil & Earth Resources Engineering, Environmental Geosphere Engineering, Applied Elasticity for Rock Mechanics, Fundamental Theories in Geophysical Exploration, Rock Stress and Physical Properties, Lecture on Exploration Geophysics, Measurement in The Earth's Crust Environment, Energy System Management, Infrastructure Safety Engineering

Study Area Groups of the Department of Urban Management

April 4, 2023

[Study Area 1] Study Area of Public Policy Planning/Management

(1) Content :

This program aims to educate the personnel who would be responsible for planning and implementing the public policy and urban management measure, both of which are essential for the construction of the safe and comfortable urban system which secures the quality of life. In addition to an engineering view point for urban infrastructure improvement and operation, this course train students to be able to demonstrate their leadership in various occasions in practical society with their multiple and flexible thoughts and planning abilities to comprehensively evaluate and discuss future urban profile from the viewpoint of information infrastructure, urban construction and planning, risk management, and finance as well.

(2) Required subject groups

Compulsory subjects: Public Finance, Urban Environmental Policy, Risk Management

: 6 credits in total

Elective compulsory subjects (2 or more among below subjects are required.)

Quantitative Methods for Behavioral Analysis, Intelligent Transportation Systems, Remote Sensing and Geographic Information System, Civic and Landscape Design, Disaster Risk Management

: 4 or more credits in total

[Study Area 2] Study Area of International Project Management (Infrastructure/Energy Development)

(1) Content :

Recently, both infrastructure and energy resource development projects have been shifting to an international scale procurement ones. This course aims for you to acquire not only the technologies necessary in engineering management, but also an interdisciplinary knowledge from a socioeconomic point of view for both infrastructure and energy developments.

(2) Required subject groups

Compulsory subjects: Exercise on Project Planning or Capstone Project, Resources Development Systems, Public Finance

: 6 credits in total

Elective compulsory subjects (3 or more among below subjects are required.)

Construction of Geotechnical Infrastructures, Fundamental Geofront Engineering, Urban Infrastructure Management, Risk Management, Energy System Management, Environmental Geosphere Engineering

: 6 or more credits in total

Note: The class “Geo-Risk Management,” which had been held for students who enrolled in AY2019 or earlier, will not be held in AY2023.

[Study Area 3] Study Area of Urban Water/Geo Environment Management

(1) Content :

Cities are located on the basin, basically consisting of water and ground where people live. From such point of view, this program is set to train urban water or ground environment planner who aims to create cities where we can demonstrate a coexistence with nature and people’s potential capacity along the basin. Also, the students can learn mutual interaction behaviors between the water and the ground, both of which are closely related with each other. With the analysis of such mutual interaction, substance transfer therein, chemical reaction, and deformation

behavior as the main elemental technique, this course covers a wide range including the analysis of the phase transition of city and basin and object setting based on environmental information, actual basin plan from the points of water circulation and supply, river improvement utilization and environment, urban water and ground environment and actual disaster prevention plan, and underground space planning and construction techniques.

(2) Required subject groups

Compulsory subjects: River Management, Construction of Geotechnical Infrastructures, Hydrologic Design and Management, Hydro-meteorologically based Disaster Prevention, Environmental Geotechnics

: 10 credits in total

Elective compulsory subjects (2 or more among below subjects are required.)

Water Resources Systems, Coastal Wave Dynamics, River Basin Management of Flood and Sediment, Coastal and Urban Water Disasters Engineering, Disaster Mitigation for Sustainable Basin Environment, Disaster Prevention through Geotechnics, Urban Environmental Policy

: 4 or more credits in total

[Study Area 4] Study Area of Seismic Design/Management

(1) Content :

It is not sufficient to conduct disaster risk management in advanced information societies with just the knowledge of risk control including long-term quake-resistant technology. Rather it is necessary to approach from a comprehensive point of view taking economic, environmental and social problems into consideration as well. In this course, you will acquire comprehensive management techniques and incorporating risk finance technology as well as the dynamic behavior of ground, structure, and lifeline, and the most recent quake-resistant engineering and design including ecomaterial.

(2) Required subject groups

Compulsory subjects: Structural Dynamics, Earthquake Engineering/Lifeline Engineering, Seismic Engineering Exercise, Ecomaterial Design, Exercise on Project Planning or Capstone Project

: 10 credits in total

Elective compulsory subjects (2 or more among below subjects are required.)

Structural Design, Risk Management, Continuum Mechanics, Material and Structural System & Management, Construction of Geotechnical Infrastructures, Disaster Risk Management, Disaster Information, Emergency Management Systems

: 4 or more credits in total

Note: The class “Geo-Risk Management,” which had been held for students who enrolled in AY2019 or earlier, will not be held in AY2023.

[Study Area 5] Study Area of Urban Transportation Policy (Urban Planning, Urban Transport Policy)

(1) Content :

This course aims to educate the personnel who would plan and implement urban and transportation policies which are essential to construct safe, comfortable, and vital urban system. These cities must be constructed not only from the view point of efficacy, liability, and economic potential, but from an environmental and human perspective as well. Thus, the course leads students to discuss and plan in both scientific and logical ways by giving them the concept and method of urban and transportation policies from new prospects.

(2) Required subject groups

Compulsory subjects: Urban Environmental Policy, Quantitative Methods for Behavioral Analysis

: 4 credits in total

Elective compulsory subjects (6 credits are required to obtain through the following subjects)

Public Finance, Civic and Landscape Design, Intelligent Transportation Systems

: 6 credits in total

: 10 total credits for compulsory and elective compulsory subjects

[Study Area 6] Study Area of Earth Resources and Energy Engineer/Researcher Training

(1) Content :

This course aims to create and develop technologies to explore, develop, and utilize resource energies through the integration and development within the framework of geoscience, geotechnology, computational and experimental mechanics, and theory and applied dynamics inheriting the basic earth resource and energy engineering which has supported the social infrastructure. This course educates engineers who will possess state-of-the-art intelligence which recognizes both the inside and outside of Japan with a high practical ability of focusing the education to the researchers and engineers who would take on the sustainable development of social infrastructure in the future. Therefore, students are required to enroll in subject groups to establish an engineering foundation, but also to develop application capability skills with Exercise on Project Planning.

(2) Required subject groups

Elective compulsory subjects (6 or more among below subjects are required.)

: 12 or more credits in total

Resources Development Systems, Applied Mathematics in Civil & Earth Resources Engineering, Environmental Geosphere Engineering, Applied Elasticity for Rock Mechanics, Fundamental Theories in Geophysical Exploration, Rock Stress and Physical Properties, Lecture on Exploration Geophysics, Measurement in The Earth's Crust Environment, Energy System Management

Seminar on Infrastructure Engineering A, B

(for Master Course students, Dept. of Civil and Earth Resources Eng.)

Seminar on Urban Management A, B

(for Master Course students, Dept. of Urban Management)

Seminar on Infrastructure Engineering A / Seminar on Urban Management A

This seminar has the lectures about the movement and content of the most advanced research at home and abroad on Infrastructure Engineering / Urban Management. The students are individually instructed about the planning of study schedule, the way of collecting data, the way of doing the research and summarizing the results of research.

Seminar on Infrastructure Engineering B / Seminar on Urban Management B

The students make the collection of data, research and summarize the research results about the concrete and specific themes on Infrastructure Engineering / Urban Management Engineering. In addition, the students are individually instructed about the way of presentation of research results through the presentations at the conferences at home and abroad, the ones at laboratory and participation in training course.

Students are required to do the self-rating (refer the below point list), and to get **more than 10 points in total for two years from M1 to M2, more than 3 points in each year. (When enrolled beyond two years, discuss with your supervisor)**. Students should fill out number of the points in the portfolio and submit it after every semester (submit the final portfolio with the submission of Master thesis). The actual period of submission will be notified separately.

1 point	: Presentation at laboratory seminar **(only if supervisor agrees)** Oral presentation in the annual meeting in the Society of Civil Engineers
1～5 point	: Attending the lecture held by Academic Society (Certification is required) Number of points is determined by your supervisor in accordance to the level of difficulty for approval.
3 point	: Presentation in English in international conference If the papers are peer-reviewed, the points are determined as journal papers (see below).
5～10 point	: Fist author or coauthor of published and/or accepted journal papers (e.g., for Journal of Society of Civil Engineers, ASCE Journal, etc.) (Number of points is determined by your supervisor depending on level of journal and/or your contribution.)
Others	: Exercise on project or training course (Number of points is determined by your supervisor.) However, the activities related to the other courses are not admitted, which are Exercise on Project Planning, Capstone Project, Internship on Infrastructure Engineering, Long-Term Internship, Practice in Infrastructure Engineering or Practice in Urban Management.

April 1, 2023

Exercise on Project Planning

(Civil and Earth Resources Engineering and Urban Management)

1. Objective

- To bring out each students' own planning ability and creativity in order to achieve their goal.
- Specifically, students are to write a report on a company's internship activities, training activities at national and international universities and companies, joint project planning and management of citizens, themes and theses research on different research activities, and its purpose methods.

2. Professors in charge

- Assoc. Prof. Hisato Matsumiya (Department of Civil and Earth Resources Engineering)

- Assoc. Prof. Yasuo Sawamura (Department of Urban Management)
  E-mail: sawamura.yasuo.6c@kyoto-u.ac.jp, phone: 075-383-3230

3. Main target students

- 1st year in the Master Course of Civil and Earth Resources Engineering and Urban Management.

4. Certified credits

- Civil and Earth Resources Engineering: 2 compulsory core subjects per year
- Urban Management: 2 chosen compulsory core subjects per year

5. Operational processes

（1） Guidance : April 13 (Thu) 1:15PM in C1-191

★ **Students who wish to take this course should be registered through KULASIS with an appropriate email address** as all of the information will be available throhgh KULASIS and PandA. **When the email has been changed, the address registered in the KULASIS should be revised accordingly**. Frequent visits to the KULASIS and PandA would be highly recommended.

★ After registraion, please review course introduction material available in KULASIS and PandA. If you have any questions regarding this course, send an eamil to sawamura.yasuo.6c@kyoto-u.ac.jp.

（2） Submission of proposal, Due date: June 9 (Fri), Note: Use the 'proposal format' on the KULASIS and PandA.

★ Followings are the principal issues to be written in the proposal.

- Project Title (Japanese and English)
- Name, Laboratory name, E-mail address
- Name of your advisor (professor, associate professor, teacher that is related to your major)
- Summary (around 200 words in English), goal and method (from the planning to the operation in detail), expected results, publication planning.

After the completion of your proposal, **receive a signature or a seal from your advisor and submit your proposal in PDF format via PandA. Also you are requested to submit the proposal with Excel file.**

Note: The PDF and Excel files' name shall be "EPP_Name_Student#.pdf (or .xlsx)".

（3）Progress report, Due date : October 2 (Mon)

Write your progress report within a page on an A4 size paper. Receive a signature or a seal from your advisor and submit it in PDF format via PandA.

（4） Submission of the final report, Due date : January 5 (Fri) 2023

Write a final report on your results and submit it in PDF format via PandA.

The name of pdf file shall be "EPP_Name_Student#.pdf". Note, your report should be within 10 pages in JSCE journal format (refer to the URL: https://committees.jsce.or.jp/jjsce/english/formats).
Also, please submit your final report AFTER the confirmation by your advisor.

6. Attentions

- When forming a group, your group cannot exceed 5 members.
- Along with Civil and Earth Resources Engineering internship as well as long-term internship, your activities will be presented after mid-December 2023.
- You must fully attend the class for your presentation. It will be arranged for 3 hours.
- You must report the company or organization providing your internship to your advisor when you decide it.
- It is highly recommended to take out accidental insurance, e.g., “Gakkensai”, “Gakkenbai”, “Gakubai”.
  https://www.kyoto-u.ac.jp/ja/education-campus/campuslife/Insurance (in Japanese)
  https://www.kyoto-u.ac.jp/en/current/campus-life/health-management-and-insurance-1/insurance-programs-for-ku-students.html
  https://kyosai.univcoop.or.jp/english/index.html

April 1, 2023

Internship on Infrastructure Engineering (Dept. Civil and Earth Resources Eng.)
Long-Term Internship (Dept. Urban Management)

1. Objective

Through the long-term internship (longer than 3 months) outside the university, e.g., government and private companies, students can obtain the practical techniques, the way of finding and solving the problems, the way of integrating the techniques, the way of summarizing the results and making the presentation in each field of Civil and Earth Resources Engineering and Urban Management.

2. Professors in charge

- Assoc. Prof. Hisato Matsumiya (Department of Civil and Earth Resources Engineering)

- Assoc. Prof. Yasuo Sawamura (Department of Urban Management)
  E-mail: sawamura.yasuo.6c@kyoto-u.ac.jp, phone: 075-383-3230

3. Main target students

- 1st year in the Master Course of Civil and Earth Resources Engineering and Urban Management (doctor course students can take this course).

4. Certified credits

- 4 per year, On the Research Training, elective subject

5. Operational conditions

- Internship has to be longer than 3 months within the duration from August to mid-December. The 3 months can be divided into several parts.
- Financial support from university is NOT provided. Rewards to students are dependent of each recipient institution or company.
- Financial support for travel expenses (in particular, distant place) should be discussed among students, supervisor and recipient.
- It is highly recommended to take out accidental insurance, e.g., “Gakkensai”, “Gakkenbai”, “Gakubai”.
  https://www.kyoto-u.ac.jp/ja/education-campus/campuslife/Insurance (in Japanese)
  https://www.kyoto-u.ac.jp/en/current/campus-life/health-management-and-insurance-1/insurance-programs-for-ku-students.html
  https://kyosai.univcoop.or.jp/english/index.html

6. Operational processes

(1) Guidance: April 13 (Thu) 1:15PM in C1-191

(2) Students who wish to take this course must contact Assoc. Prof. Yasuo Sawamura via email at sawamura.yasuo.6c@kyoto-u.ac.jp by April 17 (Mon).

(3) Determination of internship location

Institution or company for internship can be determined by the following three ways: i) contact by students; ii) contact by advisors; and iii) contact by professors in charge of this course. In the case of iii), students need to give their information to the professors, and the professors will contact with possible institutions.

(4) Preparation (April to June)

After determination of internship location, through discussion with the recipient, students are required to i) determine internship subject, ii) write proposal of internship with methods (experiment / data analysis / site investigation / programming / design etc.), duration, conditions, etc., and iii) to prepare anything needed for internship.

(5) Submission of proposal: June 23 (Fri)

Show your proposal to your advisor and receive a signature or a seal from your advisor. And submit your proposal in PDF format via PandA.

(6) Implementation of internship (from August to mid-December)

Implement your internships according to the proposal.

(7) Report and presentation (after mid-December)

- Submission of report: Due date: January 5 (Fri) 2023

Write a report on your results and submit in PDF format via PandA. Report should be within 20 pages in JSCE journal format.

(https://committees.jsce.or.jp/jjsce/english/formats)

- Presentation: After mid-December 2023

-You must fully attend the class for your presentation. It will be arranged for 3 hours.

7. Attention

You CANNOT take any other courses during this internship.

“Capstone Project” (FY2023)

Department of Urban Management

1. Outline (extract from syllabus)

The students plan and implement projects on various problems in the urban society by widely making use of the basic knowledge which you have gotten in Undergraduate or Master Course. Actually, the students simulate the actual problems for which you collect and analyze the data, and then evaluate the practice and effect of projects. At the end, the students write the reports about a series of project results and make the presentations about them.

2. Cautions

- Students who wish to take this subject must register the subject at KULASIS as quick as possible so that you have an access to the course site [2023 通集他他]キャップストーンプロジェクト at PandA. All information will be provided through the course site.

- Students who wish to take this subject must check the list of themes and register the first to third choices of desired themes on the course site **by 4PM on April 14th (Fri)**. When it is difficult to select 3 due to the language restrictions, please select only possible ones. If you have any questions, please contact Assoc. Prof. Furukawa (furukawa.aiko.3w@kyoto-u.ac.jp).

※You are NOT allowed to choose the theme that is provided from your own lab.
※Please be strict about the deadline.

- Determination of theme

Information will appear on the course site on April 19th, Wednesday, 12:00
⇒Students whose themes are NOT determined: You will receive an email to adjust the theme.
⇒Students whose themes are determined: Contact to the faculties in charge of your theme.

- Final report (one for each theme)

Presentation: January 2024.
Report: A4 size, 10 pages, J. of JSCE format ⇒ http://committees.jsce.or.jp/jjsce/english/formats

How to Submit a Portfolio (for new Master's students in the Academic Year 2023)

(1) Go to a website (https://www.um.t.kyoto-u.ac.jp/ja/oncampus/kyomu2023) and download a copy of the portfolio form (MS-Word).→[Download]

(2) Fill out the form in designated pages (see next page*) and then print it.

(3) Students in the Department of Civil and Earth Resources Engineering: Obtain supervisor signature in the signature space of printed portfolio. (You do not need sub-supervisor signatures.)

Students in the Department of Urban Management: Obtain supervisor signature in the signature space of printed portfolio. (You do not need sub-supervisor signatures.)

Print out your class timetable on the course registration from KULASIS (see document no.7-1), and then obtain supervisor signature or seal on it.

(4) Scan pertinent pages of portfolio and the class timetable, then make one PDF file and send it to the e-mail address shown in the below box as an attached file. Students who applied the classes offered by the other graduate schools and faculties must add the application form signed by supervisor to the PDF file to be submitted.

When students complete the 4th semester in the 2nd year, they must submit all pages of original portfolio to C-Cluster Office.

Send a portfolio to the following e-mail address

kyomu-ceum@adm.t.kyoto-u.ac.jp

Note 1 : E-mail subject line must be written as follows:

Student ID number (half-size 10-degit number) ＋ student's department (the Department of Civil and Earth Resources Engineering→CE or the Department of Urban Management→UM ※use half-size characters)＋ student's name

(Example) 1234567890CE Taro Yamada

Note 2 : When students send a PDF file via e-mail, they must also send the e-mail to their supervisor with CC.

Note 3 : Be sure to have an appropriate file size. Preferred file size is around 100 kb.

Note 4 : File name must be written as follows:

"Student ID number＋student's department (CE or UM)+Student's name.pdf"

(Example) 1234567890_CE_TaroYamada.pdf

(5) Keep your original copy of printed portfolio in a safe place until the end of Master Course Program. (Students must submit original portfolio after the end of 4th semester in the 2nd Year.)

*Below are the pages students must fill in for master's portfolio

・at school entry
Fill in page 1-3 of Academic Portfolio (for Master Course)
Deadline: April 11th, 2023, 17:00 (must send filled form in a PDF file.)

・after the end of the 1st semester in the 1st Year
Fill in page 4-5
Schedule Deadline: late September in 2023 (must send filled form in a PDF file.)

・after the end of the 2nd semester in the 1st Year
Fill in page 6-7
Schedule Deadline: mid-April in 2024 (must send filled form in a PDF file.)

・after the end of the 3rd semester in the 2nd Year
Fill in page 8-9
Schedule Deadline: late September in 2024 (must send filled form in a PDF file.)

・after the end of the 4th semester in the 2nd Year
Fill in page 10-12
Schedule Deadline: late January in 2025 (must submit original copy of all pages 1-12)

履修登録科目選択リスト

んの科目選択状況です。

指導教員サインまたは印

2017/04/20

学生番号

※候補科目設定だけでは，履修登録申込は完了していません。
履修登録期間(04/20(木) 00:00 ～ 04/24(月) 24:00）に，各曜時限1科目を決定し，履修登録してください。
なお，事前に申込が必要な科目は履修登録期間までに反映します。予備登録した科目が反映されていない場合は，窓口までお問い合せください。

曜時限		科目名	担当教員	区分	旧群	単位数	開講期	教室
月	1							
	2	(全共)日本語コミュニケーションの特徴	パリハワダナ　ルチラ	人社群	A群	2	前期	1共03
	3	(全共)英語ライティング－リスニングA EW57b	TEETER，Jennifer Louise	外国語群	C群	2	前期	4共14
	4	(全共)情報基礎［工学部］（電気電子工学科）	原田　博司	情報群		2	前期	総合研究5号館NSホール
	5							
火	1							
	2	(全共)熱力学	阪上　雅昭	自然群	B群	2	前期	共南11
	3	(全共)微分積分学（講義・演義）A	浅岡　正幸 他	自然群	B群	3	前期	共西32
	4	(全共)南アジアの政治と社会	中溝　和弥	人社群	A群	2	前期	教育院棟講義室31
	5	(工) 電気回路基礎論	久門　尚史			2	前期	電気総合館電総大
水	1							
	2	(全共)ラテン・アメリカ現代社会論	村上　勇介	人社群	A群	2	前期	共北26
	3	(全共)線形代数学（講義・演義）A	岸本　大祐	自然群	B群	3	前期	共西32
	4	(全共)物理学基礎論A	松田　和博	自然群	B群	2	前期	4共11
	5	(全共)自然現象と数学	佐藤　亨	自然群	B群	2	前期	総合研究5号館北棟1階ND2

曜時限		科目名	担当教員	区分	旧群	単位数	開講期	教室
木	1	(全共)スポーツ実習IA ［バドミントン］	杉本　寛恵	健康群	D群	1	前期	総合体育館
	2	(全共)中国語IA（演習） C1217	道坂　昭廣	外国語群	C群	2	前期	情報メ301(CALL)
	3	(全共)論理学I	安部　浩	人社群	A群	2	前期	共南11
	4	(全共)神経科学の基礎	水原　啓暁	自然群	B群	2	前期	4共30
	5							
金	1	(全共)英語リーディング ER57	横山　仁視	外国語群	C群	2	前期	共北35
	2	(全共)微分積分学（講義・演義）A (全共)線形代数学（講義・演義）A	浅岡　正幸 他 岸本　大祐	自然群 自然群	B群 B群	* *	前期 前期	共西32 共西32
	3	(全共)中国語IA（文法） C1117	前田　尚香	外国語群	C群	2	前期	共西11
	4							
	5							

●その他(集中講義等)

曜時限	科目名	担当教員	区分	旧群	単位数	開講期	教室

[April 2023] 指導教員の署名を取得後、1-3 ページをまとめて PDF にして指定アドレスに電子提出する。原本は大切に保管すること。Obtain supervisor signature. Scan pertinent pages into a PDF file, and then send it to the designated e-mail address. Keep your original copy in a safe place until the end of Master Course Program.

京都大学工学研究科　社会基盤工学専攻・都市社会工学専攻
ポートフォリオ（修士課程）　2023 年 4 月入学者用

Academic Portfolio (for Master Course, Dept. of Civil and Earth Resources Eng. and Dept. of Urban Management)

			2023 年　4 月　入学 Entered Apr. 2023
専攻名 Department	学生番号 Student ID	コース Course 高度･融合(分野) Advanced or Interdisciplinary(field)	氏　　名 Name
社会基盤工学専攻	**1234567890**		**山田　太郎**

所属分野 Laboratory	指導教員 Supervisor
〇〇〇〇分野	〇〇〇〇
教育プログラムの選択（Major 履修科目の系） Division of education program for major subjects	
（例） **水工系教育プログラム**	

Current address

現	（例） 〇〇市〇〇町〇〇〇	TEL(固定, fixed)	**000-000-0000**
住		TEL(携帯, cp)	**000-000-0000**
所		E-mail	**（全学メールアドレスを記入）**

		TEL(固定, fixed)	
		TEL(携帯, cp)	
		E-mail	

		TEL(固定, fixed)	
		TEL(携帯, cp)	
		E-mail	

Hometown address

帰	（例） 〇〇市〇〇町〇〇〇	TEL(1)	**000-000-0000**
省		FAX or TEL(2)	
先		E-mail	

		TEL(1)	
		FAX or TEL(2)	
		E-mail	

氏名(Name)：　山田　太郎

学習目標 Your goals

所属専攻、コースにおいて修了に必要な単位 Credits required for completion
（大学院学習要覧を参考にして記入）

科目区分 Subject category	単位数 Credits	
	修士課程 Master Program	博士後期課程 Ph.D. Program
コア科目　Core	2　単位以上	単位以上
Major 科目	20　単位以上	単位以上
Minor 科目	単位以上	単位以上
演習・ORT・インターンシップ科目	8　単位以上	単位以上
その他の科目　Others	単位以上	単位以上
合　計　Total	30　単位以上	単位以上

資格・公的試験の目標　Your plans on acquisition of professional licenses/qualifications

資格等の名前 Category	取得予定年月 Planned date	実際の取得年月 Actual date	備　考 Remark

大学院在籍中の勉学目標 Your study goals in Master (and Ph.D.) program
（例） 査読付論文集を執筆し、掲載されることを目指す。（○○工学論文集など） 国際会議において口頭発表を行う。 土木学会全国大会で優秀講演者賞の受賞を目指す。

履修コースの修得目標　Your study goals to obtain the Courses designated by the department
（例）　水工系の履修コースの関連科目の単位を修得し、コース認定されることを目標とする。

その他の目標　Other goals
（例）TOEIC800点以上を獲得。

氏名(Name)： 山田 太郎

テーラーメイド学習計画 Study/Research Plan

一般科目 Course works （単位 credits）

年・セメスター Year/Semester		コア科目 Core	Major 科目	Minor 科目	演習 ORT 等	その他科目 Others
1年	1	2 単位	10 単位	単位	8 単位	単位
1st year	2	単位	単位	単位	単位	単位
2年	3	単位	単位	単位	単位	単位
2nd year	4	単位	単位	単位	単位	単位
小 計 Subtotal		2 単位	10 単位	単位	8 単位	単位
研究論文(修士) Master dissertation		必修 Compulsory				
3年	5	単位	単位	単位	単位	単位
3rd year	6	単位	単位	単位	単位	単位
4年	7	単位	単位	単位	単位	単位
4th year	8	単位	単位	単位	単位	単位
5年	9	単位	単位	単位	単位	単位
5th year	10	単位	単位	単位	単位	単位
小 計 Subtotal		単位	単位	単位	単位	単位
合 計 Total		単位	単位	単位	単位	単位
研究論文(博士) Doctoral dissertation		必修 Compulsory				

特別実験及び演習（修士論文） Master dissertation

研究目標（テーマ・目的等） Purpose/Plan	（例） 開水路ワンド流れの基礎的研究 河床高自動計測システムを開発する。

インターンシップ・海外研修等の計画 Internship plan

（例） ○○株式会社の夏季インターンシップに参加する。

指導教員の署名欄 Approval from your supervisor (to be signed by your supervisor)

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氏名(Name)： 山田 太郎

学習の状況

Your progress and self-evaluation in the first semester (to be filled after the first semester)

履修科目名 Subject	科目区分 Subject category (Core, Major, Minor, ORT, Others)	単位 Credit	合否 Pass/Fail

取得単位数 Credits acquired

	コア科目 Core	Major 科目	Minor 科目	演習 ORT 等	その他科目 Others	合 計 Total
今期の取得単位数 In this semester	単位	単位	単位	単位	単位	単位
積算取得単位数 Total	単位	単位	単位	単位	単位	単位

氏名(Name)： 山田 太郎

特別実験及び演習（修士論文） Dissertation study

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学習の状況

Your progress and self-evaluation in the second semester (to be filled after the second semester)

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取得単位数 Credits acquired

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学習の状況

Your progress and self-evaluation in the third semester (to be filled after the third semester)

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学習の状況

Your progress and self-evaluation in the fourth semester (to be filled after the fourth semester)

履修科目名 Subject	科目区分 Subject category (Core, Major, Minor, ORT, Others)	単位 Credit	合否 Pass/Fail

取得単位数 Credits acquired

	コア科目 Core	Major 科目	Minor 科目	演習 ORT 等	その他科目 Others	合　計 Total
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履修分野の修了の申請

Application to obtain the Study Area Certificate (to be submitted on February in the fourth semester)

履修分野名 Study area name:

履修科目名 Subject	科目区分 Subject category (Core, Major, Minor, ORT, Others)	単位 Credit	合否 Pass/Fail

履修分野名 Study area name:

履修科目名 Subject	科目区分 Subject category (Core, Major, Minor, ORT, Others)	単位 Credit	合否 Pass/Fail

The Handling of Test Reports

Due to the improvements of internet technologies in recent years, global data (including theses and reports) are easily accessed. In the past there were no regulations on how to handle test reports.

The regulations on handling test reports from now on are as follows:

1. Objective
   - Clarification on handling test reports
   - Prevention of plagiarism.

2. Warning
   - If you have written a report based on materials from the internet, be aware of the directions below.

   ① Reports are given tasks from teachers and are to be written in your own words and thoughts. Reports written by copying someone else's words are unaccepted.
   ② Referring to internet materials to prove your point is acceptable, but make sure that the materials are only those relevant to your report.
   ③ If you have quoted a reference, cite the source at the end of the report.
   ④ If you have used someone else's words or ideas and did not cite them, the report will be accepted as plagiarism (Laws of Engineering Examination Article 16).