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

13:00 - 14:00, Friday 4th April 2014

Room C1-191 on Katsura Campus

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[Master Course] 2.1Department 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 view points.

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.

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

(2) Credits required for Master degree

[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) 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 the website of the Graduate School of Engineering. URL:http://www.t.kyoto-u.ac.jp/syllabus-gs/
- (2) The subjects without a circle (\circ) 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.

Structural Division Education Program:

Must take all "Continuum Mechanics", "Structural Stability", "Material and Structural System & Management", "Earthquake Engineering/Lifeline Engineering", and "Infrastructural Structure Engineering".

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 "Integrated Disasters and Resources Management in Watersheds".

Geomechanics Division Education Program:

Must take at least 5 subjects among "Geomechanics", "Computational Geotechnics", "Geo-Risk Managenent", "Construction of Geotechnical Infrastructures", "Fundamental Geofront Engineering", "Environmental Geotechnics" and "Disaster Prevention through Geotechnics".

Planning Division Education Program:

Must take at least 2 subjects among "Public Finance", "Urban Environmental Policy", "City Logistics", "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 "Theory & Practice of Environmental Design Research".

Earth Resources and Energy Division Education Program:

Must take at least 3 subjects among "Resources Development Systems", "Applied Mathematics in Civil & Earth Resources Engineering", "Computational Mechanics and Simulation", "Environmental Geosphere Engineering", "Modeling of Geology", "Applied Elasticity for Rock Mechanics", "Fundamental Theories in Geophysical Exploration", "Design of Underground Structures", "Lectureon Exploration Geophysics", "Measurement in the Earth's Crust Environment", "Time Series Analysis", and "Energy System Management".

"International Course in Management of Civil Infrastructure" Program:

Must complete 10 credits or more from English-lectured classes providedon 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.

(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)As for taking "Urban Transport Policy", "Policy for Low-Carbon Society", "Urban Transport Management", "Policy for Low-Carbon Society, Advanced"; "Urban Transport Management, Advanced"; "Capstone Project Practice"; contact **the Low-Carbon Society Unit** prior to registering for the classes.

(9) As for taking "Dialog/Liveable Cities", "Dialog/ Design of Liveable Cities" "Basic Civil Engineering & Health Science I" "Basic Civil Engineering & Health Science II" "Policy for Liveable Cities" "Methodology for Liveable Cities" "Seminar on Liveable Cities A" "Seminar on Liveable Cities B" "Disaster and Health Risk Management" "KANSEI urban spaces" and "Exercise on Project planning"; contactLiveable Cities Unit prior to registering for the classes.

(10) The coursesbelow have also been set in the Department of Civil and Earth Resources Engineering:

- Structural Design Engineer/Researcher Training Course
- Hydrologic Design Engineer/Researcher Training Course
- Geo Design Engineer/Researcher Training Course
- Urban Design Engineer/Researcher Training Course
- Earth Resources and Energy Engineer/Researcher Training Course
- International Course on Approaches for Disaster Resilience

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.

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10F245 〇〇Open C (開水路の水 (開水路の水 10F462 〇二Coastal (海岸波動論 (海岸波動論 (本文気象財) 10F267 〇Hydro-me (水文気象財) 10A222 〇Niver Bas Sediment (?) 10F077 ORiver Bas Sediment (?) 10F269 OCoastal ar Engineering 10F466 ODisaster M Environment 10F011 ③Computat (数値流体力) 10F065 ◎Hydraulic Development	Design and Management 荐)	Tachikawa	2		2		0	
10F462 ◎□Coastal (海岸波動語 (海岸波動語 (水文気象防) 10F267 □Hydro-me (水文気象防) 10A222 □Water Res (水資源シス) 10F077 ○River Bas Sediment (i Engineering) 10F269 ○Coastal ar Engineering) 10F466 ODisaster M Environmeni 10F011 ◎Computat (数値流体力) 10F065 ◎Hydraulic Developmeni	Channel Hydraulics	Hosoda, Onda	2		2		0	
10F267 □Hydro-me (水文気象防 10A222 □Water Res (水資源シス 10F077 ORiver Bas Sediment (i 0F269 10F269 0Disaster M Environment 10F011 ◎Computat (激値流体力 10F065 ◎Hydraulic Development	l Wave Dynamics	H.Gotoh, E.Harada, Khayyer	2		2		0	
10A222 □Water Res (水資源シス 30F077 10F077 ORiver Bas Sediment (i Engineering 0Disaster M Environment (数値流体力 10F065 10F466 ○Coastal ar Engineering 0Disaster M Environment (数値流体力 Development)	eteorological Disaster Prevention	Takara, Nakakita, Kido (DPRI)	2		2		0	
ORiver Bas Sediment (注 10F269 10F269 OCoastal ar Engineering 0Disaster M Environmeni (数值流体力 (数值流体力) 10F011 ©Computat (数值流体力) 10F065 ©Hydraulic Developmeni	sources Systems	Hori, K.Tanaka (DPRI)	2		2		0	
OCoastal ar Engineering 10F466 ODisaster M Environment 10F011 @Computat (数值流体力) 10F065 OHydraulic Development	sin Management of Flood and 流域治水砂防学)	H.Nakagawa, Sumi, Kawaike, Takebayashi	2		2		0	
ODisaster M Environmen 10F011 @Computat (数值流体力 10F065 @Hydraulic Developmen	nd Urban Water Disasters (沿岸・都市防災工学)	Mase, Igarashi, Yoneyama, Mori (DPRI)	2		2		0	
10F011 ©Computat (数値流体力 10F065 0Hydraulic Developmen	Mitigation for Sustainable Basin nt (流域環境防災学)	Fujita, Hiraishi, Takemon, Tsutsumi, Baba (DPRI)	2		2		0	
10F065 ©Hydraulic Developmen	tional Fluid Dynamics	Ushijima, H.Goto, Khayyer		2	2		0	
	c Engineering for Infrastructure nt and Management (水域社会基	Hosoda,Toda, H.Gotoh, Tachikawa, Kishida,		2	2		0	
10F100 @Applied H	Hand Management (永敏社会鉴 Hydrology (応用水文学)	Hori, Sumi, S. Tanaka, Kido, Takemon, K.Tanaka	2		2		0	
	lies Harmonizing Disaster at and Environment Conservation	Takara, H.Nakagawa, Nakakita, Mase, Mori	2		2		0	

10F106	Integrated Disasters and Resources Management in Watersheds	Fujita, Hiraishi, Yoneyama, Kawaike, Takebayashi,		2	2	0	
10F025	Geomechanics (地盤力学)	Mimura, Kimoto	2		2	0	
10K016	◎Computational Geotechnics (計算地盤工学)	Kimoto,Inui (GSGES)		2	2	0	
10F238	◎Geo-Risk Management (ジオリスクマネジメント)	Ohtsu, Shiotani	2		2	0	
10F241	Construction of Geotechnical Infrastructures (ジオコンストラクション)	Kimura, Kishida		2	2	0	
10F405	 ③Fundamental Geofront Engineering (ジオフロント工学原論) 	Mimura, Kimura, Higo	2		2	0	
10A055	(ジオブロンドエ子/示論) Environmental Geotechnics (環境地盤工学)	Katsumi, Inui (GSGES)	2		2	0	
10F109	◎Disaster Prevention through Geotechnics (地盤防災工学)	Iai, Tobita (DPRI)		2	2	0	
10F203	◎Public Finance (公共財政論)	K.Kobayashi, Matsushima	2		2	0	
10F207	Urban Environmental Policy (都市社会環境論)	D.Nakagawa, Matsunaka	2		2	0	
10F213	(御川社云環境)	E.Taniguchi, Ali G.Qureshi	2		2	0	
10F219	Quantitative Methods for Behavioral Analysis	S.Fujii	2		2	0	
10F215	/Public Psychology for Human Behavior (人間 Intelligent Transportation Systems	Uno, T.Yamada,		2	2	0	
10A805	(交通情報工学) Remote Sensing and Geographic Information	T.Nakamura	2	-			
	System (リモートセンシングと地理情報システ Civic and Landscape Design	Tamura, Susaki Kawasaki, Kubota,	Z		2	0	
10A808	(景観デザイン論)	Yamaguchi, Okabe (Part-		2	2	0	
10F223	◎ Risk Management (リスクマネジメント論)	Yokomatsu (DPRI)		2	2	0	
10X333	◎Disaster Risk Management (災害リスク管理論)	Tatano, Yokomatsu (DPRI)	2		2	0	
693287	★Disaster Information (防災情報特論)	Tatano, Yamori, Hatayama (DPRI)	2		2	0	
10A845	★Theory & Practice of Environmental Design Research (環境デザイン論)	H.Kobayashi (GSGES)		2	2	0	
10A402	Resources Development Systems (資源開発システム工学)	T.Matsuoka , Murata		2	2	0	
10F053	Applied Mathematics in Civil & Earth Resources Engineering (応用数理解析)	Tsukada, Saito	2		2	0	
10K008	 © Computational Mechanics and Simulation (計算力学及びシミュレーション) 	Murata, Furukawa, Flores, Liang	2		2	0	
10A405	Environmental Geosphere Engineering (地殻環境工学)	K. Koike	2		2	0	
10F069	◎●Modeling of Geology (数理地質学)	Y.Yamada		2	2	0	
10F071	Applied Elasticity for Rock Mechanics (応用弾性学)	Murata		2	2	0	
10F073	Fundamental Theories in Geophysical Exploration (物理探査の基礎数理)	Mikada, T.Gotoh	2		2	0	
10F087	Design of Underground Structures (地下空間設計)	Asakura, Ishida		2	2	0	
10A420	◎OLecture on Exploration Geophysics (探査工学特論)	Mikada, T.Gotoh		2	2	0	
10F085	◎Measurement in The Earth's Crust Environment (地殻環境計測)	T.Asakura, Ishida Yamamoto (Part-time	2		2	0	<u> </u>
10F039	□Time Series Analysis (時系列解析)	Tsukada		2	2	0	
10F086	◎□Energy System Management (エネルギー基盤マネジメント工学)	K. Koike		2	2	0	
10F081	(エイルイー 宏盛 (インノントエチ) Infrastructure Creation Engineering (社会基盤工学創生)	Related instructors	2		2	0	
10X311	(江云室盛上子別土) ◎ Urban Infrastructure Management (都市基盤マネジメント論)	Ohtsu and related instructors	2		2	0	
10F112	(自力) 室盤マネンノン (画) のGlobal Survivability Studies (グローバル生存学)	Takara(DPRI), Yoshikawa and related instructors		2	2	0	
693291	(危機管理特論)	Hayashi, Maki,Suzuki	2		2	0	
10F201	Information Technology for Urban Society	(DPRI) Related instructors	2		2		
10Z001	(都市社会情報論) Urban Transport Policy (知志なるが第次の) イント・講座)	D. Nakagawa, Matsunaka,	Interio		1		
	(都市交通政策フロントランナー講座)	Oba, Matsubara and related	intensive		1		

10Z002	Policy for Low-Carbon Society	E. Taniguchi, D. Nakagawa,	T. C. M.		1		
	(低炭素都市圏政策論) Urban Transport Management	Matsubara and related D. Nakagawa, S. Fujii, Uno,	Intensive				
10Z003	(都市交通政策マネジメント)	D. Nakagawa, S. Fujii, Uno, Matsubara and related	Intensive		1		
10Z004	(価市反通政策マネンシント) ○Policy for Low-Carbon Society, Advanced (低炭素都市圏政策特論)	Related instructors	Intensive	T. (1		
	(低灰茶郁巾圏以東守論) ○Urban Transport Management, Advanced	D. Nakagawa, S. Fujii,		Intensive			
10Z005	(都市交通政策マネジメント特論)	Matsunaka, Oba, Matsubara		Intensive	1		
107004	OCapstone Project Practice	E. Taniguchi, D. Nakagawa,					
10Z006	(キャップストーンプロジェクト演習)	Matsunaka, Oba, Matsubara		Intensive	1		
10Z063	Dialog/ Liveable Cities (対話・安寧の都市論)	Related instructors	2		2		
10Z064	Dialog/ Design of Liveable Cities (対話・安寧の都市デザイン)	Related instructors		2	2		
10Z065	Basic Civil Engineering & Health Science I (都市健康科学基礎論 I)	Related instructors	2		2		
10Z066	Basic Civil Engineering & Health Science Ⅱ (都市健康科学基礎論Ⅱ)	Related instructors		2	2		
10Z067	Policy for Liveable Cities (安寧の都市政策)	Related instructors	2		2		
10Z068	Methodology for Liveable Cities (健康都市政策論)	Related instructors		2	2		
10Z058	Seminar on Liveable Cities A (安寧の都市セミナーA)	Related instructors	Intensive		1		
10Z059	Seminar on Liveable Cities B (安寧の都市セミナーB)	Related instructors		Intensive	1		
10Z069	Disaster and Health Risk Management (災害健康危機管理論)	Related instructors	2		2		
10Z070	KANSEI urban spaces (感性都市空間論)	Related instructors		2	2		
10Z062	Exercise on Project Planning (実践プロジェクト)	Related instructors	(2)	(2)	2		
10F383	 ②Engineering Seminar for Disaster Resilience in ASEAN countries 1 (強靭な国づくりのためのエンジェアリングセミナー1) 	Ohtsu and related instructors	Intensive		2		
10F384	 ②Engineering Seminar for Disaster Resilience in ASEAN countries 2 (強靭な国づくりのためのエンジェアリングセミナー2) 	Tachikawa and related instructors	Intensive		2		
10F385	 ②Engineering Seminar for Disaster Resilience in ASEAN countries 3 (強靭な国づくりのためのエンジェアリングセミナー3) 	Hori, Shimizu, Hatayama, Mori, Takebayashi, Yokomatsu	Intensive		2		
10F382	◎Disaster and Health Risk Management for Liveable Cities (安寧の都市のための災害及び健康リスクマネジ	Kiyono and related instructors	Intensive		2		
10F299	Master's Thesis (研究論文(修士))						Compulso

 Legend

 ©English Class

 ○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

[Master Course] 2.2Department of Urban Management (1) Educational Policy

1) Necessity of Research and Education in the Department

To realizesustainable 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 engineeringtechnology such as management, advanced information, social infrastructureand 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 informationcommunication 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	
Others	8 or more credits Take under your supervisor's approval
Total number of credits	30 or more credits

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) 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 the website of the Graduate School of Engineering.URL:http://www.t.kyoto-u.ac.jp/syllabus-gs/.
- (2)The subjects without a circle (\circ) 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. However, under supervisor's approval, 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". 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 6educational programs below. For the selection of your educational program, obtain your supervisor's approval in advance.

Structural Division Education Program:

Must take all "Continuum Mechanics", "Structural Stability", "Material and Structural System & Management", "Earthquake Engineering/Lifeline Engineering", and "Infrastructural Structure Engineering".

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 "Integrated Disasters and Resources Management in Watersheds".

Geomechanics Division Education Program:

Must take at least 5 subjects among "Geomechanics", "Computational Geotechnics", "Gio-Risk Management" "Construction of Geotechnical Infrastructures", "Fundamental Geofront Engineering", "Environmental Geotechnics", ", and "Disaster Prevention through Geotechnics".

Planning Division Education Program:

Must take at least 2 subjects among "Public Finance", "Urban Environmental Policy", "City Logistics", "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 "Theory & Practice of Environmental Design Research".

Earth Resources and Energy Division Education Program:

Must take at least 3 subjects among "Resources Development Systems", "Applied Mathematics in Civil & Earth Resources Engineering", "Computational Mechanics and Simulation", "Environmental Geosphere Engineering", "Modeling of Geology", "Applied Elasticity for Rock Mechanics", "Fundamental Theories in Geophysical Exploration", "Design of Underground Structures", "Lectureon Exploration Geophysics", "Measurement in the Earth's Crust Environment", "Time Series Analysis", and "Energy System Management".

"International Course in Urban and Regional Development" Program:

Must complete more than 4credits from English-lectured classes (subjects with \odot) provided on the Subject Listexcept for one subject as Core subject above-mentioned (2).Consult with your supervisorand 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.

(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)As for taking "Urban Transport Policy", "Policy for Low-Carbon Society", "Urban Transport Management", "Policy for Low-Carbon Society, Advanced"; "Urban Transport Management, Advanced"; "Capstone Project Practice"; contact **the Low-Carbon Society Unit** prior to registering for the classes.

(9) As for taking "Dialog/Liveable Cities", "Dialog/ Design of Liveable Cities" "Basic Civil Engineering & Health Science II" "Policy for Liveable Cities" "Methodology for Liveable Cities" "Seminar on Liveable Cities A" "Seminar on Liveable Cities B" "Disaster and Health Risk Management" "KANSEI urban spaces" and "Exercise on Project planning"; contact Liveable Cities Unit prior to registering for the classes.

(10) The courses below have also been set in the Department of Urban Management:

- Public Policy Planning/Management Course
- International Project Management Course (Infrastructure/Energy Development)
- Urban Water/Geo Environment Management Course
- Seismic Design/Management Course
- Urban Transportation Policy Course (Urban Planning, Urban Transport Policy)
- Earth Resources and Energy Engineer/Researcher Training Course
- International Course on Approaches for Disaster Resilience

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.

Subject				f hours per eek	Credit	Sub	ject cate	gory
code	Subject	Instructor	1 st semester	2nd semester		Core	Major	ORT
10F201	Information Technology for Urban Society (都市社会情報論)	Related instructors	2		2	O Compulsory		
10F251	Exercise on Project Planning (自主企画プロジェクト)	Related instructors	2	2	2	OElective Compulsory		
10F253	Capstone Project (キャップストーンプロジェクト)	Related instructors	2	2	2	OElective Compulsory		
10F257	Seminar on Urban Management A (都市社会工学セミナーA)	Related instructors	(4)	(4)	4			O 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	Inte	nsive	4			0
10U210	Practice in Urban Management (都市社会工学実習)	Related instructors		2	2			0
10F003	Continuum Mechanics (連続体力学)	Sugiura, Yagi	2		2		0	
10F067	◎Structural Stability(構造安定論)	Shirato, Sugiura		2	2		0	
10F068	◎Material and Structural System & Management (材料・構造マネジメント論)	Miyagawa, Kawano, Hattori, Yamamoto	2		2		0	
10F261	◎Earthquake Engineering/Lifeline Engineering(地震・ライフライン工学)	Kiyono, Igarashi	2		2		0	
10W001	◎Infrastructural Structure Engineering (社会基盤構造工学)	Related instructors		2	2		0	
10F009	◎Structural Design (構造デザイン)	Sugiura, Yagi, Takahashi, Kubota	2		2		0	
10F010	◎Bridge Engineering (橋梁工学)	Shirato, Sugiura, Yagi		2	2		0	
10A019	Concrete Structural Engineering (コンクリート構造工学)	Miyagawa, Yamamoto, Takaya, Yamanaka (Part-		2	2		0	
10F227	Structural Dynamics (構造ダイナミクス)	Igarashi, Furukawa	2		2		0	
10F263	Seismic Simulation Exercise (サイスミックシミュレーション)	S.Sawada, Takahashi		2	2		0	
10F415	Ecomaterial and Environment-friendly Structures (環境材料設計学)	Kawano, Hattori, Ishikawa	2		2		0	
10F089	Infrastructure Safety Engineering (社会基盤安全工学)	Sugiyama, Ohshima		2	2		0	
10F075	Hydrodynamics and Turbulence Mechanics (水理乱流力学)	Toda, Sanjo, Okamoto	2		2		0	
10A216	◎OHydrology(水文学)	Tachikawa		2	2		0	
10F019	River Management (河川マネジメント工学)	Hosoda, Kishida	2		2		0	
10A040	Sediment Hydraulics (流砂水理学)	H.Gotoh, E.Harada	2		2		0	
10F464	Hydrologic Design and Management (水工計画学)	Tachikawa	2		2		0	
10F245	◎OOpen Channel Hydraulics (開水路の水理学)	Hosoda, Onda	2		2		0	
10F462	◎□Coastal Wave Dynamics (海岸波動論)	H.Gotoh, E.Harada, Khayyer	2		2		0	
10F267	□Hydro-meteorological Disaster Prevention (水文気象防災学)	Takara, Nakakita, Kido (DPRI)	2		2		0	
10A222	□Water Resources Systems (水資源システム論)	Hori, K.Tanaka (DPRI)	2		2		0	
10F077	□River Basin Management of Flood and Sediment (流域治水砂防学)	H.Nakagawa, Sumi, Kawaike, Takebayashi	2		2		0	
10F269	OCoastal and Urban Water Disasters Engineering (沿岸·都市防災工学)	Mase, Igarashi, Yoneyama, Mori (DPRI)	2		2		0	
10F466	ODisaster Mitigation for Sustainable Basin Environment (流域環境防災学)	Fujita, Hiraishi, Takemon, Tsutsumi, Baba (DPRI)	2		2		0	
10F011	◎Computational Fluid Dynamics (数值流体力学)	Ushijima, H.Goto, Khayyer		2	2		0	

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IOF053 Resources Engineering (応用数理解析) Isukada, Saito 2 2 10K008 © Computational Mechanics and Simulation (計算力学及びシミュレーション) Murata, Furukawa, Flores, Liang 2 2 10A405 Environmental Geosphere Engineering (地殻環境工学) K. Koike 2 2	0
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10A405 (地殼環境工学) K. Kolke 2 2	0
10F069 ◎●Modelling of Geology(数理地質学) Y.Yamada 2 2	0
	0
10F071Applied Elasticity for Rock Mechanics (応用弾性学)Murata22	0
10F073 Fundamental Theories in Geophysical Exploration (物理探査の基礎数理) Mikada, T.Gotoh 2 2	0
10F087 Design of Underground Structures (地下空間設計) Asakura, Ishida 2 2	0
10A420O CLecture on Exploration Geophysics (探查工学特論)Mikada, T.Gotoh22	0
10F085◎Measurement in The Earth's Crust Environment (地殼環境計測)T.Asakura, Ishida Yamamoto (Part-time)22	0
10F039 □Time Series Analysis (時系列解析) Tsukada 2 2	0
10F086©□Energy System Management (エネルギー基礎マネジメント工学)K. Koike22	0

			1	1	1	1	1
10F081	Infrastructure Creation Engineering (社会基盤工学創生)	Related instructors	2		2	0	
10X311	◎ Urban Infrastructure Management (都市基盤マネジメント論)	Ohtsu and related instructors	2		2	 0	
10F112	©Global Survivability Studies (グローバル生 存学)	Takara(DPRI), Yoshikawa and related instructors	2		2	0	
693291	★Emergency Management Systems (危機管理特論)	Hayashi, Maki,Suzuki (DPRI)	2		2	0	
10Z001	Urban Transport Policy (都市交通政策フロントランナー講座)	D. Nakagawa, Matsunaka, Oba, Matsubara and related	Intensive		1		
10Z002	Policy for Low-Carbon Society (低炭素都市圏政策論)	E. Taniguchi, D. Nakagawa, Matsubara and related	Intensive		1		
10Z003	(国政宗部市国政家編) Urban Transport Management (都市交通政策マネジメント)	D. Nakagawa, S. Fujii, Uno, Matsubara and related	Intensive		1		
10Z004	○Policy for Low-Carbon Soceiety, Advanced (低炭素都市圏政策特論)	Related instructors	Intensive	Intensive	1		
10Z005	OUrban Transport Management, Advanced	D. Nakagawa, S. Fujii, Matsunaka, Oba, Matsubara		Intensive	1		
10Z006	OCapstone Project Practice	E. Taniguchi, D. Nakagawa,		Intensive	1		
	(キャップストーンプロジェクト演習)	Matsunaka, Oba, Matsubara		Intensive			
10Z063	Dialog/ Liveable Cities (対話・安寧の都市論)	Related instructors	2		2	 	
10Z064	Dialog/ Design of Liveable Cities (対話・安寧の都市デザイン)	Related instructors		2	2		
10Z065	Basic Civil Engineering & Health Science I (都市健康科学基礎論 I)	Related instructors	2		2		
10Z066	Basic Civil Engineering & Health Science II (都市健康科学基礎論Ⅱ)	Related instructors		2	2		
10Z067	Policy for Liveable Cities (安寧の都市政策)	Related instructors	2		2		
10Z068	Methodology for Liveable Cities (健康都市政策論)	Related instructors		2	2		
10Z058	Seminar on Liveable Cities A (安寧の都市セミナーA)	Related instructors	Intensive		1		
10Z059	Seminar on Liveable Cities B (安寧の都市セミナーB)	Related instructors		Intensive	1		
10Z069	Disaster and Health Risk Management (災害健康危機管理論)	Related instructors	2		2		
10Z070	KANSEI urban spaces (感性都市空間論)	Related instructors		2	2		
10Z062	Exercise on Project Planning (実践プロジェクト)	Related instructors	(2)	(2)	2		
10F383	◎Engineering Seminar for Disaster Resilience in ASEAN countries 1 (強靭な国づくりのためのエンシ゛ニアリンク・セミナー1)	Ohtsu and related instructors	Intensiv e		2		
10F384	◎Engineering Seminar for Disaster Resilience in ASEAN countries 2 (強靭な国づくりのためのエンシ゛ニアリングセミナー2)	Tachikawa and related instructors	Intensiv e		2		
10F385	 ②Engineering Seminar for Disaster Resilience in ASEAN countries 3 (強靱な国づくりのためのエンジュアリングセミナー3) 	Hori, Shimizu, Hatayama, Mori, Takebayashi, Yokomatsu	Intensiv e		2		
10F382	◎Disaster and Health Risk Management for Liveable Cities (安寧の都市のための災害及び健康リスクマネジメ	Kiyono and related instructors	Intensiv e		2		
	Master's Thesis (研究論文(修士))						O Compulsor
□Biennial ©∎Held o	Class (Held this year) (Held next year) every year, but English and Japanese alternately every other every year, but Japanese and English alternately every other	-					

♥●Held every year, but Japanese and English alternately every other year
 ※Subject of other Department

★ Subject of other Graduate School

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

2. Purpose of the model curriculum

Today, contribution to the sophistication of management technology for international social infrastructure and satisfaction of the demand of whole society including technology induction to Asian countries of rapid urbanization are required. In this condition, 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.

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

3. Model curriculum

(Note)

Students are required to take 10 or more credits from English subjects provided on "Subject List". Consult with your supervisor and decide which subjects to take. Subjects to be accredited as completion requirements are English subjects only (including 'Exercise on Project Planning' and 'Seminar on Infrastructure Engineering A/B').
 6 courses 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 courses, please refer to the documents distributed at the guidance.

Master's Program of the Department of Urban Management Model Curriculum (International Course 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 Course 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 wide range of English subjects related to Urban Management.

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

3. Model curriculum

(Note)

1) Students are required to take 4 or more credits from English subjects on "Subject List". Consult with your supervisor and decide which subjects to take. Subjects to be accredited as completion requirements are English subjects only (including 'Information Technology for Urban Society' 'Exercise on Project Planning' 'Capstone Project' 'Seminar on Urban Management A/B').

2) 7 courses 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 courses, please refer to the documents distributed at guidance.

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

1. Targeted students

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

2. Purpose of the model curriculum

Today, contribution to the sophistication of management technology for international social infrastructure and satisfaction of the demand of whole society including technology induction to Asian countries of rapid urbanization are required. In this condition, 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 P	rogram)	
Year	Subjects (Core, Major, Minor, Others)	ORT subjects	Credits
M1 1st term	 Exercise on Project Planning (Required) 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 (Required/ 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 (Required) 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 (Required)	10 credits
M2 1st term		Seminar on Infrastructure Engineering A/B (Required)	
M2 2nd term		Seminar on Infrastructure Engineering A/B (Required) Master's Thesis (Required)	8 credits 0 credits
Credits	22 or more credits	8 or more subjects	30 or more credits
	5yr Course (Doctoral Program) 3yr Co	urse (Doctoral Program)	
Year	Subjects (Core, Major, Minor, Others)	ORT subjects	Credits
D1 1st term	Integrated Seminar on Infrastructure Engineering A (Required) 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 (Required) Practice in Advanced Infrastructure Engineering	ORT on Infrastructure Engineering	4 credits
D2 1 st Term		ORT on Infrastructure Engineering	
D2 2 nd Term		ORT on Infrastructure Engineering	
D3 1 st Term		ORT on Infrastructure Engineering	
D3 2 nd Term		ORT on Infrastructure Engineering Doctoral Thesis (Required)	4 credits 0 credits

	Total	6 or more credits	4 or more credits	10 or more credits
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(Note)

1) 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. Subjects to be accredited as completion requirements are English subjects only (including 'Exercise on Project Planning' and 'Seminar on Infrastructure Engineering A/B').

2) 6 courses 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 courses, please refer to the documents distributed at guidance.

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

1. Targeted students

Students who belong to Advanced Engineering Course Program (5yr Course) and take International Course 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 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	InformationTechnologyforUrbanSociety(Required)Exercise on Project Planning (Required-elective)Capstone Project (Required-elective)1-6 subjects from English subject group on"Subject List" of the Department of UrbanManagement,0-5 subjects from English CommonSubjects of Graduate School of Engineering	Seminar on Urban Management A/B (Required/ 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 (Required-elective) Capstone Project (Required-elective) 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 (Required)	10 credits		
M2 1st term		Seminar on Urban Management A/B (Required)			
M2 2nd term		Seminar on Urban Management A/B (Required) Master's Thesis (Required)	8 credits 0 credits		
Credits	22 or more credits	8 or more credits	30 or more credits		
	5yr Course (Doctoral Program), 3yr Co	ourse (Doctoral Program)			
Year	Subjects (Core, Major, Minor, Others)	ORT subjects	Credits		
D1 1st term	Integrated Seminar on Urban Management A (Required) 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 (Required) 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	4 credits		
		Doctoral Thesis (Required)	0 credits		

Total	6 or more credits	4 or more credits	10 or more credits

(Note)

1) Students are required to take 4 or more credits from English subjects on "Subject List". Consult with your supervisor and decide which subjects to take. Subjects to be accredited as completion requirements are English subjects only (including 'Information Technology for Urban Society' 'Exercise on Project Planning' 'Capstone Project' 'Seminar on Urban Management A/B').

2) 7 courses 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 courses, please refer to the documents distributed at guidance.

Course Groups of the Department of Civil and Earth Resources Engineering

Students can complete any of the 6 courses below besides their normal completion requirements. You don't have to apply to the following courses in the normal subject registration. However, if you satisfy the completion requirements for any one or several courses 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.

[Course 1] Structural Design Engineer/Researcher Training Course

(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, Infrastructural Structure Engineering

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 Simulation Exercise, Ecomaterial and Environment-friendly Structures, Infrastructure Safety Engineering, Computational Fluid Dynamics, Applied Mathematics in Civil & Earth Resources Engineering, Computational Mechanics and Simulation

[Course 2] Hydraulic/Hydrologic Design Engineer/Researcher Training Course

(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 Prediction, 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-meteorological Disaster Prevention, Water Resources Systems, Disaster Mitigation for Sustainable Basin Environment, 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

[Course 3] Geo Design Engineer/Researcher Training Course

(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 aim 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

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

: 12 or more credits in total

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

[Course 4] Urban Design Engineer/Researcher Training Course

(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

Governance for Regional and Transportation Planning, Public Finance, Urban Environmental Policy, City Logistics, Advanced Transport Logistics, Public Psychology for Human Behaviour, Intelligent Transportation Systems, Theory & Practice of Environmental Design Research, Risk Management,

Disaster Risk Management, Disaster Information, Urban Infrastructure Management

[Course 5] Earth Resources and Energy Engineer/Researcher Training Course

(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 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 posses 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, Computational Mechanics and Simulation, Environmental Geosphere Engineering, Modeling of Geology, Applied Elasticity for Rock Mechanics, Fundamental Theories in Geophysical Exploration, Design of Underground Structures, Frontiers in Energy Resources, Lecture on Exploration Geophysics, Measurement in The Earth's Crust Environment, Time Series Analysis, Energy System Management, Infrastructure Safety Engineering

[Course 6] International Course on Approaches for Disaster Resilience

(1) Content :

The objective of this course is to construct new concepts for building disaster-resilient countries and train students who lead them. This course aims to educate the personnel who acquire not only the technologies necessary in engineering management, but also an interdisciplinary knowledge from a socioeconomic point of view for infrastructure developments, especially for disaster mitigation, recovery, and reconstruction.

(2) Required subject groups

Compulsory subjects: Engineering Seminar on Building Resilient Nation 1, Engineering Seminar on Building Resilient Nation 2, Engineering Seminar on Building Resilient Nation 3, Disaster and Health Risk Management for Liveable City

: 8 credits in total

Elective compulsory subjects (3 or more subjects from English-lectured classes with double circle (⁽⁽⁾) provided on the Subject List (Master's Program of Department of Urban Management as well as Department of Civil and Earth Resources Engineering), plus at least one subject of the following; Disaster Prevention & Recovery Management, Policy Evaluation, which are offered by Graduate School of Management .)

: 8 or more credits in total

: 16 minimum total credits for compulsory and elective compulsory subjects.

** An explanatory meeting will be held for those who will take this course.

[Course 1] Public Policy Planning/Management Course

(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.)

City Logistics, Public Psychology for Human Behaviour, Intelligent Transportation Systems, Remote Sensing and Geographic Information System, Civic and Landscape Design, Disaster Risk Management : 4 or more credits in total

[Course 2] International Project Management Course (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, Management of Geotechnical Infrastructures, Resources Development Systems, Public Finance

: 8 credits in total

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

Construction of Geotechnical Infrastructures, Fundamental Geofront Engineering, Frontiers in Energy Resources, Urban Infrastructure Management, Risk Management, Modeling of Geology, Energy System Management, Environmental Geosphere Engineering

: 6 or more credits in total

[Course 3] Urban Water/Geo Environment Management Course

(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 Prediction, Hydro-meteorological 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, Management of Geotechnical Infrastructures, Geo-Risk Engineering, Disaster Prevention through Geotechnics, Urban Environmental Policy

: 4 or more credits in total

[Course 4] Seismic Design/Management Course

(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: Required subjects: Structural Dynamics, Earthquake Engineering/Lifeline Engineering, Seismic Simulation Exercise, Ecomaterial and Environment-friendly Structures, 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, Management of Geotechnical Infrastructures, Construction of Geotechnical Infrastructures, Geo-Risk Management, Disaster Risk Management, Disaster Information, Emergency Management Systems

: 4 or more credits in total

[Course 5] Urban Transportation Policy Course (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, City Logistics, Public Psychology for Human Behavior

: 6 credits in total

Elective compulsory subjects (4 or more credits are required to obtain through the following subjects)

Governance for Regional and Transportation Planning, Intelligent Transportation Systems, Advanced Transport Logistics, Urban Transport Policy (Unit for Low-Carbon Society), Policy for Low-Carbon Society (Unit for Low-Carbon Society), Urban Transport Management (Unit for Low-Carbon Society)

(Note: Only 1 credit is granted for 1 subject for the lectures in the Unit for Low-Carbon Society.) : 4 or more credits in total

[Course 6] Earth Resources and Energy Engineer/Researcher Training Course

(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 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 posses 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, Computational Mechanics and Simulation, Environmental Geosphere Engineering, Modeling of Geology, Applied Elasticity for Rock Mechanics, Fundamental Theories in Geophysical Exploration, Design of Underground Structures, Frontiers in Energy Resources, Lecture on Exploration Geophysics, Measurement in The Earth's Crust Environment, Time Series Analysis, Energy System Management, Infrastructure Safety Engineering

[Course 7] International Course on Approaches for Disaster Resilience

(1) Content :

The objective of this course is to construct new concepts for building disaster-resilient countries and train students who lead them. This course aims to educate the personnel who acquire not only the technologies necessary in engineering management, but also an interdisciplinary knowledge from a socioeconomic point of view for infrastructure developments, especially for disaster mitigation, recovery, and reconstruction.

- (2) Required subject groups
 - Compulsory subjects: Engineering Seminar on Building Resilient Nation 1, Engineering Seminar on Building Resilient Nation 2, Engineering Seminar on Building Resilient Nation 3, Disaster and Health Risk Management for Liveable City

: 8 credits in total

Elective compulsory subjects (3 or more subjects from English-lectured classes with double circle (◎) provided on the Subject List (Master's Program of Department of Urban Management as well as Department of Civil and Earth Resources Engineering), plus at least one subject of the following; Disaster Prevention & Recovery Management, Policy Evaluation, which are offered by Graduate School of Management .)

: 8 or more credits in total

: 16 minimum total credits for compulsory and elective compulsory subjects. *An explanatory meeting will be held for those who will take this course.

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 <u>more than 3 points in</u> <u>total for a year, more than 10 points in total for two years</u>. 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 Oral presentation in the annual meeting in the Society of Civil Engineers			
$1 \sim 5$ point				
	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).			
$5 \sim 10$ point	: Publication and/or acceptance of journal papers (e.g., for Journal of Society			
-	of Civil Engineers, ASCE Journal, etc.)			
	(Number of points is determined by your supervisor.)			
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.			

Independent Planning Project

(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. Tada-nori Goto (Department of Civil and Earth Resources Engineering) Email: goto.tadanori.8a@kyoto-u.ac.jp, phone: 075-383-3195
Assoc. Prof. Yusuke Kanda (Department Urban Management) Email: kanda@trans.kuciv.kyoto-u.ac.jp, phone: 075-383-7494

3. Main Target

-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. Operation means

- (1) Course introduction : April 10 (Thu) 13:00- Katsura C1-173
- (2) Submission of proposal, Due date: June 5 (Thu), Note: Use the 'proposal format' in the KULASIS.

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

FYI, the followings ara the principal issues to be written in the proposal.

- Project Title (Japanese and English)
- Name, Research Room, 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), result expectations, publication planning.

After the completion of your proposal, receive a signature or a seal from your advisor and submit your proposal to the academic affairs office in C-cluster with conventional paper-based. <u>Also you are requested to submit</u> the proposal with word file to the following email address:

jisyukikaku@adm.t.kyoto-u.ac.jp

Note: The subject of the email shall be IPP, Name, Student # in order.

(3) Progress report Due date : October 9 (Thu)

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 to the office in C-cluster.

(4) Submission of the final report Due date : January 8 (Thu) 2015

Create a final report on your results and submit your proposal to the academic affairs office in C-cluster with conventional paper-based. <u>Also you are requested to submit the report with word file to the email address</u>: *jisyukikaku@adm.t.kyoto-u.ac.jp*. The subject of the email shall be IPP, Name, Student # in order.

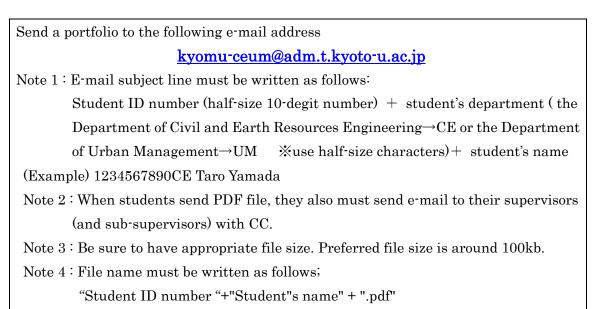
Note, your report should be within 10 pages in JSCE format (refer to the url: http://committees.jsce.or.jp/jjsce/english/formats/j_post).

- 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 in late January 2015.

How to Submit a Portfolio (for new master's students in the Academic Year 2014)

- (1) Go to a website of your department and download a copy of the portfolio form (MS-Word).→[Download]
- (2) Fill out the form in designated pages (see below *)and then print it.
- (3) Students in the Department of Civil and Earth Resources Engineering: <u>Obtain supervisor signature</u> in the signature space of printed portfolio. Students in the Department of Urban Management: <u>Obtain supervisor and sub-supervisor signatures</u> in the signature space of printed portfolio.
- (4) Scan pertinent pages of portfolio and make <u>one</u> PDF file, then <u>send it as e-mail</u> <u>attachment</u> to the address below. <u>When students complete the 4th semester in the</u> <u>2nd Year, they must submit original portfolio to C Cluster Office.</u>



(Example) 1234567890CE Taro Yamada.pdf

(5) <u>Keep your original copy of printed portfolio in a safe place</u>. (Students must submit original portfolio after the end of 4th semester in the 2nd Year.)

*<u>Below are pages students must fill in for master's portfolio</u>

 \cdot at school entry

Fill in page 1-3 of Academic Portfolio (for Master Course) Deadline: April 14th, 2014 (must send filled form in a PDF file.)

- after the end of the 1th semester in the 1th Year
 Fill in page 4-5
 Schedule Deadline: late September in 2014 (must send filled form in a PDF file.)
- after the end of the 2nd semester in the 1th Year
 Fill in page 6-7
 Schedule Deadline: late April in 2015 (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 2015 (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 2016 (must submit original copy of all pages 1-12)

[2014年4月提出用] 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。

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) 2014年4月入学者用

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

			2014 年 4月 入学
			Entered Apr. 2013
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	主指導教員	副指導教員(1)*	副指導教員(2)*
Laboratory	Supervisor	Sub-supervisor 1	Sub-supervisor 2
0000分野	0000		
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		

* 社会基盤工学専攻所属の修士課程学生は記入不要。 No need to fill in for master course students at Dept. of Civil and Earth Resources Eng.

Current address

現	(例) 00市00町000	TEL(固定, fixed)	000-000-0000
住		TEL(携带, cp)	000-000-0000
所		E-mail	(全学メールアドレスを記入)

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

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

Hometown address

帰	(例) 00市00町000	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)

利日豆八百十二十二	単位数 Credits			
科目区分 Subject category	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	10	単位以上	単位以上	
Minor 科目	8	単位以上	単位以上	
演習・ORT・インターンシップ科目		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	取得予定年月	実際の取得年月	備考
Category	Planned date	Actual date	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。(〇〇工学論文集など)

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)**TOEIC**800点以上を獲得。

<u>氏名(Name): 山田 太郎</u>

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	コア科目	Major 科目	Minor 科目	演習 ORT 等	その他科目		
Year/Ser	Year/Semester					Others		
1年	1	2 単位	24 単位	単位	8 単位	単位		
1 st 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		
2 nd year	4	単位	単位	単位	単位	単位		
小計S	ubtotal	2 単位	28 単位	単位	8 単位	単位		
研究論文(修士)			必修 Compulsory					
Master diss	sertation							
3年	5	単位	単位	単位	単位	単位		
3 rd 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		
4 th 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		
5 th year	10	単位	単位	単位	単位	単位		
小計S	ubtotal	単位	単位	単位	単位	単位		
合 計	Total	単位 単位 単位				単位		
研究論文	宪論文(博士)							
Doctoral dis	sertation							

特別実験及び演習(修士論文) Master dissertation

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

インターシップ・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 supervisors (to be signed by your supervisors)

主指導教員 Supervisor	副指導教員 Sub-supervisor 1	副指導教員 Sub-supervisor 2
0000		

[2014年9月末提出用] 指導教員の署名を取得後、4-5ページをまとめて PDF にして指定アドレスに電子提出。原本は大切に保管すること。

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

取得単位数 Credits acquired

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

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<u>氏名(Name): 山田 太郎</u>

特別実験及び演	寅習(修士論文)Dissertation study	
研究題目 Title		
研究経過		
Progress		
U		
目標到達度と		
今後の課題		
Goals and		
Challenges		
社会基盤工学		今期の取
セミナーA,B /		得ポイント
都市社会工学		Points
セミナーA,B		acquired in
活動内容と		this
獲得ポイント		semester
Points and		
activities for		
Seminar on		積算取得
Infrastructure		ポイント
Eng. A,B /		Total
Urban		points
Management		
A, B		

特別実驗及7%演習(修十論文) Dissertations

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

主指導教員 Supervisor	副指導教員 Sub-supervisor 1	副指導教員 Sub-supervisor 2

[2015年4月提出用] 指導教員の署名を取得後、6-7ページをまとめて PDF にして指定アドレスに電子提出。原本は大切に保管 すること。

氏名(Name): 山田 太郎

学習の状況

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

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

取得単位数 Credits acquired

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

[2015年4月提出用] 指導教員の署名を取得後、6-7ページをまとめて PDF にして指定アドレスに電子提出。原本は大切に保管 すること。

氏名(Name): 山田 太郎

特別実験及び演	寅習(修士論文)Dissertation study	
研究題目 Title		
研究経過		
Progress		
8		
目標到達度と		
今後の課題		
Goals and		
Challenges		
社会基盤工学		今期の取
セミナーA,B /		得ポイント
都市社会工学		Points
セミナーA,B		acquired in
活動内容と		this
獲得ポイント		semester
Points and		
activities for		
Seminar on		積算取得
Infrastructure		ポイント
Eng. A,B /		Total
Urban		points
Management		
A, B		

特別実験及び演習(修士論文) Dissertation study

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

主指導教員 Supervisor	副指導教員 Sub-supervisor 1	副指導教員 Sub-supervisor 2

[2015年9月末提出用] 指導教員の署名を取得後、8-9ページをまとめて PDF にして指定アドレスに電子提出。原本は大切に保管すること。

<u>氏名(Name): 山田 太郎</u>

学習の状況

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

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

取得単位数 Credits acquired

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

[2015年9月末提出用] 指導教員の署名を取得後、8-9ページをまとめて PDF にして指定アドレスに電子提出。原本は大切に保管すること。

氏名(Name): 山田 太郎

特別実験及び演習(修士論文) Dissertation study

研究題目 Title	A L (修工冊文) Dissertation study	
研究経過		
Progress		
目標到達度と		
今後の課題		
Goals and		
Challenges	1	
社会基盤工学		今期の取
セミナーA,B /		得ポイント
都市社会工学		Points
セミナーA,B		acquired in
活動内容と		this
獲得ポイント		semester
Points and		
activities for		往答而泪
Seminar on		積 算 取 得 ポ イント
Infrastructure		ホインド Total
Eng. A,B /		points
Urban		1
Management		
A, B		

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

主指導教員 Supervisor	副指導教員 Sub-supervisor 1	副指導教員 Sub-supervisor 2

[2016年1月末提出用]指導教員の署名を取得後、1-12ページ全ての原本をホチキス止めして C クラスター事務室教務第一掛に提出。

<u>氏名(Name): 山田 太郎</u>

学習の状況

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

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

取得単位数 Credits acquired

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

[2016年1月末提出用]指導教員の署名を取得後、1-12ページ全ての原本をホチキス止めして C クラスター事務室教務第一掛に提出。

氏名(Name): 山田 太郎

特別実験及び演習(修士論文) Dissertation study

	电(修工确文) Dissertation study	
研究題目Title		
研究経過		
Progress		
Tigress		
目標到達度と		
今後の課題		
Goals and		
Challenges		
社会基盤工学		今期の取
セミナーA,B /		得ポイント
都市社会工学		Points
セミナーA,B		acquired in
活動内容と		this
獲得ポイント		semester
Points and		
activities for		话体氏组
Seminar on		積 算 取 得 ポ イント
Infrastructure		ホイント Total
Eng. A,B /		points
Urban		F
Management		
A, B		

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

主指導教員 Supervisor	副指導教員 Sub-supervisor 1	副指導教員 Sub-supervisor 2

[2016年1月末提出用]指導教員の署名を取得後、1-12ページ全ての原本をホチキス止めして C クラスター事務室教務第一掛に提出。

氏名(Name): 山田 太郎

履修コースの修了の申請

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

履修コース名 Course name:

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

履修コース名 Course name:

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