Department of Risk Engineering

Student Achievement Assessment System

Contents Page

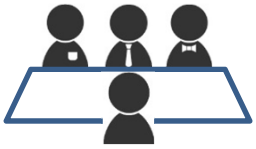
1 Overview of the Student Achievement Assessment System

Features of the Student Achievement Assessment System

Since the 2008 academic year, "Student Achievement Assessment" for the educational objectives has been conducted in the Department of Risk Engineering. The Student Achievement Assessment System is a system for evaluating the educational process so that students simultaneously meet the educational objectives of the department and the general educational objectives of the Graduate School (see the 6 items in the attached sheet). As described below, it is extremely useful for checking the level of everyone's study progress. Therefore, this system is utilized for having a more meaningful experience in the Graduate School.

<Feature 1> Achievement Level Evaluation Committee (meets twice a year)

Outline of Committee → P7



- Guidance from multiple professors
- By creating such materials as Achievement Level Evaluation Sheets, an objective look back at the state of regular study can be made, to maintain a course for achieving goals.
- Feedback from the evaluations can provide meticulous guidance!

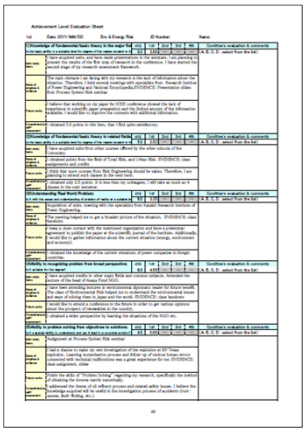
<Feature 2> Student portfolio evidence file (submitted monthly)

Sample of student portfolio → P15

- Each month, a summary of the student's state of academic study, called the student portfolio, is created and stored.
- The Achievement Level Evaluation Sheet that is submitted to the Achievement Level Evaluation Committee is created based on the student portfolio and when necessary is saved as evidence.
- Evidence of Study: Materials that are created during the study program. This includes, for example, study notes created during the course of special research, group work, internships, etc, research reports for laboratory seminars, and manuscripts of papers prepared for academic societies, research conferences. The student can be requested to submit these materials to provide support for the "Achievement Level Evaluation Sheet (Self-Assessment)" described below, so all of them should be saved.

<Feature 3> Creation of an "Achievement Level Evaluation Sheet (Self-Assessment)"

Sample of Evaluation Sheet → P21

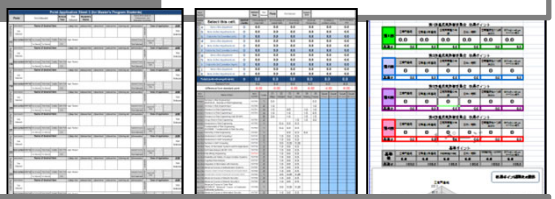


- By creating Achievement Level Evaluation Sheets (Self-Assessment), students can confirm the state of progress toward their own goals before the meeting of Academic Level Evaluation Committee.
- Students can look at themselves and take corrective actions for 8 items: 1) knowledge of fundamental/basic theory in the major field, 2) knowledge of fundamental/basic theory in related fields, 3) understanding of real world problem, 4) ability to approach problems from a broad perspective, 5) ability to solve problems, from recognizing problems to finding solutions, 6) presentation and communication skills, 7) ability to contribute to international professional societies in the major field, and 8) scientific research results.
- This becomes practices that encourages students to be more aware of the state of their studies, and enables them to develop the self-promoting skills that they will need in the workforce.

Samples of Each Field and Program: → P23, 25, 27, 29, 31

<Feature 4> Study check based on points (only for students in the Master's Program)

How to enter information → P33



- The points set for each course can be added by acquiring units.
- The designated points are multiplied by 1.2 for grades of As, by 1.0 for Bs, and 0.8 for Cs.
- By taking courses so that a good balance of points can be acquired, students can avoid taking only courses that they tend to have an interest in.

Point Table for courses → P39
Point Application Sheet, Course Credit Points Sheet, and sample graphs of each field→P47, 50, 53, 56

<Basic Concepts of the Student Achievement Assessment System>

Flow of the Student Achievement Assessment System

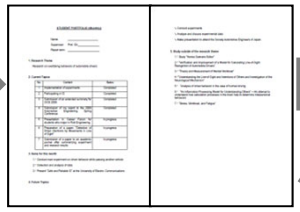
Student Portfolio Evidence

All students | Submitted monthly | Upload to Moodle | P15

Student

Laboratory seminar
Research report
Special research
Group work
Internship
Papers written for societies, conferences, etc.

Creation



Creation of student portfolio

Submission of electronic files

Student

Upload files on Moodle

※ Can be read only by instructors of Risk Engineering, TAs, and GP staff

All materials saved by the students themselves

Student

Saved portfolio files (saved by the students themselves)

1) Every month, students create a student portfolio on electronic media and submit their file to Manaba. (Check with your TA about how to submit the files)
2) The submission of evidence is voluntary. However, everyone should be prepared to submit evidence when an instructor asks you to do so.

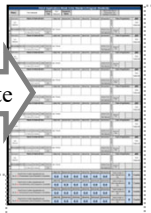
Point Application Sheets

Candidates in the Master's Program | Every semester | To the Chair of the Achievement Level Evaluation Committee | P33

Student

Graduate Student Handbook

Create



1) Choose courses in other majors while referring to the Graduate Student Handbook.

2) Fill in the application in the file "Self-assessment.xls." See 35 for details on how to enter information. If you have any questions, please consult with your supervising TA.

Application → Chair

Application → Director

Approval → Student

3) Use e-mail to apply to the Chair of the Achievement Level Evaluation Committee.

4) Confirmation by the Director and the supervising instructors for GP.

5) Save only the completely processed files.

Meetings of the Achievement Level Evaluation Committee (twice a year)

All students | December and March (February for students completing the program) | To the Chair of the Achievement Level Evaluation Committee | P7

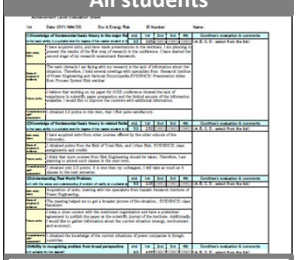
Chair

E-mail to inform date and time of meetings

1) The Chair of the Achievement Level Evaluation Committee sets the date and time for each student to meet with the Achievement Level Evaluation Committee, and e-mails this information to each student and to the GP Core Addresses.

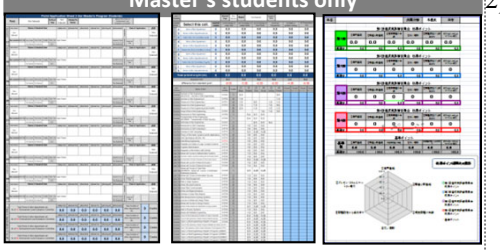
Student

All students



Sample of the Sheet →P21

Master's students only



Point Application Sheets, Course Credit Points Sheet, and sample graphs→P47

2) Students create an Achievement Level Evaluation Sheet (self-evaluation) before the meeting of the evaluation committee. Master's students also create a point chart. In the case of courses completed in another faculty, students should not forget to enter their grades on the approved processed sheet. If you have any questions, please consult with your supervising TA.

E-mail

Self-assessment.xls

Saved portfolio files

Hard copies (one for each member of the Committee)

3) After creating these materials, students should submit an electronic file and hard copies (one for each member of the Committee) to the Chair of the Achievement Level Evaluation Committee beforehand.

Student

4) Holding a meeting of the Achievement Level Evaluation Committee
- Results of daily studies can impress Committee members!
- Students can directly ask Committee members their questions.
- The state of study can be reviewed objectively!

Chair

5) The Chair of the Achievement Level Evaluation Committee summarizes the evaluation results to provide feedback about these results to the students. The Self-assessment.xls file with comments attached is returned to the student.

Schedule for Achievement Level Evaluation Committee meetings up to completion of the Program

You will be notified of this academic year schedule as soon as it is finalized.

	Master's Program Students		Common	Doctoral Program Students	
	Period of ALEC meetings	Application period for Point Application Sheet	Submission	Period of ALEC meetings	
	Details of meetings	Details for application		Details of meetings	
April		(Spring A Module) Early to middle of April			April
May		(Spring B Module)			May
June		Middle to late of May			June
July		(Spring C Module) Llate of June			July
August					August
September					September
October	First ALEC meeting (about a month period starting October 1)	(Autumn A Module) Early October		First ALEC meeting (about a month period starting October 1)	October
November		(Autumn B Module) Early November			November
December					December
January		(Autumn C Module) Early January			January
February	Second ALEC meeting (from end of February to end of March)			Second ALEC meeting (from end of February to end of March)	February
March					March
April		(Spring A Module) Early to middle of April			April
May		(Spring B Module)			May
June		Middle to late of May			June
July		(Spring C Module) Llate of June			July
August					August
September					September
October	Third ALEC meeting (about a month period starting October 1)	(Autumn A Module) Early October		Third ALEC meeting (about a month period starting October 1)	October
November		(Autumn B Module) Early November			November
December					December
January	Fourth ALEC meeting (to be held between late January and early February)	(Autumn C Module) Early January			January
February					February
March				Fourth ALEC meeting (from end of February to end of March)	March
					April
					May
					June
					July
					August
					September
				Fifth ALEC meeting (about two month period starting October 1)	October
					November
					December
				Sixth ALEC meetings (to be held between late January and early February)	January
					February

Students should submit their student Portfolio electronic data to Moodle by themselves the 10th of each month (files for August/September and December/January may be submitted together)

2 Outline of Achievement Level Evaluation Committee

Outline of Achievement Level Evaluation Committee (for Master's Program)

1. Notification about the Committee Meeting Period — Chairperson of the Committee

1) The Chairperson shall decide the date and time of the meeting of Achievement Level Evaluation Committee for each student, and shall notify the student and all committee.

(Please also contact the GP Core Mailing List at risk-gp-core@risk.tsukuba.ac.jp)

2. Student Preparation — Students

1) Print out the 'TWINS Personal Academic Results' sheet from the TWINS system.
   - Students who have already completed courses for the Graduate School should list the grade(s) for the course(s), not just whether the course was passed or failed.
2) Enter this information in "Achievement Level Evaluation Materials File" (Excel file) and submit the computer file to the Chairperson beforehand. Please refer to the separate sheet for how to enter information.
3) The materials listed in the following table should be prepared, and submitted beforehand to the Chairperson of the Achievement Level Evaluation Committee.

Name of material	No. of sheets
The 'TWINS Personal Academic Results' sheet	One
Student portfolio evidence file	One form
Achievement level evaluation sheet, and Self-assessment	One set for every member of the committee
Course Credit Points sheet	One set for every member of the committee
Graphs	One set for every member of the committee
Point Application sheet	One set for every member of the committee

3. Before evaluation — Chairperson of the Committee

1) The Chairperson of the Achievement Level Evaluation Committee must check the "Grade" column of the materials submitted by the student to determine whether or not the information has been correctly entered.

4. Meeting of the Achievement Level Evaluation Committee — Committee members & Students

1) In most cases, (the 2 or 3) committee members who are not the chairperson will interview the student. The final Achievement Level Evaluation Committee (just before completion) can be held by e-mail. However, the Record of Achievement Level Evaluation must still be signed.
2) For evaluation standards, please refer to "Achievement Level Evaluation Standards for Self-Evaluations" in your orientation materials.
3) Each evaluation committee member shall write his/her comments in the applicable "Achievement level evaluation sheet (Self-evaluation)". At that time, the names of committee members will be entered under the item name (A-B). Even if the Evaluation is 2 or 3 sheets long, it is acceptable, and the line spacing will be adjusted accordingly.
   Please make sure that everything is printed at the time of printing.
4) The Chairperson of the Achievement Level Evaluation Committee, with agreement from the other committee members, shall fill in the "Instructors' Evaluations" column.
5) The Chairperson of the Achievement Level Evaluation Committee shall create a "Record of Achievement Level Evaluations" and have it signed by each committee member.

5. Submission of Materials — Chairperson of the Committee

(1) After completion of the Achievement Level Evaluation Committee, the Chairperson of the committee shall compile the committee members' comments into an Excel document titled "Achievement Level Evaluation Materials File" and shall submit or save each material according to the following table:

Name of material	Number of copies	Where to submit or save
The 'TWINS Personal Academic Results' sheet	1	Submission box (In instructor mail room)
Achievement level evaluation sheet, and Self-assessment *All evaluations and comments by committee members should already be written	1	Submission box (In instructor mail room)
Course Credit Points sheet	1	Submission box (In instructor mail room)
Graphs	1	Submission box (In instructor mail room)
Point Application sheet (only if there is an application)	1	Submission box (In instructor mail room)
Student Achievement Assessment Record (Signed)	1	Submission box (In instructor mail room)
"Achievement Level Evaluation Materials" *All evaluations and comments by committee members should already be written		Save each Excel file in GP server Each Excel file will be returned to the student, with feedback about the evaluation.

6. For more information

1) For questions about creating materials, please contact the TA in each field, or go to the TA Mailing List at risk-gp-ta@risk.tsukuba.ac.jp

2) For questions about the Achievement Level Evaluation Committee, please consult the GP Core Mailing List at risk-gp-core@risk.tsukuba.ac.jp

Outline of Achievement Level Evaluation Committee (for Doctoral Program)

1. Notification about the Committee Meeting Period — Chairperson of the Committee

1) The Chairperson shall decide the date and time of the meeting of Achievement Level Evaluation Committee for each student, and shall notify the student and all committee.

(Please also contact the GP Core Mailing List at risk-gp-core@risk.tsukuba.ac.jp)

2. Student Preparation — Students

1) Print out the 'TWINS Personal Academic Results' sheet from the TWINS system.
   - Students who have already completed courses for the Graduate School should list the grade(s) for the course(s), not just whether the course was passed or failed.
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   Please make sure that everything is printed.
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Name of material	Number of copies	Where to submit or save
Achievement level evaluation sheet, and Self-assessment *All evaluations and comments by committee members should already be written	1	Submission box (In instructor mail room)
Student Achievement Assessment Record (Signed)	1	Submission box (In instructor mail room)
Achievement Level Evaluation Materials.xls *All evaluations and comments by committee members should already be written		Save each Excel file in GP server
		Each Excel file will be returned to the student, with feedback about the evaluation.

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1) For questions about creating materials, please contact the TA in each field, or go to the TA Mailing List at risk-gp-ta@risk.tsukuba.ac.jp
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所属 システム情報工学研究科（博士前期課程）リスク工学専攻　　学籍番号 xxxxxxxx

氏名 xxxxxxxx　　年度 20xx 年度

No	科目区分	科目番号	科目名	教員名	認定年度	1学期	2学期	3学期	総合評価	合否
1	A1：基礎科目	01CB213	ソフトデータ解析	佐藤 美佳	20xx				B	合
2	A1：基礎科目	01CF011	リスク工学前期特別演習	糸井川 栄一	20xx				A	合
3	A1：基礎科目	01CF012	リスク工学前期特別研究I	糸井川 栄一	20xx				A	合
4	A1：基礎科目	01CF014	リスク工学概論	糸井川 栄一	20xx				A	合
5	A1：基礎科目	01CF015	リスク工学グループ演習	糸井川 栄一	20xx				A	合
6	A1：基礎科目	01CF101	ソフトコンピューティング基礎論I	宮本 定明	20xx				A	合
7	A1：基礎科目	01CF102	ソフトコンピューティング基礎論II	遠藤 靖典	20xx				A	合
8	A1：基礎科目	01CF104	確率システム論	金野 秀敏	20xx	B			A	合
9	A1：基礎科目	01CF106	システム信頼性特論	稲垣 敏之	20xx				A	合
10	A1：基礎科目	01CF401	エネルギーリスク評価論	内山 洋司	20xx				B	合
11	A1：基礎科目	01CF403	エネルギー安全工学特論	羽田野 祐子	20xx				A	合
12	A1：基礎科目	01CF404	エネルギーリスク解析演習	羽田野 祐子	20xx				A	合
13	D1：専門科目	01CF901	リスク工学前期特別講義I	非常勤講師等	20xx				B	合
14	A1：基礎科目	01CM323	環境流体工学特論	白川 直樹	20xx				B	合
15	B1：共通基礎科目	01ZZ005	企業と技術者の倫理	掛谷 英紀	20xx				C	合

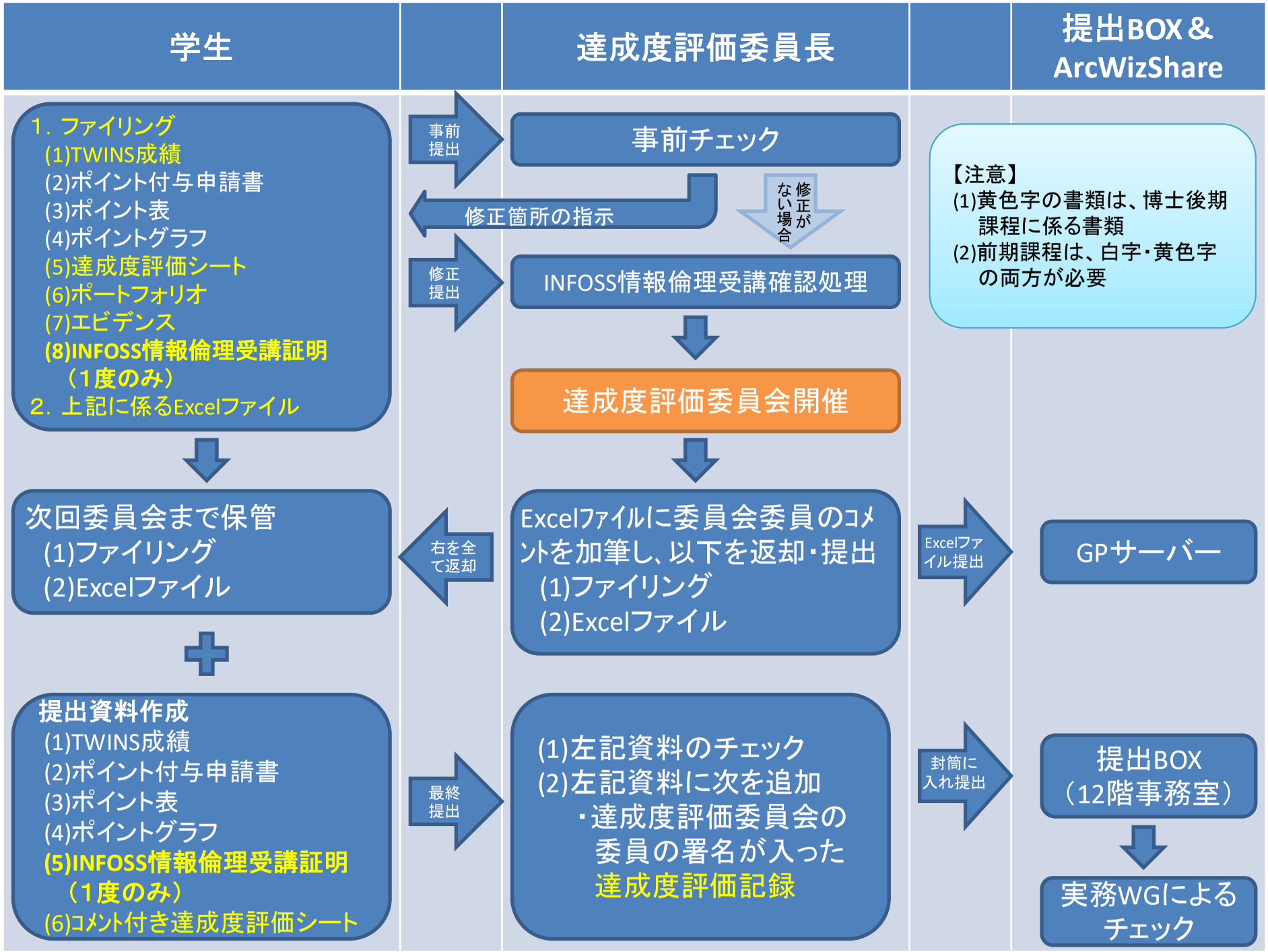
The Term Achievement Level Evaluation Committee in Department of Risk Engineering
Achievement Level Evaluation Record

Department of Risk Engineering, Graduate School of Systems and Information Engineering,
University of Tsukuba

Name of the Student	
Evaluation Date	
Place	
Evaluation Result	As the enclosement

	Signature
Chairperson of Achievement Level Evaluation	
Committee of Achievement Level Evaluation	
Committee of Achievement Level Evaluation	
Committee of Achievement Level Evaluation	

Space for note : Comment (if any) on achievement level evaluation system


学生
達成度評価委員長
提出BOX＆
ArcWizShare
1．ファイリング
(1)TWINS成績
(2)ポイント付与申請書
(3)ポイント表
(4)ポイントグラフ
(5)達成度評価シート
(6)ポートフォリオ
(7)エビデンス
(8)INFOSS情報倫理受講証明
（1度のみ）
2．上記に係るExcelファイル
事前
提出
事前チェック
修正箇所の指示
修正がない場合
修正
提出
INFOSS情報倫理受講確認処理
達成度評価委員会開催
【注意】
(1)黄色字の書類は、博士後期課程に係る書類
(2)前期課程は、白字・黄色字の両方が必要
次回委員会まで保管
(1)ファイリング
(2)Excelファイル
右を全て返却
Excelファイルに委員会委員のコメントを加筆し、以下を返却・提出
(1)ファイリング
(2)Excelファイル
Excelファイル提出
GPサーバー
提出資料作成
(1)TWINS成績
(2)ポイント付与申請書
(3)ポイント表
(4)ポイントグラフ
(5)INFOSS情報倫理受講証明
（1度のみ）
(6)コメント付き達成度評価シート
最終
提出
(1)左記資料のチェック
(2)左記資料に次を追加
・達成度評価委員会の委員の署名が入った
達成度評価記録
封筒に入れ提出
提出BOX
（12階事務室）
実務WGによるチェック

3 Sample of Student Portfolio

STUDENT PORTFOLIO (Monthly)

Name: _____

Supervisor: Prof. /Dr._____

Report term: _____

1. Research Theme

Research on overtaking behaviors of automobile drivers

2. Current Topics

No.	Content	Status
1	Implementation of experiments	Completed
2	Participating in IS	Completed
3	Submission of an extended summary for SICE 2008	Completed
4	Submission of my report to the 2008 Automotive Engineering Spring Conference	Completed
5	Presentation in Career Forum for students who major in Risk Engineering	In progress
6	Preparation of a paper, "Detection of Driver intentions by Movements in Line of Sight"	In progress
7	Submission of a paper to an academic journal after summarizing experiment and research results	In progress

3. Items for this month

1）Conduct main experiment on driver behavior while passing another vehicle

2）Collection and analysis of data

3）Present "Safe and Reliable IS" at the University of Electro- Communications

4. Future Topics

＊Conduct experiments

＊Analyze and discuss experimental data

＊Make presentation to attend the Society Automotive Engineers of Japan

5. Study outside of the research theme

1）Study "Honda Scenario Editor"

2）"Verification and Improvement of a Model for Calculating Line-of-Sight Recognition of Automobile Drivers"

3）"Theory and Measurement of Mental Workload"

4）"Understanding the Line-of-Sight and Intentions of Others and Investigation of the Neurological Mechanism"

5） "Analysis of driver behavior in the case of hurried driving

6） "An Information Processing Model for Understanding Others" ---An attempt to understand how calculation processes in the brain help to determine interpersonal behaviors

7）"Stress, Workload, and Fatigue"

6. Group Work in Risk Engineering "Detection of False Rumor on Twitter"

1）Meeting with adviser staff

＊5/12, 14:00-14:40

＊5/21, 18:00-18:40

＊5/26, 14:00-14:40

2）Student Meeting

＊5/13, 18:00-19:00

＊5/22, 18:00-19:00

＊5/27, 18:00-19:00

3）My jobs

1] Investigation of Twitter including Twitter API

2] Reference Survey

3] Preparation of a web site for our group work

STUDENT PORTFOLIO (December)

Name: _____

Supervisor: Prof. /Dr._____

Report term: December 1-31, 2007

1. Research Theme

- Clustering Algorithms for Data within a Tolerance Range
- SVM for Data within a Tolerance Range
- Research on late stage projects for Risk Engineering

2. Current Topics

- Creation of a clustering method for all data within a solution search space
- Research on late stage projects for Risk Engineering
- Revision of a paper for the Japan Society for Fuzzy Theory and Intelligent Informatics

3. Research Items for This Week

- Meeting with instructors

1. December 3: Meeting with Prof. Hatano (about late-stage project research)

   Discussion about the contents of the research, state of progress, schedule, etc.

   Evidence: written on 1 sheet of A4 paper

2. December 4: Seminar in the Endo Lab.

   Presentation of project research in front of all lab members

   Evidence: written on 2 sheets of A4 paper

3. December 6: Individual seminar with Prof. Endo

   A meeting was held about clustering methods for all data within a solution search space, and advice was received for problem-solving.

   Evidence: Note of the meeting

4. December 18: Seminar in the Endo Lab.

A presentation was made in front of all lab members about the research, and about algorithms for all data within a solution search space.

Evidence: written on 1 sheet of A4 paper

5. December 21: Meeting with Prof. Hatano (about late-stage project research)

Meeting about mid-term presentation early next year and confirmation of schedule

Evidence: None

4. Future Topics

- Create a program for clustering all data within a solution search space
- Revision and submission of paper
- Preparations for mid-term report, etc.

5. Concluding remarks

Appropriate review is being made of analysis, linear algebra, optimization, etc. In addition, pattern recognition and mechanical learning methods are being studied in the literature.

When necessary, discussions will be held with instructors to receive advice and guidance.

There is no particular problem with the progress of the research, or with how it is being approached.

4 Sample of Achievement Level Evaluation Sheet

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Env & Energy Risk ID Number: Name:

(1)Knowledge of fundamental/basic theory in the major fiel	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	8.0	3.80	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired units, and have made presentations in the seminars. I am planning to present the results of the first step of research in the conference. I have started the second stage of my research-assessment framework.					
State of progress & evidence	The main obstacle I am facing with my research is the lack of information about the situation. Therefore, I held several meetings with specialists from Research Institue of Power Engineering and National Encyclopedia.EVIDENCE: Presentation slides from Process System Risk seminar					
Future works	I believe that working on my paper for ICEE conference showed the lack of experience in scientific paper preparation and the limited amount of the information available. I would like to improve the contents with additional information.					
Comprehensive self-assessment	I obtained 3.8 poitns in this item, that I find quite satisfactory.					

(2)Knowledge of fundamental/basic theory in related fields:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	5.0	2.52	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired units from other courses offered by the other schools of the University.					
State of progress & evidence	I obtained points from the field of Total Risk, and Urban Risk. EVIDENCE: class assignments and credits					
Future works	I think that more courses from Risk Engineering should be taken. Therefore, I am planning to attend such classes in the next term.					
Comprehensive self-assessment	I obtained only 2.5 points. It is less than my colleagues, I will take as much as 4 classes in the next semester.					

(3)Understanding Real World Problem:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it with the sense and understanding of problem of reality at a suitable lev	6.0	3.35	--	--	--	(A, B, C, D : select from the list)
Main study items	Acquisition of units, meeting with the specialists from Kazakh Research Institute of Power Engineering.					
State of progress & evidence	The meeting helped me to get a broader picture of the situation. EVIDENCE: class handouts					
Future works	I keep a close contact with the mentioned organization and have a preleminar agreement to publish the paper at the scientific journal of the institute. Additionally, I would like to gather information about the current situation (energy, environment and economy).					
Comprehensive self-assessment	I obtained the knowledge of the current situations of power companies in foregin countries.					

(4)Ability in recognizing problem from broad perspective:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	4.55	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits in other major fields and common subjects. Attended the lecture of the head of Asaza Fund NGO.					
State of progress & evidence	I have been attending lectures in environmental diplomatic leader for future benefit. The class of Environmental Risk helped me to understand the environmental issues and ways of solving them in Japan and the world. EVIDENCE: class handouts					
Future works	I would like to attend a conference in the future in order to get various opinions about the prospect of renewables in the country.					
Comprehensive self-assessment	I obtained a wider perspective by learning the situations of the NGO etc.					

(5)Ability in problem solving from objectives to solutions:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it a special ability to understand, and can it lead to a concrete solution?	4.0	0.00	--	--	--	(A, B, C, D : select from the list)
Main study items	Assignment at Process System Risk seminar					
State of progress & evidence	I had a chance to make my own investigation of the explosion at BP Texas explosion. Learning isomerization process and follow-up of various human errors connected with technical mulfunctions was a great experience for me. EVIDENCE: class assignment, slides					
Future works	Polish the skills of "Problem Solving" regarding my research, specifically the method of obtaining the inverse matrix numerically.					
Comprehensive self-assessment	I addressed the theme of oil refinery process and related safety issues. I believe the knowledge acquired will be useful in the investigation process of accidents (root-causes, fault-finding, etc.).					

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Env & Energy Risk ID Number: Name:

(6)Presentation and communication skills:		std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?		6.0	0.00	--	--	--	(A, B, C, D : select from the list)
Main study items	Weekly Lab seminar, Presentation at Risk Senko Enshu						
State of progress & evidence	I was able to make my presentations within time limit.EVIDENCE: Lab Seminar slides, Senko Enshu slides						
Future works	I need to improve my presentation skills; very often I lose the visual contact with auditorium. Moreover, I have to actively participate in Q&A session of other members of the laboratory.						
Comprehensive self-assessment	I think my presentation skills have greatly improved.						

(7)International passing: Is the learning passes internationally in the specialized field?		Committee's comments
Main study items	I have sumbitted abstracts for the following conferences: ICEE 2015 in Hong Kong and GPE 2015 in Malaysia.	
State of progress & evidence	The abstracts allowed me to systematize the structure of the future thesis. EVIDENCE: Abstracts of ICEE 2015 & GPE 2015	
Future works	The preparation of the abstract showed me the lack of the experience in scientific paper writing. I have to self-study to improve my skills.	
Comprehensive self-assessment	Two times submission of abstracts have greatly improved my skills of internaional eligibity.	

(8)Academic publication: Is your judged academic result may give master degree?		Committee's comments
Main study items	Full paper preparation for ICEE 2015	
State of progress & evidence	The discussion part of the full paper greatly improved the research quality. EVIDENCE: Draft for ICEE 2015	
Future works	Preparation of the full paper for GPE 2015	
Comprehensive self-assessment	Preparing full papers makes me greatly improve the skills of academic writing.	

Compre-hensive committee 's opinion	

(1) Is the basic ability in a suitable level for degree of the master student in the specialized field?
(2) Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the specialized field?
(3) Is it with the sense and understanding of problem of reality at a suitable level?
(4) Is it suitable for the degree?
(5) Is it a special ability to understand, and can it lead to a concrete solution?
(6) Is it suitable for the degree?
(7) Is the learning passes internationally in the specialized field?
(8) Is your judged academic result may give master degree?

Achievement Level Evaluation Sheet

2nd Date: 20YY/MM/DD Total Risk Management ID Number: Name:

(1)Knowledge of fundamental/basic theory in the major fiel	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	8.0	3.60	7.20	---	---	(A, B, C, D : select from the list)
Main study items	I have made oral presentations in MADI '15 and FSS '15. In addition, I have acquired crediits in Introduction to SC I & II, research seminars, Cognitive Risk Analysis, core courses.					
State of progress & evidence	I have made presentations at domestic and international symposiums. I will continue to advance my research to complete my Master's thesis. I have aquired many "A"s in courses in my major field. EVIDENCE: Seminar materials, Submitted papers, Self-study notes					
Future works	Take classes of the rest of the core courses and Advanced ○○ class.					
Comprehensive self-assessment	I have acquired credits in Advanced Course in Risk Engineering. As this value is close to the required criterion, I have almost obtained satisfactory academic results.					

(2)Knowledge of fundamental/basic theory in related fields:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	5.0	3.16	4.16	---	---	(A, B, C, D : select from the list)
Main study items	I have acquired credits in Introduction to Risk Engineering and major courses in Risk Engineering. I have participated in sessions of related fields in conferences and RERM.					
State of progress & evidence	I have aquired credits in some fields of Risk Engineering. My aquired credits were significantly above the standard credits. EVIDENCE: self-study notes, RERM notes					
Future works	I'll take classes of the Urban Risk and Energy & Environmental Risk in the next term.					
Comprehensive self-assessment	I have acquired credits in major courses in Risk Engineering and in other courses.As this value exceeds the required criterion, I have obtained satisfactory academic					

(3)Understanding Real World Problem:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it with the sense and understanding of problem of reality at a suitable lev	6.0	3.62	5.32	---	---	(A, B, C, D : select from the list)
Main study items	I have acquired crediits in some courses of the Departments of Risk Engineering. I have participated in sessions related to application of soft computing at FSS '15.					
State of progress & evidence	I have aquired credits in some fields of Risk Engineering. My aquired credits were significantly increased. In addition, I have been able to broaden knowledge of real world problem by participating in sessions of RERM.					
Future works	Taking the rest credits in the department.					
Comprehensive self-assessment	I have acquired credits in major courses in Risk Engineering and in other courses. I have obtained satisfactory academic results.In addition, I was able to broaden my knowledge of real world problems.					

(4)Ability in recognizing problem from broad perspective:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	3.62	6.52	---	---	(A, B, C, D : select from the list)
Main study items	I have acquired credits in Introduction to Risk Engineering and some courses of other Departments of Risk Engineering. In addition, I have made an oral					
State of progress & evidence	I have aquired credits in some fields of Risk Engineering. My aquired credits were significantly above the standard credits. I think I have been able to expand my perspective by acquiring credits and participating RERMs. EVIDENCE: Self-study notes, Group work materials, Submitted papers to and pesentation materials at the Society for Risk Analysis Japan					
Future works	Participation at RERM					
Comprehensive self-assessment	I have acquired credits in major courses in Risk Engineering and in other courses. As this value exceeds the required criterion, I have obtained satisfactory academic results from my broad perspective.					

(5)Ability in problem solving from objectives to solutions:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it a special ability to understand, and can it lead to a concrete solution?	4.0	0.00	0.00	---	---	(A, B, C, D : select from the list)
Main study items	I have worked on a new theme related to my major field and made a presentation about it. I have acquired credits in group work. In addition, I have made an oral presentation to the Society for Risk Analysis Japan.					

Achievement Level Evaluation Sheet

2nd Date: 20YY/MM/DD Total Risk Management ID Number: Name:

State of progress & evidence	I will analyze problems and deepen my knowledge and understanding on my research theme in the course of time. In group work, I have been able to obtain a standard level of results. EVIDENCE: Self-study notes, Group work materials, Submitted papers to and pesentation materials at the Society for Risk Analysis Japan
Future works	The revised theme of my research, which has been newly set in this term, has helped my academic paper.
Comprehensive self-assessment	Though I have experienced bad time, I believe that I have obtained satisfactory results from my continuous research efforts.

(6)Presentation and communication skills:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	0.00	0.00	--	--	(A, B, C, D : select from the list)
Main study items	I have made presentations in the FSS '15, MDA '15, Society for Risk Analysis Japan, group work, course work, and research seminars at the university.					
State of progress & evidence	I have made five oral presentations (two of them were in English). I would like to present my thesis clearly in the Master's paper presentation meeting. EVIDENCE: Seminar materials, Submitted papers, Presentation materials to academic societies Presentation materials to lectures					
Future works	Preparation for FSS '16 and MDA '16					
Comprehensive self-assessment	I believe that I have been able to clearly understand and communicate critical points. I will continue my efforts in this way. I think that my presentation skills have advanced comparing to the very first day of my entrance to the school.					

(7)International passing: Is the learning passes internationally in the specialized field?	Committee's comments
Main study items	I have made an oral presentation (in English) in MDAI '15. I attended Professor Liu's lecture about soft computing.
State of progress & evidence	I think that I could make oral presentation and discussion in English better than before. I will continuously work to improve my presentation skills in English. EVIDENCE: Presentation materials to academic societies
Future works	Make presentations at MDA '16 and FSS '16 in English.
Comprehensive self-assessment	I believe that I have obtained satisfactory academic progress by my study efforts. I will continue this effort.

(8)Academic publication: Is your judged academic result may give master degree?	Committee's comments
Main study items	I have submitted papers to and made presentations in FSS '15, MDAI '15 and the Society for Risk Analysis Japan.
State of progress & evidence	Concerning my thesis, I have made four presentations, two each for domestic symposiums and international conferences. I believe that I have obtained a satisfactory academic progress. EVIDENCE: Submitted papers
Future works	Making a new numerical scheme for calculating the norm between clusters and write a full paper to a journal.
Comprehensive self-assessment	About my thesis, I have made four presentations, two each in domestic symposiums and international conferences. Therefore, I believe that I have obtained satisfactory academic results.

Compre-hensive committee 's opinion	

(1) Is the basic ability in a suitable level for degree of the master student in the specialized field?

(2) Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the specialized field?

(3) Is it with the sense and understanding of problem of reality at a suitable level?

(4) Is it suitable for the degree?

(5) Is it a special ability to understand, and can it lead to a concrete solution?

(6) Is it suitable for the degree?

(7) Is the learning passes internationally in the specialized field?

(8) Is your judged academic result may give master degree?

Achievement Level Evaluation Sheet

3rd Date: 20YY/MM/DD Cyber Risk ID Number: Name:

(1)Knowledge of fundamental/basic theory in the major fiel	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	8.0	6.00	8.40	8.40	--	(A, B, C, D : select from the list)
Main study items	I have prepared my thesis. I have made presentations and participated in question and answer sessions in Seminar in Risk Engineering.					
State of progress & evidence	have conducted additional experiments and summarized the results. I have completed a draft of my thesis.EVIDENCE: Thesis Draft, Research notes, Presentation slides for Seminar in Risk Eng.					
Future works	Ask questions at lab seminars more frequently, and with confidence.					
Comprehensive self-assessment	By making presentations and writing papers, I have obtained specialized knowledge and developed my research.					

(2)Knowledge of fundamental/basic theory in related fields:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	5.0	4.52	5.32	6.82	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits in other fields and participated in group work activities. I have participated in question and answer sessions in Seminar in Risk Engineering and RERM. I have acquired credits in Ethics for Engineers in Business.					
State of progress & evidence	I have acquired credits in other fields. I have asked questions in presentations in other fields. EVIDENCE: RERM handouts, Lecture notes					
Future works	Ask questions at Risk Senko Enshu more frequently.					
Comprehensive self-assessment	I could ask more questions than the last semester. Great progress.					

(3)Understanding Real World Problem:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it with the sense and understanding of problem of reality at a suitable le	6.0	5.44	6.80	7.52	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits in a course in which company engineers delivered lectures. I have acquired credits in Ethics for Engineers in Business.					
State of progress & evidence	I have listened to lectures on actual ethical problems in companies.					
Future works	Although my credit of this item has reached the required value, I'm not sure my real-world knowledge is enough. I will still keep learing.					
Comprehensive self-assessment	I have participated in group work based on lectures by company engineers, and learned about present conditions of information security in companies. I have learned about the essentials of ethics for engineers.					

(4)Ability in recognizing problem from broad perspective:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	5.44	7.70	8.42	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits in Ethics for Engineers in Business.					
State of progress & evidence	I have listened to lectures on ethical problems of engineers and companies. EVIDENCE: Lecture notes of the classes					
Future works	Make use of the knowledges to my thesis					
Comprehensive self-assessment	Though I have heard about ethical problems in the news, etc., by attending these lectures; I have obtained more expansive knowledge. This was a good opportunity to learn these problems.					

(5)Ability in problem solving from objectives to solutions:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it a special ability to understand, and can it lead to a concrete solution?	4.0	0.00	3.18	3.18	--	(A, B, C, D : select from the list)
Main study items	I have participated in group work activities. I had submitted my paper, made presentations, and listened to other speeches at CSEC. I have prepared my thesis.					
State of progress & evidence	I summarized research activities which I had done. EVIDENCE: Draft of thesis, Research notes.					
Future works	Polish the skill through writing my thesis					
Comprehensive self-assessment	Based on the research, discussion, and review, which I have done, I have summarized my research results.There is a good prospect in meeting the standard by acquiring credits of Research in Risk Engineering II.					

(6)Presentation and communication skills:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	1.20	6.00	6.00	--	(A, B, C, D : select from the list)

Achievement Level Evaluation Sheet

3rd Date: 20YY/MM/DD Cyber Risk ID Number: Name:

Main study items	I have made presentations in Seminar in Risk Engineering. I have made a speech in English for Improving Reading and Writing Skills. I had submitted my paper, made presentations, and listened to other speeches at CSEC. I have made presentations and participated in question-and-answer sessions in Seminar in Risk Engineering.	
State of progress & evidence	I made presentations in Seminars in Risk Engineering and at CSEC, and had speeches in English. I have reviewed my research in Seminar in Risk Engineering.	
Future works	Enhance the skill for the final defence at master thesis.	
Comprehensive self-assessment	I have drawn various diagrams so that my research results are easy to understand. After improving the contents and diagrams of my presentation which I made at CSEC, I attended Seminar in Risk Engineering. I think I could make easy-to-understand presentations.	
(7)International passing: Is the learning passes internationally in the specialized field?		Committee's comments
Main study items	I have participated in invited lectures by researchers. I had submitted my paper, made presentations, and listened to other speeches at CSEC. I have prepared my	
State of progress & evidence	While preparing my thesis, I have taken its contribution to international societies into consideration. EVIDENCE: Thesis draft, Research notes	
Future works	Enhance the skill, specifically for discussions with native speakers.	
Comprehensive self-assessment	Through discussions with and reviews by my supervisor, I have recognized the contribution of my research to international societies.	
(8)Academic publication: Is your judged academic result may give master degree?		Committee's comments
Main study items	I have conducted a survey and discussed problems with researchers and my supervisor. I had submitted my paper, made presentations, and listened to other	
State of progress & evidence	I submitted my paper at CSEC. I had drafted my thesis, which was reviewed by researchers and my supervisor. EVIDENCE: Thesis draft, Research notes	
Future works	Submission of a manuscript to an international journal	
Comprehensive self-assessment	By receiving several reviews, I have improved my research results. I have made steady progress in preparing my thesis.	
Comprehensive committee's opinion		

(1) Is the basic ability in a suitable level for degree of the master student in the specialized field?

(2) Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the specialized field?

(3) Is it with the sense and understanding of problem of reality at a suitable level?

(4) Is it suitable for the degree?

(5) Is it a special ability to understand, and can it lead to a concrete solution?

(6) Is it suitable for the degree?

(7) Is the learning passes internationally in the specialized field?

(8) Is your judged academic result may give master degree?

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Urban Risk ID Number: Name:

(1)Knowledge of fundamental/basic theory in the major fiel	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	8.0	3.40	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits, and have made presentations in research seminars in and outside the university. I have reviewed statistics, learned operating methods of GIS, etc., which are necessary for my research.					
State of progress & evidence	I have participated in research seminars and made presentations at conferences and was able to understand the areas in my research that need improvement and that has lack of knowledge. EVIDENCE: Academic presentation materials, Seminar materials, Research notes, Submitted papers					
Future works	I would like to make further progress of my research and improve the contents, so that it can be suitable for academic submission in conferences or journals.					
Comprehensive self-assessment	I believe that conference presentations have added a great achievement to my academic endeavor.					

(2)Knowledge of fundamental/basic theory in related fields:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is the basic ability in a suitable level for degree of the master student in th	5.0	6.16	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits in other fields and participated in Risk Engineering Research Meeting (RERM) for the Master's Program, and other domestic conferences.					
State of progress & evidence	I have been able to get a general understanding of related fields from lectures in other fields and RERM. I have been able to learn about cutting-edge research by participating in academic conferences. EVIDENCE: Lecture notes, Lecture assignments					
Future works	I will continue my pursuit for advanced studies.					
Comprehensive self-assessment	I think I have learned the fundamentals of related fields to a standard level. The point exceeded the required value. Quite satisfactory for myself.					

(3)Understanding Real World Problem:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it with the sense and understanding of problem of reality at a suitable lev	6.0	0.00	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired credits and participated in RERM.					
State of progress & evidence	I have been able to understand topics and associated summaries, etc. in various fields by attending lectures, RERM, etc. EVIDENCE: RERM materials, Lecture assignments					
Future works	I will keep continuing to participate in RERM and other lectures to broaden my knowledge.					
Comprehensive self-assessment	By attending lectures such as RERM, I was able to broaden my knowledge of actual problems to a standard level.					

(4)Ability in recognizing problem from broad perspective:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	5.02	--	--	--	(A, B, C, D : select from the list)
Main study items	I have acquired 8 credits in other department's subjects and fields. I have also participated in RERM for 8 times.					
State of progress & evidence	I would like to expand my perspective by actively participating in RERM during the next school year. EVIDENCE: RERM attendance, Lecture assignments					
Future works	I will broaden my knowledge continuously through attending RERM and other seminars.					
Comprehensive self-assessment	By attending lectures such as RERM, I was able to broaden my perspectives and approaches for my research and future work.					

(5)Ability in problem solving from objectives to solutions:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it a special ability to understand, and can it lead to a concrete solution?	4.0	0.00	--	--	--	(A, B, C, D : select from the list)
Main study items	In group work, I have worked on a theme that is not related to my research and made a presentation on it.					
State of progress & evidence	I have been able to recognize problems, build consensus, and propose ways of finding solutions within a group setting. EVIDENCE: Group work materials					
Future works	I'd like to apply this skill, obtained through the group work, to my research.					
Comprehensive self-assessment	I have addressed the theme 'swine flu' in group work and was able to obtain a good result. I am confident to attain better achievement even if I work alone.					

(6)Presentation and communication skills:	std.	1st	2nd	3rd	4th	Comittee's evaluation & comments
Is it suitable for the degree?	6.0	0.00	--	--	--	(A, B, C, D : select from the list)
Main study items	I have made 2 oral presentations in the university, and 2 outside the university.					

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Urban Risk ID Number: Name:

State of progress & evidence	The presentation itself has reached to a certain level. However, sometimes I have not been able to answer questions accurately. EVIDENCE: presentation slides	
Future works	I am intended to make future presentations more clearly and would also like to make better preparation for question and answer sessions.	
Comprehensive self-assessment	I believe I had a progress in my presentation skills, specifically regarding the skill of time keeping.	
(7)International passing: Is the learning passes internationally in the specialized field?		Committee's comments
Main study items	I submitted an abstract to USMCA2015.	
State of progress & evidence	The abstract has been accepted. At present, I am writing the paper in English. EVICENCE: Draft for USMCA2015	
Future works	In order to improve my English proficiency, I am participating in English writing seminars.	
Comprehensive self-assessment	I believe my academic English has greatly improved.	
(8)Academic publication: Is your judged academic result may give master degree?		Committee's comments
Main study items	I have submitted a paper to AIJ2015 and made a presentation. I have also submitted a refereed paper to CPIJ2015 and made a presentation.	
State of progress & evidence	After the presentations, I have received advice, comments etc. from the researchers. I have accepted those to improve my research topics and other	
Future works	I would like to reflect researchers' comments in the present paper that I am planning to submit.	
Comprehensive self-assessment	I will seek to solve problems that have been suggested in academic conferences.	
Comprehensive committee's opinion		

(1) Is the basic ability in a suitable level for degree of the master student in the specialized field?
(2) Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the specialized field?
(3) Is it with the sense and understanding of problem of reality at a suitable level?
(4) Is it suitable for the degree?
(5) Is it a special ability to understand, and can it lead to a concrete solution?
(6) Is it suitable for the degree?
(7) Is the learning passes internationally in the specialized field?
(8) Is your judged academic result may give master degree?

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Not Selected ID Number: Name:

(1)Knowledge of fundamental/basic theory in the major field: Is the basic ability in a suitable level for degree of the master student in the specialized field?		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	I have progressed with my research theme and have submitted papers to international conferences and academic journals. I am also making progress in understanding literature related to Kernel Function and Semi-Supervised Learning.	
State of progress & evidence	I have submitted papers to conferences that I was planning to attend and made oral presentations. Now, I will start to broaden my understanding of Semi-Supervised Learning which has been a major part of my current research, and would like to apply it to my own research theme. EVIDENCE: Research notes, Seminar slides+resumes, Submitted journal papers, Submitted papers of conference	
Future works	Currently I do not have a satisfactory understanding of Kernel Function and Semi-Supervised Learning, I would like to get a more accurate understanding of them through literature surveys, etc., and apply it to my research theme.	
Comprehensive self-assessment	I am very happy about having several papers related to the present research theme selected for international conferences and academic journals.	
(2)Knowledge of fundamental/basic theory in related fields: Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	I have participated in the Advanced Seminar in Risk Engineering and RERM, and have acquired units in Project Research in Risk Engineering. In the FSS '15, I have participated in a session in applied methods for pattern recognition.	
State of progress & evidence	I feel there is a need for knowledge and approaches toward application, not just understanding of the theory of the major field. In addition, I have broadened my understanding of other fields through participation in the Advanced Seminar in Risk Engineering and RERM. EVIDENCE: Research notes, Draft for Doctral thesis, RERM materials	
Future works	I feel it is necessary to make a more concerted effort to acquire knowledge of related fields, especially about optimized mathematics, and would like to continue to address analysis,	
Comprehensive self-assessment	I would also like to broaden my knowledge of applications in my major field.	
(3)Understanding Real World Problem: Is it with the sense and understanding of problem of reality at a suitable level?		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	I have participated in the Advanced Seminar in Risk Engineering and RERM, and have acquired units in Project Research in Risk Engineering. In the FSS '15, I have participated in	
State of progress & evidence	I have broadened my understanding of non-theoretical aspects such as setting problem statements and application to actual problems of soft computing methods. In addition, I have	
Future works	I will continue to tackle applications to my research theme and would like to broaden my understanding of both theory and application.	
Comprehensive self-assessment	Through participation in the Advanced Seminar in Risk Engineering and RERM, I was able to solve problems in Risk Engineering to a certain degree.	
(4)Ability in recognizing problem from broad perspective: Is it suitable for the degree?		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	I have participated in the Advanced Seminar in Risk Engineering and RERM, and have acquired units in Project Research in Risk Engineering. I have also participated in sessions	
State of progress & evidence	I have broadened my understanding of non-theoretical aspects such as setting problem statements and application to actual problems of soft computing methods. In addition, I have	
Future works	I would like to continue participating in seminars, etc., to help me think about matters that I have not been handling as current problems.	
Comprehensive self-assessment	Through participation in the Advanced Seminar in Risk Engineering and RERM, I was able to solve problems in Risk Engineering to a certain degree.	
(5)Ability in problem solving from objectives to solutions: Is it a special ability to understand, and can it lead to a concrete solution?		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	A new research theme has been set and I am working toward its solution. I have acquired units in Project Research in Risk Engineering.	
State of progress & evidence	I plan to conduct a survey to determine how the newly set problem statement is related to existing methods. By undertaking Project Research in Risk Engineering, I have come to	
Future works	Enhance the skill for my future research.	
Comprehensive self-assessment	I feel that setting new problem statements means that I have broadened my understanding of the research theme. In the Project Research in Risk Engineering, I have been able to	
(6)Presentation and communication skills: Is it suitable for the degree?		Comittee's evaluation & comments (A, B, C, D : select from the list)
Main study items	I have made 7 oral presentations at domestic symposia and international conferences. During those times, I had vigorous discussions with researchers from outside of my field.	

Achievement Level Evaluation Sheet

1st Date: 20YY/MM/DD Not Selected ID Number: Name:

State of progress & evidence	Although I was not able to answer questions well at WCCI, I was able to handle the English-language question and answer sessions well at the SCIS and MDAI. I also did a pre-FD.	
Future works	I'd like to emphasize my point more clearly at my future presentations.	
Comprehensive self-assessment	I feel that I can say that I have been able, in 3 months, to improve my ability to answer questions in English, and I would like to continue to improve my English.	
(7)International passing: Is the learning passes internationally in the specialized field?		Committee's comments (A, B, C, D : select from the list)
Main study items	Oral presentations were made at the following international conferences: FUZZ-IEEE'13, GrC'13, WCCI'14, SCIS'14, MDAI'14	
State of progress & evidence	I have so far made oral presentations at 5 international conferences. At 2 of this year's international conferences, I was recommended for Special Issues, and the manuscripts are currently in referee reading. EVIDENCE: Programs, Abstracts and slides of these conferences	
Future works	Q&A in English is the most problematic for me. Need improvement.	
Comprehensive self-assessment	I believe I recently become accustomed to making oral presentations in English.	
(8)Academic publication: Is your judged academic result may give master degree?		Committee's comments (A, B, C, D : select from the list)
Main study items	Our manuscript submitted to the Journal of Japan Society for Fuzzy Theory and Intelligent Informatics was accepted and published. In addition, I was selected as First Author for a	
State of progress & evidence	I would like to continue to submit manuscripts to international conferences and academic journals. I would especially like to undertake research that will enable me to submit papers to	
Future works	I need more growth and I'd like to achieve more higher level in my research field.	
Comprehensive self-assessment	I am happy about being accepted as a First Author for a paper submitted to the Journal of Japan Society for Fuzzy Theory and Intelligent Informatics and numerous manuscripts	
Compre-hensive committee's opinion		

(1) Is the basic ability in a suitable level for degree of the master student in the specialized field?

(2) Is the basic ability in a suitable level for degree of the master student in the special field though it is not deeper than the specialized field?

(3) Is it with the sense and understanding of problem of reality at a suitable level?

(4) Is it suitable for the degree?

(5) Is it a special ability to understand, and can it lead to a concrete solution?

(6) Is it suitable for the degree?

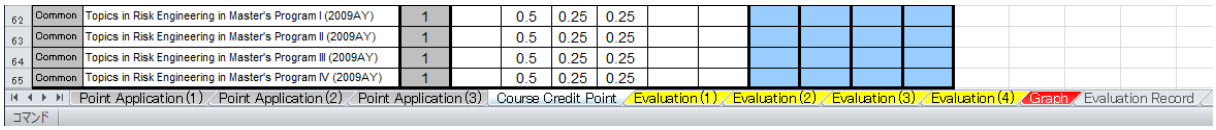
(7) Is the learning passes internationally in the specialized field?

(8) Is your judged academic result may give master degree?

5 Point Application Sheets

Method for Entering "Achievement level Evaluation Materials" file (for Master's Program)

1. Contents of "Achievement Level Evaluation Materials" file



- Point Application sheet (1)-(3)
- Course Credit Points sheet
- Achievement Level Evaluation sheet (1)-(4)
- Graph
- Record of Achievement Level Evaluation

} Total 10 sheets

2. Method for Entering "Point Application sheet" and Application Procedure

(1) In most cases, applications should be made during the period prescribed. The following is an approximate schedule. Students will be notified of the exact dates by e-mail.

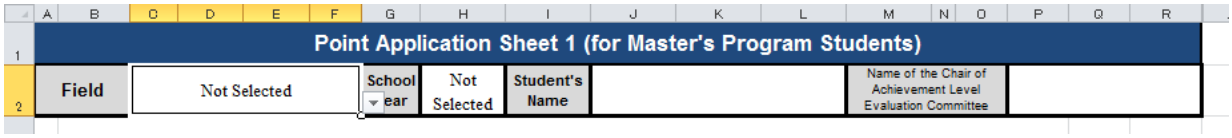
Application Period for Spring A, B, and C modules: Early in April

Application Period for Autumn A, B, and C Modules: Early in October

You should offer the application immediately when adding or changing courses.

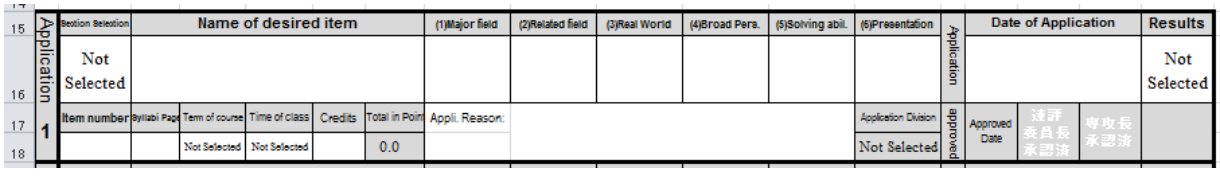
(2) Starting from the "Point Application (1)" sheet

* Even if you mistakenly start from "Point Application (2)" or "Point Application (3)" sheet, information will be reflected in the point sheet. However, it will be hard to understand when confirming the information, so it is advisable to start from "Point Application (1)"



(3) Select "Field" and "School Year" (at the time of data entry) from the drop-down list.

(4) Enter "Student's Name" and name of "Name of the Chair of Achievement Level Evaluation Committee."



(5) You can enter data in all blanks outside of the "Results" column. "Results" can be entered after the application has been approved.

(6) Click "Section Selection" and choose one of the following from the drop-down list:

Courses from other faculties

Common courses of the graduate school
Courses of other departments
Common courses of the faculty

If you choose “Courses from other faculties” and “Common courses of the graduate school,” underneath the grade entry column you will see “Application must be sent to the Graduate School Registrar’s Office.” The application is in the website for Master’s students. Please refer to the Graduate Student page to fill it out. Submit the completed form directly to the Graduate School Registrar’s Office. http://www.sie.tsukuba.ac.jp/private/pub-student/

(7) Enter Name of desired item, Item number, Syllabi Page Number, Term of course, Time of class, Credits, and Point distribution proposal.

*Please refer to the Graduate School syllabus (Class Schedule) to enter accurate information.

*If the spaces for “Term of course,” “Time of class,” etc., in the Graduate Student syllabus are empty, do not select any option from the drop box but rather leave the space(s) blank.

(8) Students should apply by sending an e-mail with the entire “Achievement Level Evaluation Materials” file attached to the Chairperson of the Achievement Level Evaluation Committee.

(9) The Chairperson will check the contents of the application, then will send to the GP Core Mailing List a “Request for Approval” e-mail with the entire “Achievement Level Evaluation Materials” file attached.

(10) If the application is approved, then the processed files (“Approved by the Chairperson of the Achievement Level Evaluation Committee” and “Approved by the Provost of the Master’s Program” marked in red, with application contents locked and Academic Results column unlocked) are sent to the student and to the Chairperson of the Achievement Level Evaluation Committee.

If you receive notification that the application was not approved, you will have to reapply.

(11) For the next application, you will not need a separate sheet; start with the blank spaces at the top of the same sheet, and work your way down.

3. Entering information before the meeting of the Achievement Level Evaluation Committee

(1) Prepare the grade chart in TWINS.

(2) Open the “Course Credit Points” sheet in “Achievement Level Evaluation Materials” file.

If a file does not enter properly, some of the data may be missing. Please make sure that all required spaces are filled in and try again.

(3) Enter the date as year/month/day. For example, 1 April 2010 would be entered as 2010/4/1.

	A	B	C	D	E	F	G	L	Q	V	AA	AF	AK	AM	AO	AQ
1	Date of Preparation				School Year	Not Selected	Field	Not Selected			Student's Name					
3	Committee Section		Select this cell.	aquired credits	(1)Knowledge of major field		(2) Knowledge of related fields		(3) Knowledge of Real World		(4) Broad Perspective		(5) Ability in problem solving		(6) Presentation and Communication	
4	1st Committee	a	Items of this department	0	0.0		0.0		0.0		0.0		0.0		0.0	
5		b	Items of other departments etc.	0	0.0		0.0		0.0		0.0		0.0		0.0	
6		c	Total in the 1st Committee(a+b)	0	0.0		0.0		0.0		0.0		0.0		0.0	
7	2nd Committee	d	Items of this department	0	0.0		0.0		0.0		0.0		0.0		0.0	
8		e	Items of other departments etc.	0	0.0		0.0		0.0		0.0		0.0		0.0	
9		f	Ttotal in the 2nd Committee(c+d+e)	0	0.0		0.0		0.0		0.0		0.0		0.0	
10	3rd Comm	g	Items of this department	0	0.0		0.0		0.0		0.0		0.0		0.0	
11		h	Items of other departments etc.	0	0.0		0.0		0.0		0.0		0.0		0.0	

(4) Select "Academic Year" (at the time of data entry) and "Field" from the drop-list menu. *You must select "Field"

(5) Enter your "Name."

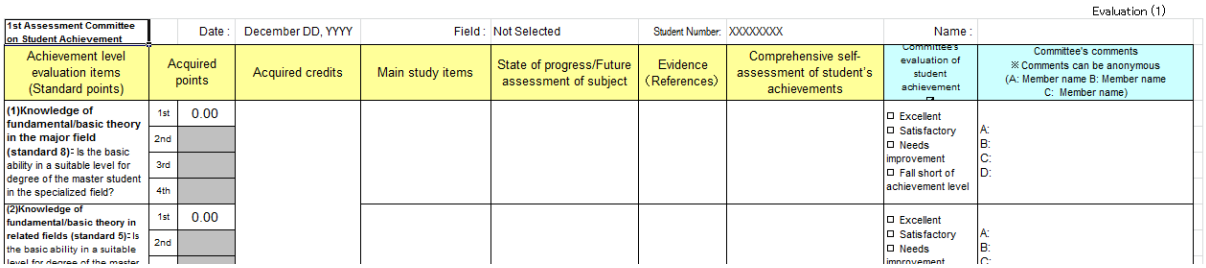
(6) Select "Committee Section" from the drop-down list.
Example: If you select "1st Achievement Level Evaluation Committee," then the cell "Enter 1st Academic Results" will appear in yellow type.
*Please note that if there is no selection, it will not be accurately reflected in the graph.

19	Item Division	Name of item	Item number	Credits	(1) Major	(2) Related	(3) Real	(4) Broad	(5) Solving	(6) Presen.	Result (1st Comm.)	Result (2nd Comm.)	Result (3rd Comm.)	Result (4th Comm.)
20	Common	Seminar in Risk Engineering I (till 2010 AY : Seminar in Risk Engineering)	01CF001	1	0.5					0.5				
21	Common	Seminar in Risk Engineering II	01CF002	2	1.0					1.0				
22	Common	Research in Risk Engineering I	01CF011	4	1.5		0.5		1.0	1.0				
23	Common	Research in Risk Engineering II	01CF012	4	1.0		1.0		1.5	0.5				
24	Common	Research in Risk Engineering II (till 2010AY)		6	2.0		1.0		1.5	1.5				
25	Common	Group Work in Risk Engineering	01CF021	2				1.5	1.5	3.0				

(7) Please select the Results (Grades) from the drop-down list while referring to your transcript of academic results.

(8) For courses that are outside your major field, enter your grades (results) in "Point Application sheets (1)-(3)". If a point application was not made for a course in another major field, the grade cannot be entered. If it was for a reason beyond your control, even if it was outside the term in question, please apply according to the procedure in the aforementioned **2. Method for Entering "Point Application sheet" and Application Procedure**. In such a case, you should state the reason for applying outside of the term in the text of your e-mail in order to request approval.

(9) Open the applicable sheet from among Evaluation (1)-(4), and enter the Day of the first committee, Name of field, and Student number. Your name will become a link from the Course Credit Points sheet.

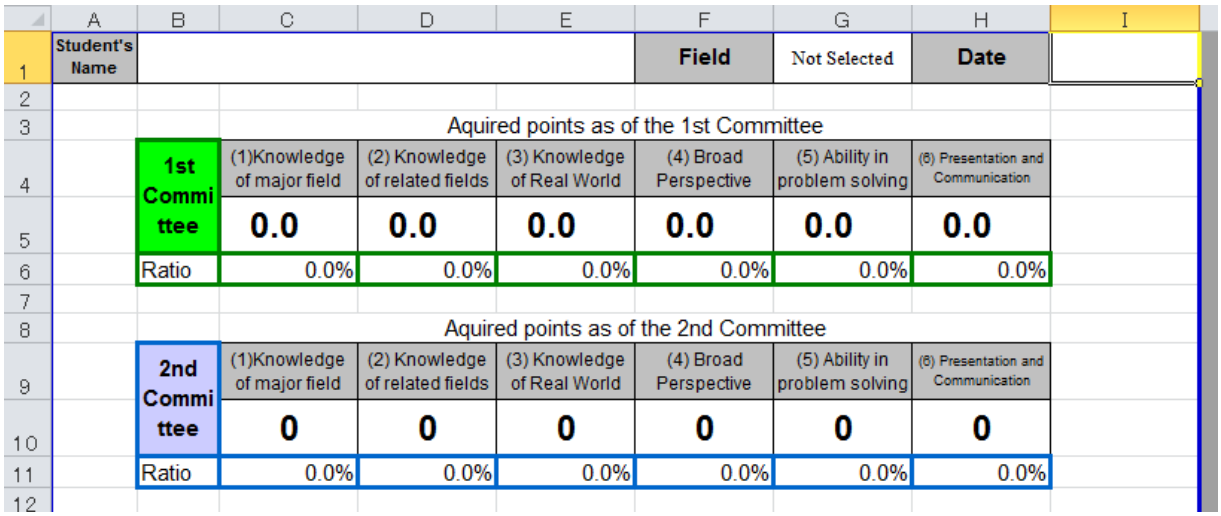


Evaluation (1)

1st Assessment Committee on Student Achievement	Date :	December DD, YYYY	Field :	Not Selected	Student Number:	XXXXXXXX	Name :	
Achievement level evaluation items (Standard points)	Acquired points	Acquired credits	Main study items	State of progress/Future assessment of subject	Evidence (References)	Comprehensive self-assessment of student's achievements	Committee's evaluation of student achievement	Committee's comments ※Comments can be anonymous (A: Member name B: Member name C: Member name)
(1)Knowledge of fundamental/basic theory in the major field (standard 8): Is the basic ability in a suitable level for degree of the master student in the specialized field?	1st 0.00 2nd 3rd 4th						☐ Excellent ☐ Satisfactory ☐ Needs improvement ☐ Fall short of achievement level	A: B: C: D:
(2)Knowledge of fundamental/basic theory in related fields (standard 5): Is the basic ability in a suitable level for degree of the master	1st 0.00 2nd						☐ Excellent ☐ Satisfactory ☐ Needs improvement	A: B: C:

(10) Enter self-evaluation. If entering evaluations (2)-(4), enter the difference from the previous time in red letters.

(11) On the Graph sheet, enter your "Name", "Affiliated Field", and "Date" (day the materials were created).



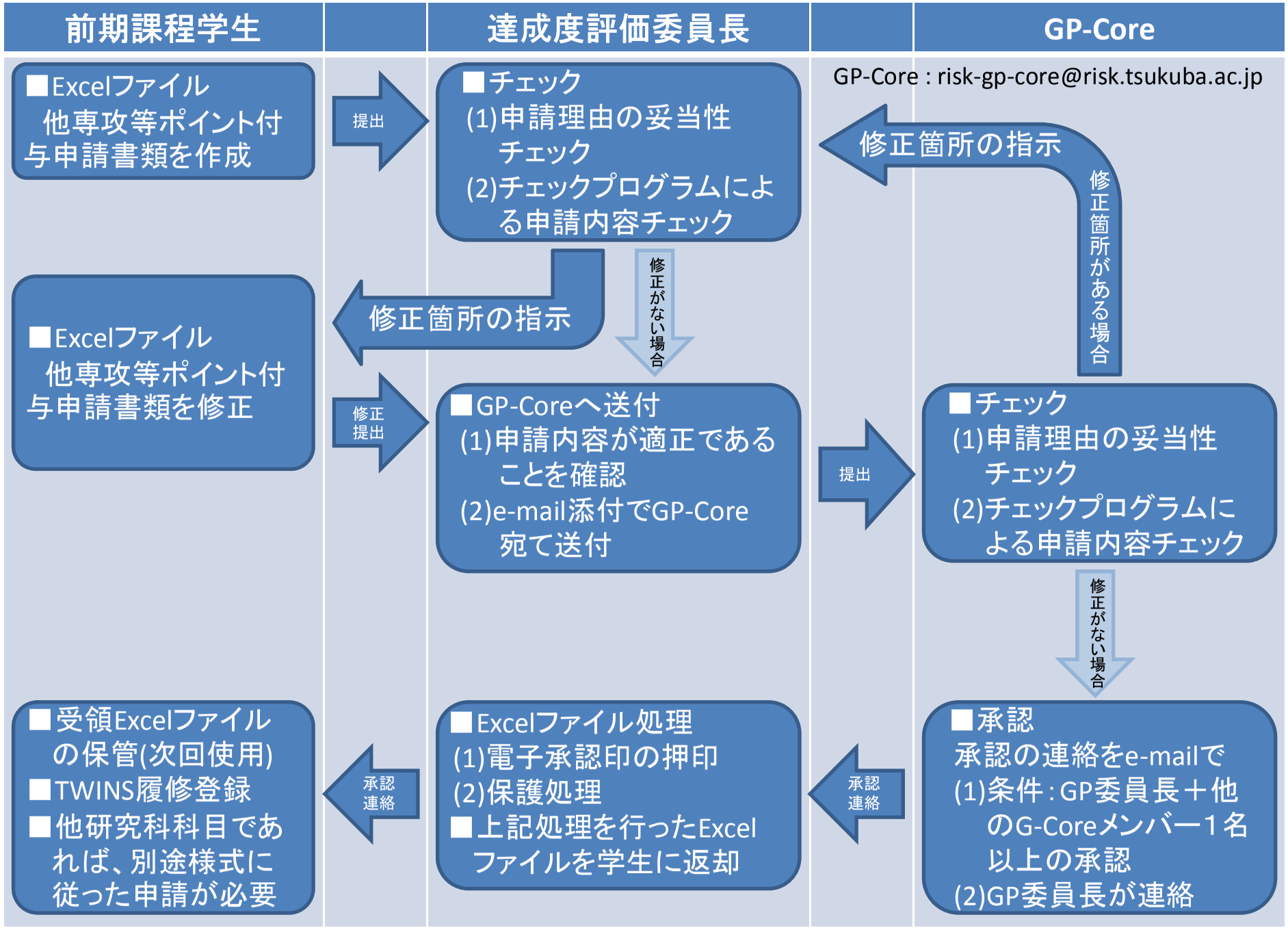
	A	B	C	D	E	F	G	H	I
1	Student's Name					Field	Not Selected	Date	
2									
3			Aquired points as of the 1st Committee						
4		1st Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication	
5			0.0	0.0	0.0	0.0	0.0	0.0	
6		Ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
7									
8			Aquired points as of the 2nd Committee						
9		2nd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication	
10			0	0	0	0	0	0	
11		Ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
12									

4. Materials required by the Achievement Level Evaluation Committee

Name of material	No. of sheets	Target Students
TWINS Personal Academic Results sheet	One	Everyone
Student Portfolio Evidence File	One form	Everyone
Achievement Level Evaluation sheet (self-evaluation sheet)	One set for each member of the committee	Everyone
Course Credit Points sheet	One set for each member of the committee	Master's students
Graphs	One set for each member of the committee	Master's students
Point Application sheet	One set for each member of the committee	Applicants for the Master's program

5. For further information

If you have questions about creating materials, please contact the TA of each field, or see the TA mailing list at risk-gp-ta@risk.tsukuba.ac.jp.


前期課程学生
達成度評価委員長
GP-Core
■Excelファイル
他専攻等ポイント付与申請書類を作成
提出
■チェック
(1)申請理由の妥当性チェック
(2)チェックプログラムによる申請内容チェック
GP-Core : risk-gp-core@risk.tsukuba.ac.jp
修正箇所の指示
修正箇所がある場合
修正箇所の指示
修正がない場合
■Excelファイル
他専攻等ポイント付与申請書類を修正
修正提出
■GP-Coreへ送付
(1)申請内容が適正であることを確認
(2)e-mail添付でGP-Core宛て送付
提出
■チェック
(1)申請理由の妥当性チェック
(2)チェックプログラムによる申請内容チェック
修正がない場合
■受領Excelファイルの保管(次回使用)
■TWINS履修登録
■他研究科科目であれば、別途様式に従った申請が必要
承認連絡
■Excelファイル処理
(1)電子承認印の押印
(2)保護処理
■上記処理を行ったExcelファイルを学生に返却
承認連絡
■承認
承認の連絡をe-mailで
(1)条件：GP委員長＋他のG-Coreメンバー1名以上の承認
(2)GP委員長が連絡

科目番号	大学院共通科目・研究科共通科目	単位数	開講時期	曜時限	ポイント総計	①専門基礎	②関連分野基礎	③現実問題の知識	④広い視野	⑤問題設定から解決まで	⑥プレゼン・コミュニケーション能力	備考
01ZZ101	「分析・操作の対象としての人間」と「人格としての人間」	1	秋A	集中	1		0.4	0.3	0.3			
01ZZ103	応用倫理	1	秋A	集中	1		0.4	0.3	0.3			
01ZZ104	環境倫理学概論	1	秋B	集中	1		0.4	0.3	0.3			
01ZZ105	研究倫理	1	春B	集中	1		0.4	0.3	0.3			
01ZZ106	生命倫理学	1	秋A	集中以外	1		0.4	0.3	0.3			
01ZZ107	企業と技術者の倫理	1	春C	集中	1		0.4	0.3	0.3			
01ZZ201	研究学 -独創的研究を目指して-	1	秋AB	集中以外	1		0.4	0.3	0.3			
01ZZ202	リスクマネジメント序論	1	春C	集中	1		0.4	0.3	0.3			
01ZZ203	知的所有権論	1	秋B	集中	1				1			
01ZZ204	科学技術・学術政策概論	1	春B	集中	1				1			
01ZZ205	研究者のための学術情報流通論	1	春AB	集中	1				1			
01ZZ206	Research Management Skills	1	秋A	集中	1				1			
01ZZ301	先端コミュニケーター・インターンシップ	1	春AB	集中	1				0.5		0.5	
01ZZ304	テクニカルコミュニケーション	1	春A	集中	1				0.5		0.5	
01ZZ305	英語発表	1	春C	集中	1						1	
01ZZ306	科学英語論文ライティング-プラクティス	1	春C	集中	1						1	
01ZZ308	サイエンスコミュニケータ養成実践講座	4	春C夏季休業中	集中	1				0.5		0.5	
01ZZ312	異分野コミュニケーションのためのプレゼンテーションバトル	2	春AB秋AB	集中	1				0.5		0.5	
01ZZ313	Communication Skills Training	1	秋ABC	集中	1				0.5		0.5	
01ZZ314	第一線研究者 教員プレゼンバトル	1	春AB秋AB	集中	1				0.5		0.5	
01ZZ316	サイエンスライティング	1	通年	集中	1						1	
01ZZ318	サイエンスコミュニケーション概論	1	春ABC	集中	1						1	
01ZZ319	サイエンスコミュニケーション特論	1	秋ABC	集中	1						1	
01ZZ320	実践型 科学コミュニケーション・トレーニング	2	通年	集中	2						2	
01ZZ321	グローバル交渉と国際対話—筑波英語模擬国連	2	秋AB	集中	2						2	
01ZZ322	サイエンスコミュニケーション実践論	1	春ABC	集中以外	1						1	
01ZZ323	リスクコミュニケーション入門	1	秋ABC	集中以外	1						1	
01ZZ402	21世紀的中国 —現代中国的多相—	2	春AB	集中以外	1				1			
01ZZ405	Special Preparation for TOEFL iBT	1	秋A	集中	1						1	
01ZZ410	国際研究プロジェクト(受講にあたっては別途協議)	1	通年	集中								
01ZZ411	国際インターンシップ(受講にあたっては別途協議)	1	通年	集中								
01ZZ412	Global Communication Practice	1	通年	集中	1				0.5		0.5	
01ZZ413	国際環境問題と日本外交	1	春B秋A	集中	1				1			
01ZZ414	国際ビジネスと標準化	1	春ABC	集中	1				1			
01ZZ501	教育・研究指導II(教師論)	1	秋ABC	集中	1				1			
01ZZ502	教育・研究指導III(職業としての大学教育)	1	春ABC	集中	1				1			
01ZZ503	「仕事と生活」と男女共同参画-WLB(ワーク・ライフ・バランス)を軸に未来予想図を描こう-	1	夏季休業中	集中	1				1			
01ZZ504	「魅力ある理科教員になるための生物・地学実験」	2	通年	集中	1				1			
01ZZ505	博士のキャリアパス	1	春ABC	集中	1				1			
01ZZ510	世界に挑む産業界・官界トップリーダーによる連続リレー講義:社会基礎学—グローバル人材に不可欠な教養I—	1	春AB	集中	1				1			
01ZZ511	世界に挑む産業界・官界トップリーダーによる連続リレー講義:社会基礎学—グローバル人材に不可欠な教養II—	1	春BC	集中	1				1			
01ZZ512	世界に挑む産業界・官界トップリーダーによる連続リレー講義:社会基礎学—グローバル人材に不可欠な教養III—	1	秋AB	集中	1				1			
01ZZ513	JAPICアドバンストディスカッションコースI-多極化時代への日本の挑戦、そして諸君の挑戦	1	春ABC	集中	1				1			
01ZZ514	JAPICアドバンストディスカッションコースII-コーポレートガバナンス(企業統治)についての事例研究	1	秋AB	集中	1				1			
01ZZ515	JAPICアドバンストディスカッションコースIII-テクノロジーとグローバルで拓く未来	1	秋BC	集中	1				1			
01ZZ517	Introduction to Management	1	秋AB	集中	1				1			
01ZZ519	キャリア形成のためのセルフプロモーション実習	1	春C秋ABC	集中	1						1	
01ZZ520	「仕事と生活」と男女共同参画II-WLB(ワーク・ライフ・バランス)を軸に未来予想図を描こう	1	春季休業中	集中	1				1			
01ZZ521	Career Development for University Students	1	秋ABC	集中	1				1			
01ZZ522	高校における科学コミュニケーション教育	1	春ABC	集中	1						1	
01ZZ523	ワークライフミックス- モーハウスに学ぶパラダイムシフト	1	春ABC	集中	1				1			
01ZZ524	Design/Create Future with Vitae RDF	1	通年	集中	1				1			
01ZZ601	化学物質の安全衛生管理	1	春AB	集中以外	1		0.4	0.3	0.3			
01ZZ602	放射線科学 —その基礎理論と応用—	1	春A	集中	1				1			
01ZZ603	機械工作序論と実習	1	春C夏季休業中	集中	1				1			
01ZZ604	計算科学リテラシー	1	春ABC	集中	1				1			
01ZZ605	計算科学リテラシー Computational Science Literacy	1	秋ABC	集中	1				1			
01ZZ606	計算科学のための高性能並列計算技術(日本語)	1	春ABC	集中	1				1			
01ZZ607	計算科学のための高性能並列計算技術 High Performance Parallel Computing Technology for Computational Sciences	1	秋ABC	集中	1				1			
01ZZ609	Science Mini-tour to Top Research Institutes in Tsukuba Science City	1	秋ABC	集中	1				1			
01ZZ610	環境・エネルギー・経済(3E)概論	1	秋ABC	集中	1		0.4	0.3	0.3			
01ZZ611	生物多様性と地球環境	1	春C	集中	1		0.4	0.3	0.3			
01ZZ612	内部共生と生物進化	1	春ABC	集中	1				1			
01ZZ613	日本の屋根のフィールドに出かけよう	1	通年	集中	1				1			
01ZZ614	海洋生物の世界と海洋環境講座	1	夏季休業中	集中	1				1			
01ZZ615	UT-Top Academist's Lecture	1	春AB	集中以外	1				1			
01ZZ616	パフォーマンス&アーツにみる身体	1	夏季休業中	集中	1				1			
01ZZ617	こころの神経科学	1	夏季休業中	集中	1				1			
01ZZ618	科学的発見と創造性	1	春A	集中	1				1			
01ZZ619	宇宙の歴史	1	秋A	集中	1				1			
01ZZ621	自然災害にどう向き合うか	1	春C	集中以外	1		0.4	0.3	0.3			
01ZZ622	「考える」動物としての人間-東西哲学からの考察	1	秋C春季休業中	集中	1				1			
01ZZ701	「かたち」と「こころ」	1	秋ABC	集中	1				1			
01ZZ702	大学院体育1:つくばマラソン	1	春AB秋AB	集中以外								
01ZZ703	大学院体育2:水泳	1	春AB秋AB	集中以外								
01ZZ704	大学院体育3:バスケットボール	1	春AB秋AB	集中以外								
01ZZ706	大学院体育4:ボディワーク(東洋的身体技法)	1	春AB	集中								
01ZZ707	大学院体育5:スノースポーツ	1	春季休業中	集中								
01ZZ708	身体表現論 —和太鼓の実践を通して—	1	秋ABC	集中								
01ZZ710	大学院生の心身の健康管理	1	秋AB	集中以外								
01ZZ711	大学院体育6:テニス	1	春AB秋AB	集中以外								
01ZZ712	大学院体育7: 器械運動	1	春ABC	集中以外								
01ZZ714	大学院体育9:マリンスポーツ	1	春BC	集中								
01ZZ715	大学院体育10:日本の体育・スポーツ文化	1	春C	集中								
01ZZ717	大学院体育12:ランニングの世界	1	春C	集中以外								

*This is a sample

Point Application Sheet 1 (for Master's Program Students)

Field	Env & Energy Risk	School Year	M2	Student's Name	XXXXXX XXXX	Name of the Chair of Achievement Level Evaluation Committee	XXXXXX XXXX

(1) To receive credits for common courses of the graduate school, common courses of the faculty, or courses of other faculties, departments, etc., you should submit a "Point Application Sheet." Regarding common courses of the graduate school and courses of other faculties, ~~you should also submit "Credits for Courses of Other Faculties" to Academic Service at the Office of Graduate School of Systems and Information Engineering.~~

(2) Applications for credits in common courses of the graduate school and common courses of the faculty: Please arrange credit applications following the instructions in the attached file "Credits in Common Courses of the Graduate School and the Faculty."

(3) For other types of credits not described above: Consult with the Chair of your Achievement Level Evaluation Committee to determine whether the credits apply to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field." After the credits are determined to be applicable to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field," please multiply the number of credits by whatever is applicable below and enter the result as applied points.

1) A: fundamental theory in the major field:(a) Major field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25

2) B: fundamental theory in a related field:(b) Related field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25

In cases where it is thought that neither A) "fundamental theory in the major field" nor B) "fundamental theory of a related field" applies, then the Chair should make an inquiry of the Risk Core Group at the following address in order to determine the applied points: risk-gp-core@risk.tsukuba.ac.jp

(4) Flow of the application:

1) The student sends the entire Excel file "Achievement Level Evaluation Materials" as an attachment in an e-mail to the Chair of the Achievement Level Evaluation Committee.

2) The Chair of the Achievement Level Evaluation Committee checks the contents of the application, then sends a request for approval to the GP Core Mailing List.

3) If the application is approved, the notice from the GP Office and the processed Excel file "Achievement Level Evaluation Materials" are sent by e-mail. If approval has been denied, then the application must be resubmitted.

4) Before the meeting of the Achievement Level Evaluation Committee is held, the student enters his/her grades for the applicable courses (they will be reflected automatically in the Point Sheet).

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
1	Courses of other departm	Universal Enegy Resouces		1.0	0.5	0.5			Application	April 23, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
	01CM423	312	2	Not Selected	2	2.0	I think this lecture is deeply related with my specialty.		1st	April 24, 20xx 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
2	Common courses	Fundamentals of Risk Engineering		0.4	0.3	0.3			Application	April 26, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
	01ZZ008	-	1	ensive course	1	1.0	I want to learn the fundamentals of risk engineering.		1st	April 27, 20xx 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
3	Courses of other departm	Advanced Course of Pattern Recognition		1.0	0.5	0.5			Application	April 26, 20xx	B
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
	01CK404	309	1	intensive cou	2	2.0	I think this lecture is deeply related with my specialty.		1st	April 27, 20xx 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
4	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
5	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
6	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date 達評委員長承認済 専攻長承認済	
Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
7	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date 達評委員長承認済 専攻長承認済	

Total in Application 1 to 7

	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Total Credits of other departments etc.	
Total Points of other departments etc. As of 1st Achievement Level Evaluation Committee	0.0	2.68	1.46	1.46	0.0	0.0	5	Credits
Total Points of other departments etc. As of 2nd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	0	Credits
Total Points of other departments etc. As of 3rd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	0	Credits
Total Points of other departments etc. As of 4th Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	0	Credits

Course Credit Point

Date of Preparation	February 1, 20xx	School Year	M2	Field	Env & Energy Risk	Student's Name	XXXXXX XXXX

Committee Section		4th Committee	aquired credits	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
1st Committee	a	Items of this department	11	3.6	2.18	3.01	3.01	0.0	0.0
	b	Items of other departments etc.	5	0.0	2.68	1.46	1.46	0.0	0.0
	c	Total in the 1st Committee (a+b)	16	3.6	4.86	4.47	4.47	0.0	0.0
2nd Committee	d	Items of this department	17	5.2	2.5	3.35	4.55	3.0	5.4
	e	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	f	Total in the 2nd Committee (c+d+e)	33	8.8	7.36	7.82	9.02	3.0	5.4
3rd Committee	g	Items of this department	5	0.0	2.3	1.15	1.15	0.0	0.0
	h	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	i	Total in the 3rd Committee (f+g+h)	38	8.8	9.66	8.97	10.17	3.0	5.4
4th Committee	j	Items of this department	6	2.4	0.0	1.2	0.0	1.8	1.8
	k	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
Total (a+b+d+e+g+h+j+k)			44	11.2	9.66	10.17	10.17	4.8	7.2
Standard Point				8.0	5.0	6.0	6.0	4.0	6.0
difference form standard point				3.2	4.66	4.17	4.17	0.8	1.2

Item Division	Name of item	Item number	Credits	(1) Major	(2) Related	(3) Real	(4) Broad	(5) Solving	(6) Presen.	Result (1st Comm.)	Result (2nd Comm.)	Result (3rd Comm.)	Result (4th Comm.)
Common	Seminar in Risk Engineering I (till 2010 AY : Seminar in Risk Engineering)	01CF001	1	0.5					0.5		A		
Common	Seminar in Risk Engineering II	01CF002	2	1.0					1.0				A
Common	Research in Risk Engineering I	01CF011	4	1.5		0.5		1.0	1.0		A		
Common	Research in Risk Engineering II	01CF012	4	1.0		1.0		1.5	0.5				A
Common	Research in Risk Engineering II (till 2010AY)		6	2.0		1.0		1.5	1.5				
Common	Group Work in Risk Engineering	01CF021	2				1.5	1.5	3.0		A		
Common	Introduction to Risk Engineering	01CF022	1		0.4	0.3	0.3			A			
Common	Fundamentals of Risk Engineering (till 2009AY : Fundamentals of Risk Security)	01CF023	1		0.4	0.3	0.3				B		
Common	Internship in Risk Engineering	01CF031	1			0.3	0.3	0.4					
Total Risk	Introduction to Soft Computing I	01CF101	2		1.0	0.5	0.5						
Total Risk	Introduction to Soft Computing II	01CF102	2		1.0	0.5	0.5						
Total Risk	Seminar in Soft Computing	01CF103	1		0.5	0.25	0.25				B		
Total Risk	Theory of Stochastic Systems and Its Application	01CF104	2		1.0	0.5	0.5						
Total Risk	Soft Data Analysis (till 2011 AY)	01CF105	2		1.0	0.5	0.5						
Total Risk	Data Mining Engineering	01CF109	2		1.0	0.5	0.5						
Total Risk	Reliability and Safety of Large-Complex Systems	01CF106	2		1.0	0.5	0.5						
Total Risk	Cognitive Risk Analysis	01CF107	2		1.0	0.5	0.5			A			
Total Risk	Integration of Information with Diversity	01CF108	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Authentication Systems	01CF201	2		1.0	0.5	0.5						
Cyber Risk	Introduction to Modern Information Processing and Communication Network	01CF202	2		1.0	0.5	0.5					B	
Cyber Risk	Advanced Modern Information Processing and Communication Network	01CF203	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course in Network Security I	01CF204	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Network Security II	01CF205	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Cyber Risk (till 2009 AY : Advanced Course in Distributed Multimedia Systems)	01CF206	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course on Information Security	01CF207	2		1.0	0.5	0.5					C	
Urban Risk	Urban Risk Management	01CF301	2		1.0	0.5	0.5						
Urban Risk	Risk in Urban Systems	01CF302	2		1.0	0.5	0.5						
Urban Risk	Urban Structural Systems	01CF303	2		1.0	0.5	0.5						
Urban Risk	Urban Risk Communication	01CF304	2		1.0	0.5	0.5				B		
Urban Risk	Urban and Regional Analysis	01CF305	2		1.0	0.5	0.5						
Urban Risk	Seminar in Urban Risk Analysis	01CF306	2		1.0	0.5	0.5						
Env&Energy	Risk Assessment on Energy Systems	01CF401	2	1.0		0.5	0.5			B			
Env&Energy	Lecture on Advanced Energy Theory	01CF402	2	1.0		0.5	0.5			C			
Env&Energy	Advanced Course in Energy Science	01CF403	2	1.0		0.5	0.5			A			
Env&Energy	Seminar in Risk Analysis and Assessment on Energy Systems	01CF404	1	0.5		0.25	0.25				A		
Env&Energy	Risk in Process Systems	01CF405	2	1.0		0.5	0.5				A		
Env&Energy	Advanced Reliability Engineering	01CF406	2	1.0		0.5	0.5				B		
Common	Topics in Risk Engineering in Master's Program (Security)	01CF902	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Remote Sensing)	01CF903	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Human Factors)	01CF904	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Reliability and Safety) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Methdology of Risk Engineering) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program I (2009AY)		1	0.5		0.25	0.25			A			
Common	Topics in Risk Engineering in Master's Program II (2009AY)		1		0.5	0.25	0.25			B			
Common	Topics in Risk Engineering in Master's Program III (2009AY)		1		0.5	0.25	0.25				A		
Common	Topics in Risk Engineering in Master's Program IV (2009AY)		1		0.5	0.25	0.25					B	

Student's Name	XXXXXX XXXX	Field	Env & Energy Risk	Date	Feb. 1, 20xx

Aquired points as of the 1st Committee

1st Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	3.6	4.86	4.47	4.47	0.0	0.0
Ratio	45.0%	97.2%	74.5%	74.5%	0.0%	0.0%

Aquired points as of the 2nd Committee

2nd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.8	7.36	7.82	9.02	3.0	5.4
Ratio	110.0%	147.2%	130.3%	150.3%	75.0%	90.0%

Aquired points as of the 3rd Committee

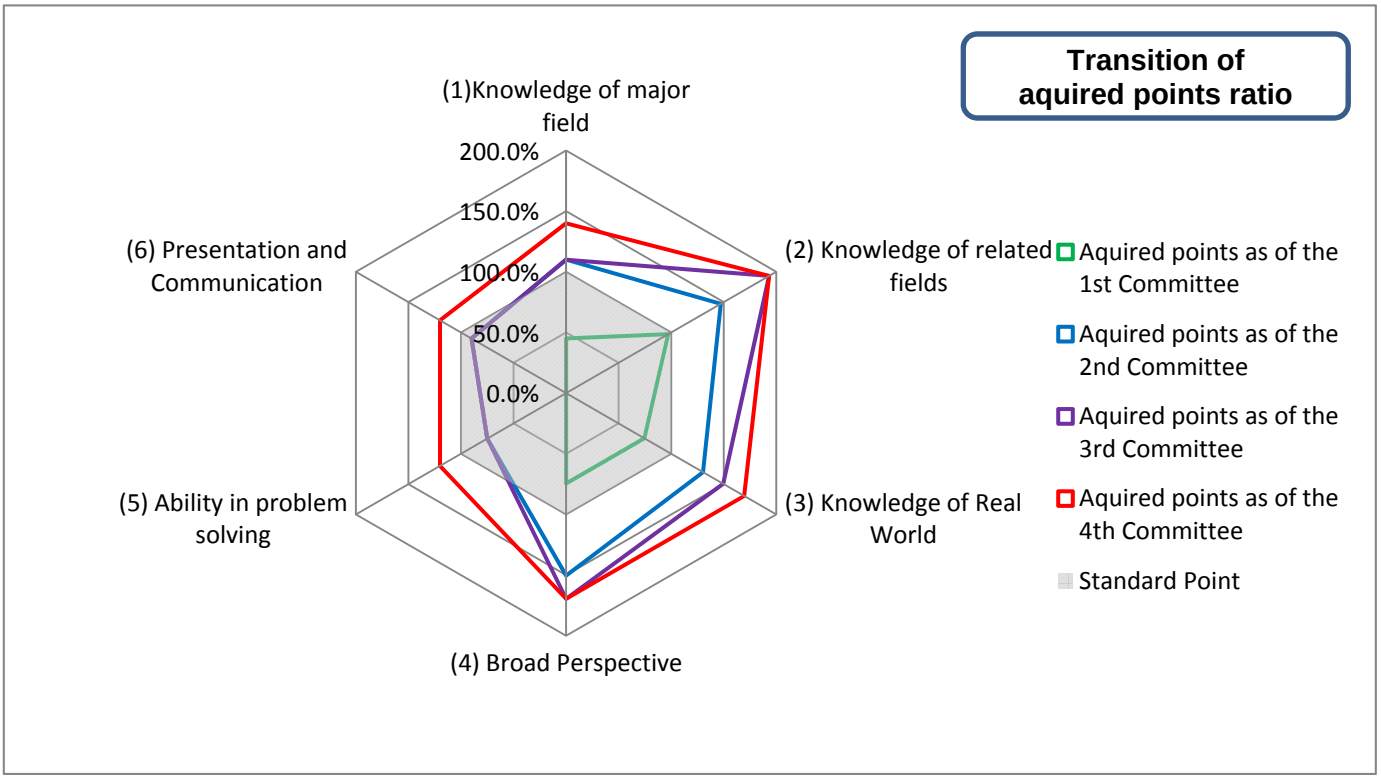
3rd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.8	9.66	8.97	10.17	3.0	5.4
Ratio	110.0%	193.2%	149.5%	169.5%	75.0%	90.0%

Aquired points as of the 4th Committee

4th Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	11.2	9.66	10.17	10.17	4.8	7.2
Ratio	140.0%	193.2%	169.5%	169.5%	120.0%	120.0%

Standard Point

Standard Point	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	5.0	6.0	6.0	4.0	6.0
Ratio	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Point Application Sheet 1 (for Master's Program Students)

Field	Total Risk Management	School Year	M2	Student's Name	XXXXXX XXXX	Name of the Chair of Achievement Level Evaluation Committee	XXXXXX XXXX

(1) To receive credits for common courses of the graduate school, common courses of the faculty, or courses of other faculties, departments, etc., you should submit a "Point Application Sheet." Regarding common courses of the graduate school and courses of other faculties, ~~you should also submit "Credits for Courses of Other Faculties" to Academic Service at the Office of Graduate School of Systems and Information Engineering~~.
(2) Applications for credits in common courses of the graduate school and common courses of the faculty: Please arrange credit applications following the instructions in the attached file "Credits in Common Courses of the Graduate School and the Faculty."
(3) For other types of credits not described above: Consult with the Chair of your Achievement Level Evaluation Committee to determine whether the credits apply to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field." After the credits are determined to be applicable to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field," please multiply the number of credits by whatever is applicable below and enter the result as applied points.
1) A: fundamental theory in the major field:(a) Major field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25
2) B: fundamental theory in a related field:(b) Related field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25
In cases where it is thought that neither A) "fundamental theory in the major field" nor B) "fundamental theory of a related field" applies, then the Chair should make an inquiry of the Risk Core Group at the following address in order to determine the applied points: risk-gp-core@risk.tsukuba.ac.jp
(4) Flow of the application:
1) The student sends the entire Excel file "Achievement Level Evaluation Materials" as an attachment in an e-mail to the Chair of the Achievement Level Evaluation Committee.
2) The Chair of the Achievement Level Evaluation Committee checks the contents of the application, then sends a request for approval to the GP Core Mailing List.
3) If the application is approved, the notice from the GP Office and the processed Excel file "Achievement Level Evaluation Materials" are sent by e-mail. If approval has been denied, then the application must be resubmitted.
4) Before the meeting of the Achievement Level Evaluation Committee is held, the student enters his/her grades for the applicable courses (they will be reflected automatically in the Point Sheet).

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
1	Courses of other departm	Universal Enegy Resouces		1.0	0.5	0.5			Application	April 23, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:	I think this lecture is deeply related with my specialty.	Application Division	approved	
	01CM423	312	2	Not Selected	2	2.0			1st	April 24, 20xx	達評委員長承認済 専攻長承認済
2	Commo n courses	Introduction to Risk Management		0.4	0.3	0.3			Application	April 26, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:	I want to learn the fundamentals of risk engineering.	Application Division	approved	
	01ZZ008	-	1	ensive course	1	1.0			1st	April 27, 20xx	達評委員長承認済 専攻長承認済
3	Courses of other departm	Advanced Course of Pattern Recognition		1.0	0.5	0.5			Application	April 26, 20xx	B
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:	I think this lecture is deeply related with my specialty.	Application Division	approved	
	01CK404	309	1	intensive cou	2	2.0			1st	April 27, 20xx	達評委員長承認済 専攻長承認済
4	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date	達評委員長承認済 専攻長承認済
5	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date	達評委員長承認済 専攻長承認済
6	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date	達評委員長承認済 専攻長承認済
7	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	
			Not Selected	Not Selected		0.0			Not Selected	Approved Date	達評委員長承認済 専攻長承認済

Total in Application 1 to 7		(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation			
	Total Points of other departments etc. As of 1st Achievement Level Evaluation Committee	0.0	2.68	1.46	1.46	0.0	0.0	Total Credits of other departments etc.	5	Credits
	Total Points of other departments etc. As of 2nd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	Total Credits of other departments etc.	0	Credits
	Total Points of other departments etc. As of 3rd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	Total Credits of other departments etc.	0	Credits
	Total Points of other departments etc. As of 4th Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	Total Credits of other departments etc.	0	Credits

Course Credit Point

Date of Preparation	February 1, 20xx	School Year	M2	Field	Total Risk Management	Student's Name	XXXXXX XXXX

Committee Section		4th Committee	aquired credits	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
1st Committee	a	Items of this department	7	3.6	0.48	2.16	2.16	0.0	0.0
	b	Items of other departments etc.	5	0.0	2.68	1.46	1.46	0.0	0.0
	c	Total in the 1st Committee (a+b)	12	3.6	3.16	3.62	3.62	0.0	0.0
2nd Committee	d	Items of this department	11	3.6	1.0	1.7	2.9	3.0	5.4
	e	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	f	Total in the 2nd Committee (c+d+e)	23	7.2	4.16	5.32	6.52	3.0	5.4
3rd Committee	g	Items of this department	6	0.0	3.2	1.6	1.6	0.0	0.0
	h	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	i	Total in the 3rd Committee (f+g+h)	29	7.2	7.36	6.92	8.12	3.0	5.4
4th Committee	j	Items of this department	6	2.4	0.0	1.2	0.0	1.8	1.8
	k	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
Total (a+b+d+e+g+h+j+k)			35	9.6	7.36	8.12	8.12	4.8	7.2
Standard Point				8.0	5.0	6.0	6.0	4.0	6.0
difference form standard point				1.6	2.36	2.12	2.12	0.8	1.2

Item Division	Name of item	Item number	Credits	(1) Major	(2) Related	(3) Real	(4) Broad	(5) Solving	(6) Presen.	Result (1st Comm.)	Result (2nd Comm.)	Result (3rd Comm.)	Result (4th Comm.)
Common	Seminar in Risk Engineering I (till 2010 AY : Seminar in Risk Engineering)	01CF001	1	0.5					0.5		A		
Common	Seminar in Risk Engineering II	01CF002	2	1.0					1.0				A
Common	Research in Risk Engineering I	01CF011	4	1.5		0.5		1.0	1.0		A		
Common	Research in Risk Engineering II	01CF012	4	1.0		1.0		1.5	0.5				A
Common	Research in Risk Engineering II (till 2010AY)		6	2.0		1.0		1.5	1.5				
Common	Group Work in Risk Engineering	01CF021	2				1.5	1.5	3.0		A		
Common	Introduction to Risk Engineering	01CF022	1		0.4	0.3	0.3			A			
Common	Fundamentals of Risk Engineering (till 2009AY : Fundamentals of Risk Security)	01CF023	1		0.4	0.3	0.3						
Common	Internship in Risk Engineering	01CF031	1			0.3	0.3	0.4					
Total Risk	Introduction to Soft Computing I	01CF101	2	1.0		0.5	0.5			A			
Total Risk	Introduction to Soft Computing II	01CF102	2	1.0		0.5	0.5			A			
Total Risk	Seminar in Soft Computing	01CF103	1	0.5		0.25	0.25				A		
Total Risk	Theory of Stochastic Systems and Its Application	01CF104	2	1.0		0.5	0.5						
Total Risk	Soft Data Analysis (till 2011 AY)	01CF105	2	1.0		0.5	0.5						
Total Risk	Data Mining Engineering	01CF109	2	1.0		0.5	0.5						
Total Risk	Reliability and Safety of Large-Complex Systems	01CF106	2	1.0		0.5	0.5						
Total Risk	Cognitive Risk Analysis	01CF107	2	1.0		0.5	0.5			A			
Total Risk	Integration of Information with Diversity	01CF108	2	1.0		0.5	0.5						
Cyber Risk	Advanced Course in Authentication Systems	01CF201	2		1.0	0.5	0.5						
Cyber Risk	Introduction to Modern Information Processing and Communication Network	01CF202	2		1.0	0.5	0.5					A	
Cyber Risk	Advanced Modern Information Processing and Communication Network	01CF203	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course in Network Security I	01CF204	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Network Security II	01CF205	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Cyber Risk (till 2009 AY : Advanced Course in Distributed Multimedia Systems)	01CF206	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course on Information Security	01CF207	2		1.0	0.5	0.5					C	
Urban Risk	Urban Risk Management	01CF301	2		1.0	0.5	0.5						
Urban Risk	Risk in Urban Systems	01CF302	2		1.0	0.5	0.5						
Urban Risk	Urban Structural Systems	01CF303	2		1.0	0.5	0.5						
Urban Risk	Urban Risk Communication	01CF304	2		1.0	0.5	0.5				B		
Urban Risk	Urban and Regional Analysis	01CF305	2		1.0	0.5	0.5						
Urban Risk	Seminar in Urban Risk Analysis	01CF306	2		1.0	0.5	0.5						
Env&Energy	Risk Assessment on Energy Systems	01CF401	2		1.0	0.5	0.5						
Env&Energy	Lecture on Advanced Energy Theory	01CF402	2		1.0	0.5	0.5					A	
Env&Energy	Advanced Course in Energy Science	01CF403	2		1.0	0.5	0.5						
Env&Energy	Seminar in Risk Analysis and Assessment on Energy Systems	01CF404	1		0.5	0.25	0.25						
Env&Energy	Risk in Process Systems	01CF405	2		1.0	0.5	0.5						
Env&Energy	Advanced Reliability Engineering	01CF406	2		1.0	0.5	0.5				D		
Common	Topics in Risk Engineering in Master's Program (Security)	01CF902	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Remote Sensing)	01CF903	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Human Factors)	01CF904	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Reliability and Safety) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Methdology of Risk Engineering) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program I (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program II (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program III (2009AY)		1	0.5		0.25	0.25						
Common	Topics in Risk Engineering in Master's Program IV (2009AY)		1	0.5		0.25	0.25				A		

Graph

Student's Name	XXXXXX XXXX	Field	Total Risk Management	Date	Feb. 1, 20xx

Aquired points as of the 1st Committee

1st Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	3.6	3.16	3.62	3.62	0.0	0.0
Ratio	45.0%	63.2%	60.3%	60.3%	0.0%	0.0%

Aquired points as of the 2nd Committee

2nd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	7.2	4.16	5.32	6.52	3.0	5.4
Ratio	90.0%	83.2%	88.7%	108.7%	75.0%	90.0%

Aquired points as of the 3rd Committee

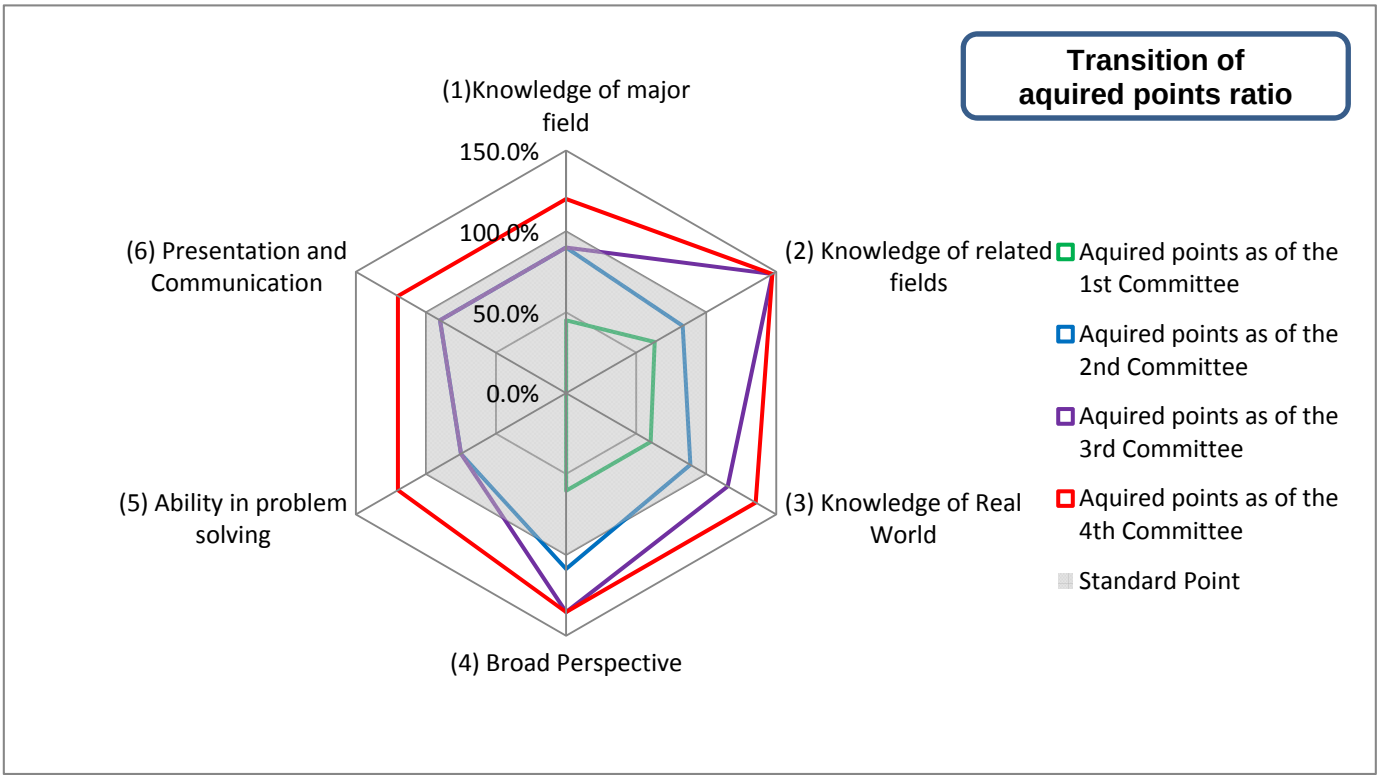
3rd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	7.2	7.36	6.92	8.12	3.0	5.4
Ratio	90.0%	147.2%	115.3%	135.3%	75.0%	90.0%

Aquired points as of the 4th Committee

4th Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	9.6	7.36	8.12	8.12	4.8	7.2
Ratio	120.0%	147.2%	135.3%	135.3%	120.0%	120.0%

Standard Point

Standard Point	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	5.0	6.0	6.0	4.0	6.0
Ratio	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Point Application Sheet 1 (for Master's Program Students)

Field	Cyber Risk	School Year	M2	Student's Name	***** *****	Name of the Chair of Achievement Level Evaluation Committee	***** *****

(1) To receive credits for common courses of the graduate school, common courses of the faculty, or courses of other faculties, departments, etc., you should submit a "Point Application Sheet." Regarding common courses of the graduate school and courses of other faculties, ~~you should also submit "Credits for Courses of Other Faculties" to Academic Service at the Office of Graduate School of Systems and Information Engineering.~~

(2) Applications for credits in common courses of the graduate school and common courses of the faculty: Please arrange credit applications following the instructions in the attached file "Credits in Common Courses of the Graduate School and the Faculty."

(3) For other types of credits not described above: Consult with the Chair of your Achievement Level Evaluation Committee to determine whether the credits apply to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field." After the credits are determined to be applicable to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field," please multiply the number of credits by whatever is applicable below and enter the result as applied points.

1) A: fundamental theory in the major field:(a) Major field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25

2) B: fundamental theory in a related field:(b) Related field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25

In cases where it is thought that neither A) "fundamental theory in the major field" nor B) "fundamental theory of a related field" applies, then the Chair should make an inquiry of the Risk Core Group at the following address in order to determine the applied points: risk-gp-core@risk.tsukuba.ac.jp

(4) Flow of the application:

1) The student sends the entire Excel file "Achievement Level Evaluation Materials" as an attachment in an e-mail to the Chair of the Achievement Level Evaluation Committee.

2) The Chair of the Achievement Level Evaluation Committee checks the contents of the application, then sends a request for approval to the GP Core Mailing List.

3) If the application is approved, the notice from the GP Office and the processed Excel file "Achievement Level Evaluation Materials" are sent by e-mail. If approval has been denied, then the application must be resubmitted.

4) Before the meeting of the Achievement Level Evaluation Committee is held, the student enters his/her grades for the applicable courses (they will be reflected automatically in the Point Sheet).

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
1	Courses of other departments	Information System Design (Computer Science Dep.)		1.0	0.5	0.5			Application	April 23, 20xx	A

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
01CH207	313	2	ensive course	2	2.0	It is important to learn about this topic for my speciality	1st				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
2	Courses of other departments	Security Mechanism (Computer Science Dep.)	1.0		0.5	0.5			Application	April 26, 20xx	B

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
01CH208	313	2	intensive cou	2	2.0	It is strongly related to my speciality	1st				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
3	Com. courses of the graduate	Ethics for Engineers in Business		0.8	0.6	0.6			Application	April 26, 20xx	A

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
01ZZ102	90	1	ensive course	2	2.0	To be engineer who can feedback to society in leaning ethics	3rd				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
4	Not Selected								Application		Not Selected

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
		Not Selected	Not Selected		0.0		Not Selected				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
5	Not Selected								Application		Not Selected

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
		Not Selected	Not Selected		0.0		Not Selected				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
6	Not Selected								Application		Not Selected

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
		Not Selected	Not Selected		0.0		Not Selected				

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
7	Not Selected								Application		Not Selected

Item number	Syllabi Page	Term of course	Time of class	Credits	Total in Point	Appli. Reason:	Application Division	approved	Approved Date	達評委員長承認済	専攻長承認済
		Not Selected	Not Selected		0.0		Not Selected				

Total in Application 1 to 7	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Total Credits of other departments etc.	
Total Points of other departments etc. As of 1st Achievement Level Evaluation Committee	1.0	1.2	1.1	1.1	0.0	0.0	4	Credits
Total Points of other departments etc. As of 2nd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	0	Credits
Total Points of other departments etc. As of 3rd Achievement Level Evaluation Committee	0.0	0.96	0.72	0.72	0.0	0.0	2	Credits
Total Points of other departments etc. As of 4th Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	0	Credits

Course Credit Point

Date of Preparation	February 1st, 20xx	School Year	M2	Field	Cyber Risk	Student's Name	***** *****

Committee Section		4th Committee	aquired credits	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
1st Committee	a	Items of this department	19	5.0	4.52	4.94	4.94	0.0	0.0
	b	Items of other departments etc.	4	1.0	1.2	1.1	1.1	0.0	0.0
	c	Total in the 1st Committee (a+b)	23	6.0	5.72	6.04	6.04	0.0	0.0
2nd Committee	d	Items of this department	10	2.4	0.8	1.36	2.26	3.18	4.8
	e	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	f	Total in the 2nd Committee (c+d+e)	33	8.4	6.52	7.4	8.3	3.18	4.8
3rd Committee	g	Items of this department	0	0.0	0.0	0.0	0.0	0.0	0.0
	h	Items of other departments etc.	2	0.0	0.96	0.72	0.72	0.0	0.0
	i	Total in the 3rd Committee (f+g+h)	35	8.4	7.48	8.12	9.02	3.18	4.8
4th Committee	j	Items of this department	0	0.0	0.0	0.0	0.0	0.0	0.0
	k	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
Total (a+b+d+e+g+h+j+k)			35	8.4	7.48	8.12	9.02	3.18	4.8
Standard Point				8.0	5.0	6.0	6.0	4.0	6.0
difference form standard point				0.4	2.48	2.12	3.02	-0.82	-1.20

Item Division	Name of item	Item number	Credits	(1) Major	(2) Related	(3) Real	(4) Broad	(5) Solving	(6) Presen.	Result (1st Comm.)	Result (2nd Comm.)	Result (3rd Comm.)	Result (4th Comm.)
Common	Seminar in Risk Engineering I (till 2010 AY : Seminar in Risk Engineering)	01CF001	1	0.5					0.5		A		
Common	Seminar in Risk Engineering II	01CF002	2	1.0					1.0				
Common	Research in Risk Engineering I	01CF011	4	1.5		0.5		1.0	1.0		A		
Common	Research in Risk Engineering II	01CF012	4	1.0		1.0		1.5	0.5				
Common	Research in Risk Engineering II (till 2010AY)		6	2.0		1.0		1.5	1.5				
Common	Group Work in Risk Engineering	01CF021	2				1.5	1.5	3.0		B		
Common	Introduction to Risk Engineering	01CF022	1		0.4	0.3	0.3			B			
Common	Fundamentals of Risk Engineering (till 2009AY : Fundamentals of Risk Security)	01CF023	1		0.4	0.3	0.3			C			
Common	Internship in Risk Engineering	01CF031	1			0.3	0.3	0.4			A		
Total Risk	Introduction to Soft Computing I	01CF101	2		1.0	0.5	0.5			B			
Total Risk	Introduction to Soft Computing II	01CF102	2		1.0	0.5	0.5			B			
Total Risk	Seminar in Soft Computing	01CF103	1		0.5	0.25	0.25						
Total Risk	Theory of Stochastic Systems and Its Application	01CF104	2		1.0	0.5	0.5			C			
Total Risk	Soft Data Analysis (till 2011 AY)	01CF105	2		1.0	0.5	0.5						
Total Risk	Data Mining Engineering	01CF109	2		1.0	0.5	0.5						
Total Risk	Reliability and Safety of Large-Complex Systems	01CF106	2		1.0	0.5	0.5						
Total Risk	Cognitive Risk Analysis	01CF107	2		1.0	0.5	0.5						
Total Risk	Integration of Information with Diversity	01CF108	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Authentication Systems	01CF201	2	1.0		0.5	0.5			A			
Cyber Risk	Introduction to Modern Information Processing and Communication Network	01CF202	2	1.0		0.5	0.5			A			
Cyber Risk	Advanced Modern Information Processing and Communication Network	01CF203	1	0.5		0.25	0.25						
Cyber Risk	Advanced Course in Network Security I	01CF204	2	1.0		0.5	0.5						
Cyber Risk	Advanced Course in Network Security II	01CF205	2	1.0		0.5	0.5			B			
Cyber Risk	Advanced Course in Cyber Risk (till 2009 AY : Advanced Course in Distributed Multimedia Systems)	01CF206	1	0.5		0.25	0.25			A			
Cyber Risk	Advanced Course on Information Security	01CF207	2	1.0		0.5	0.5			B			
Urban Risk	Urban Risk Management	01CF301	2		1.0	0.5	0.5						
Urban Risk	Risk in Urban Systems	01CF302	2		1.0	0.5	0.5						
Urban Risk	Urban Structural Systems	01CF303	2		1.0	0.5	0.5						
Urban Risk	Urban Risk Communication	01CF304	2		1.0	0.5	0.5				C		
Urban Risk	Urban and Regional Analysis	01CF305	2		1.0	0.5	0.5						
Urban Risk	Seminar in Urban Risk Analysis	01CF306	2		1.0	0.5	0.5						
Env&Energy	Risk Assessment on Energy Systems	01CF401	2		1.0	0.5	0.5						
Env&Energy	Lecture on Advanced Energy Theory	01CF402	2		1.0	0.5	0.5			B			
Env&Energy	Advanced Course in Energy Science	01CF403	2		1.0	0.5	0.5				D		
Env&Energy	Seminar in Risk Analysis and Assessment on Energy Systems	01CF404	1		0.5	0.25	0.25						
Env&Energy	Risk in Process Systems	01CF405	2		1.0	0.5	0.5						
Env&Energy	Advanced Reliability Engineering	01CF406	2		1.0	0.5	0.5						
Common	Topics in Risk Engineering in Master's Program (Security)	01CF902	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Remote Sensing)	01CF903	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Human Factors)	01CF904	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Reliability and Safety) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Methdology of Risk Engineering) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program I (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program II (2009AY)		1	0.5		0.25	0.25						
Common	Topics in Risk Engineering in Master's Program III (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program IV (2009AY)		1		0.5	0.25	0.25						

Graph

Student's Name	***** *****	Field	Cyber Risk	Date	Feb. 1st, 20xx

Aquired points as of the 1st Committee

1st Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	6.0	5.72	6.04	6.04	0.0	0.0
Ratio	75.0%	114.4%	100.7%	100.7%	0.0%	0.0%

Aquired points as of the 2nd Committee

2nd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.4	6.52	7.4	8.3	3.18	4.8
Ratio	105.0%	130.4%	123.3%	138.3%	79.5%	80.0%

Aquired points as of the 3rd Committee

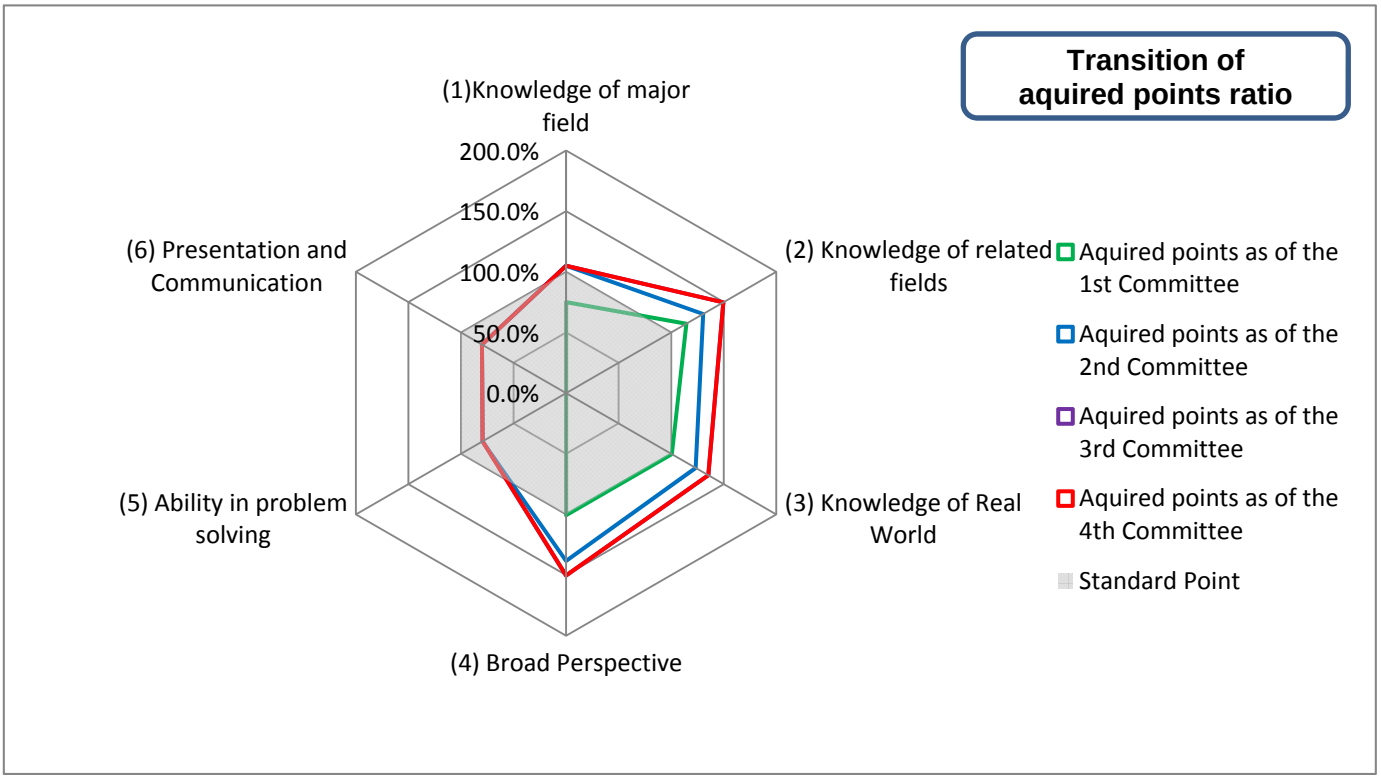
3rd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.4	7.48	8.12	9.02	3.18	4.8
Ratio	105.0%	149.6%	135.3%	150.3%	79.5%	80.0%

Aquired points as of the 4th Committee

4th Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.4	7.48	8.12	9.02	3.18	4.8
Ratio	105.0%	149.6%	135.3%	150.3%	79.5%	80.0%

Standard Point

Standard Point	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	5.0	6.0	6.0	4.0	6.0
Ratio	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Point Application Sheet 1 (for Master's Program Students)

Field	Urban Risk	School Year	M2	Student's Name	●● ●●	Name of the Chair of Achievement Level Evaluation Committee	○○ ○○

(1) To receive credits for common courses of the graduate school, common courses of the faculty, or courses of other faculties, departments, etc., you should submit a "Point Application Sheet." Regarding common courses of the graduate school and courses of other faculties, ~~you should also submit "Credits for Courses of Other Faculties" to Academic Service at the Office of Graduate School of Systems and Information Engineering~~.
(2) Applications for credits in common courses of the graduate school and common courses of the faculty: Please arrange credit applications following the instructions in the attached file "Credits in Common Courses of the Graduate School and the Faculty."
(3) For other types of credits not described above: Consult with the Chair of your Achievement Level Evaluation Committee to determine whether the credits apply to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field." After the credits are determined to be applicable to either A) "fundamental theory in the major field" or B) "fundamental theory of a related field," please multiply the number of credits by whatever is applicable below and enter the result as applied points.
1) A: fundamental theory in the major field:(a) Major field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25
2) B: fundamental theory in a related field:(b) Related field: 0.5, (c) Understanding of real world problems: 0.25, (d) Ability to approach problems from a broad perspective: 0.25
In cases where it is thought that neither A) "fundamental theory in the major field" nor B) "fundamental theory of a related field" applies, then the Chair should make an inquiry of the Risk Core Group at the following address in order to determine the applied points: risk-gp-core@risk.tsukuba.ac.jp
(4) Flow of the application:
1) The student sends the entire Excel file "Achievement Level Evaluation Materials" as an attachment in an e-mail to the Chair of the Achievement Level Evaluation Committee.
2) The Chair of the Achievement Level Evaluation Committee checks the contents of the application, then sends a request for approval to the GP Core Mailing List.
3) If the application is approved, the notice from the GP Office and the processed Excel file "Achievement Level Evaluation Materials" are sent by e-mail. If approval has been denied, then the application must be resubmitted.
4) Before the meeting of the Achievement Level Evaluation Committee is held, the student enters his/her grades for the applicable courses (they will be reflected automatically in the Point Sheet).

Application	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
1	Courses of other departments	Spatial Information Science (Dept. of Social System Engineering)		1.0	0.5	0.5			Application	April 23, 20xx	B
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
	01CB321	P287	1	tensive c	2	2.0	I think this lecture is deeply related with my speciality.		1st	達評委員長承認済	専攻長承認済
2	Courses of other departments	Special Lecture in Urban Planning I (Dept. of Social System Engineering)		0.5	0.25	0.25			Application	April 26, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
	01CB437	P288	ot Select	nsive cou	1	1.0	I think this lecture is deeply related with my speciality.		1st	達評委員長承認済	専攻長承認済
3	Courses of other departments	Special Lecture in Urban Planning II (Dept. of Social System Engineering)		0.5	0.25	0.25			Application	April 27, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
	01CB438	P288	ot Select	nsive cou	1	1.0	I think this lecture is deeply related with my speciality.		3rd	達評委員長承認済	専攻長承認済
4	Courses of other departments	Special Lecture in MPP IV (Dept. of Business and Policy Science)		0.5	0.25	0.25			Application	April 27, 20xx	A
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
	01CD274	P294	1	ensive course	1	1.0	I think this lecture is deeply related with my speciality.		3rd	達評委員長承認済	専攻長承認済
5	Com. courses of the graduate	Scientific Writing in English-Practice						1.0	Application	April 27, 20xx	C
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
	01ZZ017	—	1	ensive course	1	1.0	I want to gain an understanding of English writing.		3rd	達評委員長承認済	専攻長承認済
6	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
			Not Selected	Not Selected		0.0			Not Selected	達評委員長承認済	専攻長承認済
7	Section Selection	Name of desired item	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation	Application	Date of Application	Results
	Not Selected								Application		Not Selected
	tem number	Syllabi Page	Term of course	Time of class	Credits	Total in Poin	Appli. Reason:		Application Division	approved	Approved Date
			Not Selected	Not Selected		0.0			Not Selected	達評委員長承認済	専攻長承認済

Total in Application 1 to 7

	(1)Major field	(2)Related field	(3)Real World	(4)Broad Pers.	(5)Solving abil.	(6)Presentation			
Total Points of other departments etc. As of 1st Achievement Level Evaluation Committee	0.0	1.6	0.8	0.8	0.0	0.0	Total Credits of other departments etc.	3	Credits
Total Points of other departments etc. As of 2nd Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	Total Credits of other departments etc.	0	Credits
Total Points of other departments etc. As of 3rd Achievement Level Evaluation Committee	0.0	1.2	0.6	0.6	0.0	0.8	Total Credits of other departments etc.	3	Credits
Total Points of other departments etc. As of 4th Achievement Level Evaluation Committee	0.0	0.0	0.0	0.0	0.0	0.0	Total Credits of other departments etc.	0	Credits

Course Credit Point

Date of Preparation	February 1, 20xx	School Year	M2	Field	Urban Risk	Student's Name	●● ●●

Committee Section		4th Committee	aquired credits	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
1st Committee	a	Items of this department	15	3.4	4.56	4.22	4.22	0.0	0.0
	b	Items of other departments etc.	3	0.0	1.6	0.8	0.8	0.0	0.0
	c	Total in the 1st Committee (a+b)	18	3.4	6.16	5.02	5.02	0.0	0.0
2nd Committee	d	Items of this department	11	4.6	0.0	1.7	2.9	3.0	5.4
	e	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
	f	Total in the 2nd Committee (c+d+e)	29	8.0	6.16	6.72	7.92	3.0	5.4
3rd Committee	g	Items of this department	0	0.0	0.0	0.0	0.0	0.0	0.0
	h	Items of other departments etc.	3	0.0	1.2	0.6	0.6	0.0	0.8
	i	Total in the 3rd Committee (f+g+h)	32	8.0	7.36	7.32	8.52	3.0	6.2
4th Committee	j	Items of this department	6	2.4	0.0	1.2	0.0	1.8	1.8
	k	Items of other departments etc.	0	0.0	0.0	0.0	0.0	0.0	0.0
Total (a+b+d+e+g+h+j+k)			38	10.4	7.36	8.52	8.52	4.8	8.0
Standard Point				8.0	5.0	6.0	6.0	4.0	6.0
difference form standard point				2.4	2.36	2.52	2.52	0.8	2.0

Item Division	Name of item	Item number	Credits	(1) Major	(2) Related	(3) Real	(4) Broad	(5) Solving	(6) Presen.	Result (1st Comm.)	Result (2nd Comm.)	Result (3rd Comm.)	Result (4th Comm.)
Common	Seminar in Risk Engineering I (till 2010 AY : Seminar in Risk Engineering)	01CF001	1	0.5					0.5		A		
Common	Seminar in Risk Engineering II	01CF002	2	1.0					1.0				A
Common	Research in Risk Engineering I	01CF011	4	1.5		0.5		1.0	1.0		A		
Common	Research in Risk Engineering II	01CF012	4	1.0		1.0		1.5	0.5				A
Common	Research in Risk Engineering II (till 2010AY)		6	2.0		1.0		1.5	1.5				
Common	Group Work in Risk Engineering	01CF021	2				1.5	1.5	3.0		A		
Common	Introduction to Risk Engineering	01CF022	1		0.4	0.3	0.3			A			
Common	Fundamentals of Risk Engineering (till 2009AY : Fundamentals of Risk Security)	01CF023	1		0.4	0.3	0.3			A			
Common	Internship in Risk Engineering	01CF031	1			0.3	0.3	0.4					
Total Risk	Introduction to Soft Computing I	01CF101	2		1.0	0.5	0.5			A			
Total Risk	Introduction to Soft Computing II	01CF102	2		1.0	0.5	0.5						
Total Risk	Seminar in Soft Computing	01CF103	1		0.5	0.25	0.25						
Total Risk	Theory of Stochastic Systems and Its Application	01CF104	2		1.0	0.5	0.5			D			
Total Risk	Soft Data Analysis (till 2011 AY)	01CF105	2		1.0	0.5	0.5						
Total Risk	Data Mining Engineering	01CF109	2		1.0	0.5	0.5						
Total Risk	Reliability and Safety of Large-Complex Systems	01CF106	2		1.0	0.5	0.5						
Total Risk	Cognitive Risk Analysis	01CF107	2		1.0	0.5	0.5			B			
Total Risk	Integration of Information with Diversity	01CF108	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Authentication Systems	01CF201	2		1.0	0.5	0.5			C			
Cyber Risk	Introduction to Modern Information Processing and Communication Network	01CF202	2		1.0	0.5	0.5						
Cyber Risk	Advanced Modern Information Processing and Communication Network	01CF203	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course in Network Security I	01CF204	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Network Security II	01CF205	2		1.0	0.5	0.5						
Cyber Risk	Advanced Course in Cyber Risk (till 2009 AY : Advanced Course in Distributed Multimedia Systems)	01CF206	1		0.5	0.25	0.25						
Cyber Risk	Advanced Course on Information Security	01CF207	2		1.0	0.5	0.5						
Urban Risk	Urban Risk Management	01CF301	2	1.0		0.5	0.5			A			
Urban Risk	Risk in Urban Systems	01CF302	2	1.0		0.5	0.5			A			
Urban Risk	Urban Structural Systems	01CF303	2	1.0		0.5	0.5						
Urban Risk	Urban Risk Communication	01CF304	2	1.0		0.5	0.5				A		
Urban Risk	Urban and Regional Analysis	01CF305	2	1.0		0.5	0.5			B			
Urban Risk	Seminar in Urban Risk Analysis	01CF306	2	1.0		0.5	0.5				B		
Env&Energy	Risk Assessment on Energy Systems	01CF401	2		1.0	0.5	0.5						
Env&Energy	Lecture on Advanced Energy Theory	01CF402	2		1.0	0.5	0.5						
Env&Energy	Advanced Course in Energy Science	01CF403	2		1.0	0.5	0.5						
Env&Energy	Seminar in Risk Analysis and Assessment on Energy Systems	01CF404	1		0.5	0.25	0.25						
Env&Energy	Risk in Process Systems	01CF405	2		1.0	0.5	0.5						
Env&Energy	Advanced Reliability Engineering	01CF406	2		1.0	0.5	0.5						
Common	Topics in Risk Engineering in Master's Program (Security)	01CF902	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Remote Sensing)	01CF903	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Human Factors)	01CF904	1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Reliability and Safety) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program (Methdology of Risk Engineering) (2010AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program I (2009AY)		1		0.5	0.25	0.25			A			
Common	Topics in Risk Engineering in Master's Program II (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program III (2009AY)		1		0.5	0.25	0.25						
Common	Topics in Risk Engineering in Master's Program IV (2009AY)		1		0.5	0.25	0.25						

Graph

Student's Name	●● ●●	Field	Urban Risk	Date	February 4, 20xx

Aquired points as of the 1st Committee

1st Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	3.4	6.16	5.02	5.02	0.0	0.0
Ratio	42.5%	123.2%	83.7%	83.7%	0.0%	0.0%

Aquired points as of the 2nd Committee

2nd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	6.16	6.72	7.92	3.0	5.4
Ratio	100.0%	123.2%	112.0%	132.0%	75.0%	90.0%

Aquired points as of the 3rd Committee

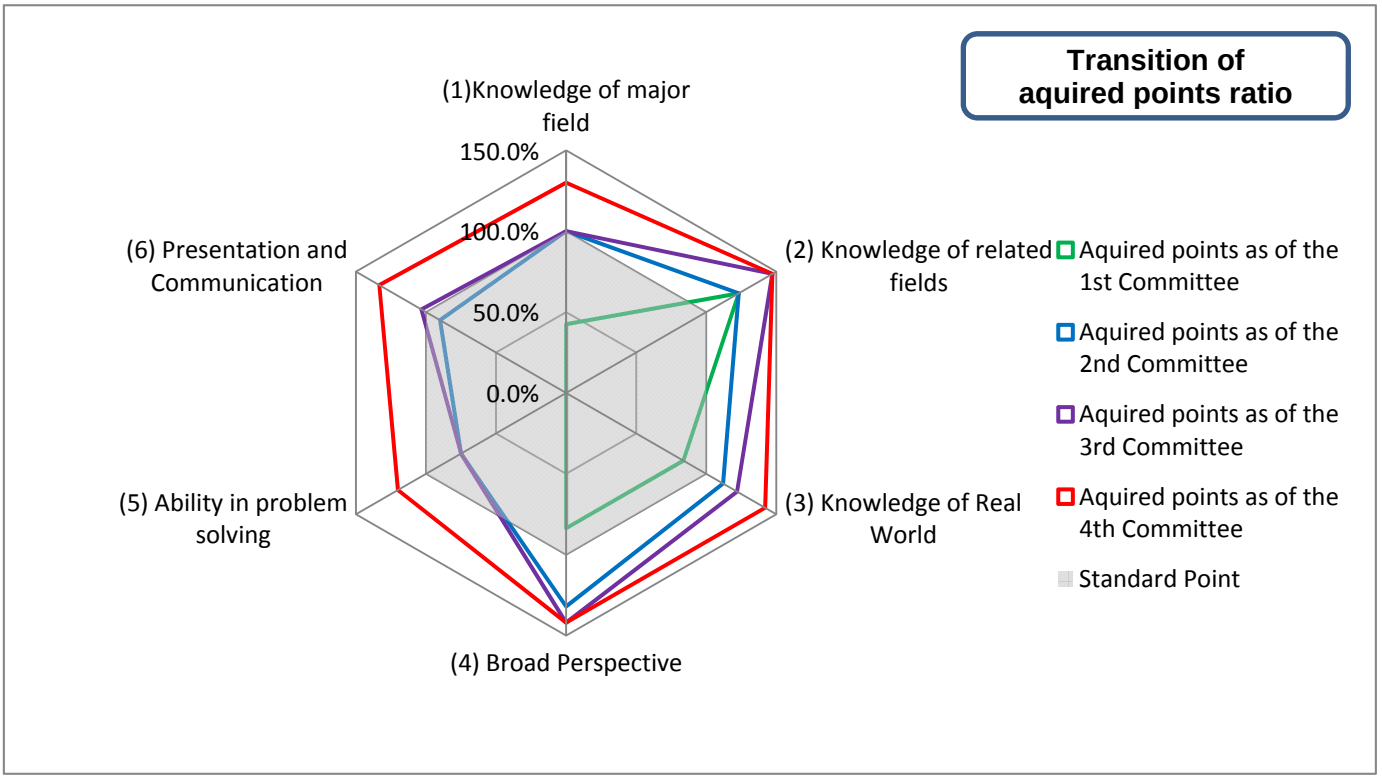
3rd Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	7.36	7.32	8.52	3.0	6.2
Ratio	100.0%	147.2%	122.0%	142.0%	75.0%	103.3%

Aquired points as of the 4th Committee

4th Committee	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	10.4	7.36	8.52	8.52	4.8	8.0
Ratio	130.0%	147.2%	142.0%	142.0%	120.0%	133.3%

Standard Point

Standard Point	(1)Knowledge of major field	(2) Knowledge of related fields	(3) Knowledge of Real World	(4) Broad Perspective	(5) Ability in problem solving	(6) Presentation and Communication
	8.0	5.0	6.0	6.0	4.0	6.0
Ratio	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



6 Basic philosophy of the Student Achievement Assessment System

Arrangement for the Student Achievement Assessment in the Master's Program

1. Implementation and approval of the student achievement assessment with the Student Achievement Assessment Committee

1) The Student Achievement Assessment Committee

In order to assess the student achievement, a Student Achievement Assessment Committee is organized by the department for each student.

2) Implementing and approving the achievement assessment

The Student Achievement Assessment is done by the Student Achievement Assessment Committee, and is approved by the chair of the Department.

3) Committee members

Each Student Achievement Assessment Committee comprises a chair of the committee and other 2 or 3 committee members.

2. The role of the student achievement assessment in completing the program

The achievement assessment is treated as part of the final examination that is given in conjunction with the Master's thesis defense. In order to pass the final examination, in most cases it is necessary to have an affirmative result for all items of the achievement assessment.

3. Decision for approval or disapproval of the student achievement at the final examination

The decision for approval or disapproval will be made, by the department, based on the evaluation results of the written self-assessment described in clause 4.

4. Department's evaluation of student's self-assessment of the achievement

1) The self-assessment of achievements is a report written by the students themselves to describe their academic achievements that may not be measured by coursework alone. Within the written self-assessment, a study plan based on subject points (see clause 5 below) must be undertaken while referring to the number of acquired course points. In addition, it is necessary to provide the following two types of academic evidence to support the academic status:-

(a) Academic materials created during the course of academic work, such as study notes, research reports, paper manuscripts, and so on.

(b) Student portfolio that summarizes the student's academic status for each month.

2) In order for students to pass the final examination, all qualification items in the self-assessment sheet have attained the level for "completing the Master's program", and they must be approved by the Student Achievement Assessment Committee.

5. Course Credit points

As explained below, it is advisable to acquire the standard number of points for each student's achievement's attributes by taking common courses and major courses. Points are calculated based on the "Table of Corresponding Points for Course Assessment Items" listed in Appendix d. However, the point table can be modified if the Achievement Assessment Committee approves.

1) Points for major courses
For each major course, the number of credits is equivalent to the total number of points, and the points are assigned to one or more student achievement assessment's attributes. The assignment of points is determined by the major department as it considers the status of each field and research group. A's are given a point score of 1.2, B's are given a score of 1, and C's are given a score of 0.8.

2) Points for common courses
In most cases, points for shared courses are set according to Appendix d. A's are given a point score of 1.2, B's are given a score of 1, and C's are given a score of 0.8.

3) Standard points for each qualification item
It would be advisable to acquire the following total points for major and shared courses:-

(a) Knowledge of fundamental theory in the major field,	8 points
(b) Knowledge of fundamental theory of related fields,	5 points
(c) Understanding of real world problems,	6 points
(d) Ability in recognizing problems from a broad perspective,	6 points
(e) Ability in problem solving from objectives to solutions,	4 points
(f) Presentation and communication skills	6 points

4) Points for common graduate courses, common courses for Graduate School of Systems and Information Engineering, other Graduate School courses, other major department courses, special lectures, etc.
For courses not listed in Appendices c and d, the point weighting is the same as for major courses, that is, the number of credits = the total number of points, and grades of A, B and C are given point scores of 1.2, 1.0, and 0.8, respectively. However, assigning the points to student's achievement attributes is done after consulting with the academic supervisor(s). A written explanation for the reason to change the assignment should be submitted to the chair of the major department through the Achievement

Assessment Committee. If it is approved by the chair of the department, then those acquired course credits can be calculated and assigned as points for qualification items.

6. Additional Subject Assigned by Student Achievement Assessment Committee to Fulfil the Minimum Criteria of Student Achievement Assessment

Before the final examination, a number of achievement assessments are made within the period specified by the Department. For students who appear that they will not reach their department's level of achievement before the final examination due to problems with the required courses and/or the self-assessments, the Achievement Assessment Committee can assign additional subjects through the academic supervisor. The student then can complete and submit the additional subject(s), etc., to get an improved assessment and have his/her assessment points increased.

7. Special points in the achievement assessment

For some students who have exceptional results, the academic advisor can send an application to the Achievement Assessment Committee for additional points. If accepted, an additional number of points for the achievement assessment can be awarded by the chair of the Department.

8. Other Utilization of Student Achievement Assessment Point

The points acquired from the achievement assessment can be used for student recognition awards and so on.

9. This arrangement will apply to students who enter the program in the 2008 academic year and later.

10. The modification of this arrangement is subject to the approval by the department of Risk Engineering.

Arrangement for the Student Achievement Assessment in the Doctoral Program

1. Implementation and Approval of the student achievement assessment with the Achievement Assessment Committee

1) The Achievement Assessment Committee
   In order to assess the student achievement, a Student Achievement Assessment Committee is organized by the department for each student.

2) Implementation and Approval of the student achievement assessment
   The Student Achievement Assessment is done by the Student Achievement Assessment Committee, and is approved by the chair of the Department.

3) Committee members
   Each Student Achievement Assessment Committee consists of the chair of the committee and other 2 or 3 committee members.

2. The role of the achievement assessment in completing the program

The achievement assessment is treated as part of the final examination that is given in conjunction with the doctor's thesis defense. In order to pass the final examination, in most cases it is necessary to have an affirmative result for all items of the achievement assessment.

3. Decision for approval or disapproval of the student achievement at the final examination

The decision for approval or disapproval will be made, by the department, based on the evaluation results of the written self-assessment described in clause 4.

4. Department's evaluation of student's self-assessment of the achievement

1) The self-assessment of achievements is a report written by the students themselves to describe their academic achievements that may not be measured by coursework alone. In addition, it is necessary to provide the following two types of academic evidence to support the academic status:-

   (a) Academic materials created during the course of academic work, such as study notes, research reports, paper manuscripts, and so on.

(b) Student portfolio that summarizes the student's academic status for each month. (Global COE students are exempt from creating this portfolio.)

2) In order for students to pass the final examination, all qualification items in the self-assessment sheet have attained the level for "completing the Doctoral program", and they must be approved by the Student Achievement Assessment Committee.

5. Additional Subject Assigned by Student Achievement Assessment Committee to Fulfil the Minimum Criteria of Student Achievement Assessment

Before the final examination, a number of achievement assessments are made within the period specified by the Department. For students who appear that they will not reach their department's level of achievement before the final examination due to problems with the required courses and/or the self-assessments, the Achievement Assessment Committee can assign additional subjects through the academic supervisor. The student then can complete and submit the additional subject(s), etc., to get an improved assessment and have his/her assessment points increased.

6. Use of the student's achievement assessment

The student's achievement assessment can be used for student recognition awards and so on.

7. The Department's achievement assessment for students in the early completion program

The achievement of students in the early completion program is evaluated within the framework specified by the program. The assessment done in the early completion program and the regular assessment done in the department are compatible to each other.

8. This arrangement will apply to students who enter the program in the 2008 academic year and later.

9. The modification of this arrangement is subject to the approval by the department of Risk Engineering.

Student Achievement Assessment Standards for Self-Assessment

1. Master's program achievement assessment for the written self-assessment

When acquired the courses points, students should make a comprehensive self-assessment of each of the qualification items using the contents of their study programs and academic evidence. Students can also include the contents of their studies that they have done on their own. The standards of achievements for reaching the level for completing the Master's program are as follows:-

1) Evidence exists of academic work for each course.

2) An appropriate study plan for obtaining enough courses points has been undertaken. This should be clearly shown by comparing acquired course points and required course points in the written self-assessment.

Please note that for each qualification item, it is advisable to make a total assessment of related items, even if the courses are different.

2. Doctoral program achievement assessment for the written self-assessment

The standards for determining whether or not the level of achievement is at the level for completing the Doctoral program differs depending on the qualification item.

1) For scientific research results:
   The standard shall be based on fulfilling the number of publicly released papers determined as a standard for writing the Doctoral dissertation.

2) For knowledge of fundamental theory in the major field:
   The standard shall be based on fulfilling the number of publicly released papers and acquiring the theoretical base for that purpose.

3) For knowledge of fundamental theory of related fields:
   For one or more acquired course credits for the applicable item or, mainly the Research in Risk Engineering in the Doctoral program and the Advanced Seminar of Risk Engineering in the Doctoral program, a description shall be made based on the applicable academic evidence. If an applicable course has not been taken, then the equivalent of one or more credits of study time is required.

4) For the ability in recognizing problems from a broad perspective, ability in problem solving from objectives to solutions, and understanding of real-world problems:
   The standards are the same as in 3) above

5) For presentation and communication skills:

The standard is based on one or more acquired course credits for the applicable item. Alternatively, if there is an equivalent consisting of at least 3 research presentations in a 3-year period, the standard is based on discussion in the course of Research in Risk Engineering in the Doctoral program, etc.

6) For ability to contribute to international professional societies in the major field:
The standard is based on at least 3 presentations made in a 3-year period in a foreign language, or the equivalent in international experience.

7) For 3) – 5) above, the student can include experience as a TA or RA, assisting with group work, and experience providing assistance to students in a research laboratory.

Educational Goals and Method of Study in the Department of Risk Engineering

1. Educational Goals

As the information networks and other vast systems of today become more widespread, they will wield greater influence and pose new challenges to our security. The aim of the department of Risk Engineering is to provide an environment that prepares students with the high level technical expertise and ability necessary to use an engineering-based approach to identify risks and so play a valuable role in society.

Our overall goal is to prepare the students with the knowledge and skills required to either lead or participate in all stages of a project from the initial identification of risk problems through the processes necessary to find a concrete solution. They will acquire the basic theory of risk analysis, assessment, and related information-processing technology. In addition, they will develop strong leadership abilities as their knowledge grows, and their perspective widens.

With these **educational goals** in mind, the Department of Risk Engineering will provide students with an in-depth understanding of:

a. The basic theory of risk analysis and assessment.
b. Information processing technology related to risk analysis and assessment.
c. The problem areas related to risk engineering.
d. The subject of risk engineering from a broad perspective.
e. The processes involved in solving risk problems from setting to solution.
f. The shared roles within a research project and the leadership abilities necessary to oversee such a project

With the aim to educate the talented person as a person who can play an active part in the real world, basic theory and skills will be thought in the Master`s Program. For the students in the doctoral program, high level theories and skills will be taught for items c. to f. The doctoral program also aims to polish the talented person not only as a highly regarded researcher or good engineer at international level but also as a person who is superior in presentation and communication skills.

2. Learning structure for achieving the educational goals

The educational goals of the Department of Risk Engineering entail the above 6 items. In the Master's program, the qualitative attributes of student's competencies or student's achievement that will be assessed for qualification of the degree are:-

A. Knowledge of fundamental/basic theory in the major field

B. Knowledge of fundamental/basic theory of related fields

C. Understanding of real world problems

D. Ability in recognizing problems from a broad perspective

E. Ability in problem solving from objectives to solutions

F. Presentation and communication skills.

The Department's educational goals and the student achievement's assessment items are different elements/processes of the department's education system but related to each other. The following is an explanation of how both the goals and the achievement items can be achieved simultaneously within the curriculum. In order to understand the relationship, an overview of the major field and related fields would be useful.

1) Achieving Educational Goals a, c and d

Major field

In general, a major field refers to the field to which the student's supervisor(s) belongs. The Department of Risk Engineering has four fields: "Total Risk Management", "Cyber Risk", "Urban Risk", and "Environmental and Energy Risk."

Obtaining at least 8 credits from his or her main field in conjunction with Risk Engineering Research I and II in the Master's program will fulfil the requirements for the educational goal a, *"Knowledge of basic theory for analyzing and assessing risk,*" and the student achievement item A, *"Knowledge of fundamental/basic theory in the major field."* In addition, because the core subjects in the major field include the aspects of C, *"Understanding of real world problems,"* and D, *"Ability in recognizing problems from a broad perspective,"* of the achievement items, the subjects also cover c, "*The problem areas related to risk engineering,"* and d, *"The subjects of risk engineering from a broad perspective,"* in the educational goals of the Risk Engineering Department.

Related fields

The remaining three fields other than the major field are the "related fields." Each student must obtain 8 units from the related fields. This will allow the student to simultaneously acquire B, "*Knowledge of fundamental/basic theory of related fields"*, *"C. Understanding of real world problems,"* and D, *"Ability in recognizing problems from a broad perspective,"* of the achievement items by learning

about the problems and its' solution in the related fields. This also fulfils items c and d in the educational goals.

As a means to acquire units in related fields, for example, if a student's major field is "Total Risk Management," he or she could select subjects from mostly "Cyber Risk" or take courses from the related three fields in equal proportion. The first selection of related field subject emphasizes the acquisition of "*Knowledge of fundamental/basic theory of related fields"* while the latter selection emphasize "*Ability in recognizing problems from a broad perspective."*

It should be noted that while it is possible to take some general university courses and courses for other majors in place of some related fields, the student should have a clear idea of how these courses are related to the student's achievement assessment attribute and educational goals of his or her major and be able to explain how such courses are relevant.

2) Achieving Educational Goals b, e and f

In order to achieve the educational goal b*, "Information processing technology related to risk analysis and assessment"*, it is necessary to complete Risk Engineering Research I and II in the Master's program. Secondly, as noted in the syllabi, it is possible to further enhance these courses through lecture courses, for example in the field of Cyber Risk.

Educational goal e*, "The ability processes involved in solving risk problems from setting to solution,"* is closely related to student achievement assessment attribute E, "*The ability in problem solving from objectives to solution.*" Therefore, requirements include not only the Research in Risk Engineering I and II in master's program, but also the Group Work in Risk Engineering.

Regarding educational goal f*, "The shared roles within a research project and the leadership abilities necessary to oversee such a project,"* it is very important for a student to be involved in and contribute to the Group Work in Risk Engineering.

As we have seen, if you follow a standard curriculum, the items brought up in the educational goals and the 6 student achievement assessment attributes are covered at the same time.

3) Talent profiles of engineer in each major field

In each major field, the talent profiles of engineers trained in the related fields are shown below.

Major-field: Total Risk Management

Cyber risk	An engineer who is capable of totally managing and controlling risks of a system by learning the basic theoretical systems concerning risks, such as uncertainty theories, e.g. probability theory, data analysis and system reliability technology based on statistical methods, as well as human risk perception and decision making. As the related fields, the engineer also has deep interest in information processing technologies which are the basement for information and network security, and risk analysis and assessment.
Environmental & Energy System Risk	An engineer who is capable of totally managing and controlling risks of a system by learning the basic theoretical systems concerning risks, such as uncertainty theories, e.g. probability theory, data analysis and system reliability technology based on statistical methods, as well as human risk perception and decision making. As the related fields, the engineer also has deep interest in regional environmental pollution and global-scale environmental problems or risk analysis and assessment technologies for energy systems.
Urban Risk	An engineer who is capable of totally managing and controlling risks of a system by learning the basic theoretical systems concerning risks, such as uncertainty theories, e.g. probability theory, data analysis and system reliability technology based on statistical methods, as well as human risk perception and decision making. As the related fields, the engineer also has deep interest in totally management and control of risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, and floods), fires, accidents, and crime.
Wide Selection of Each Field	An engineer who is capable of totally managing and controlling risks of a system by learning the basic theoretical systems concerning risks, such as uncertainty theories, e.g. probability theory, data analysis and system reliability technology based on statistical methods, as well as human risk perception and decision making. The engineer also has wider interest in related fields such as cyber risks, urban risks, and environment and energy system risks.

Major-field: Cyber Risk Management

Total risk	An engineer who is capable of working out countermeasures from the standpoint of information processing technologies such as information security by learning broad theoretical systems concerning cyber risks, e.g., information and network security and modern information theories which include them. As related fields, the engineer also has a deep interest in basic theoretical systems concerning risks, such as the uncertainty theories, e.g., probability theory, data analysis and system reliability technologies based on statistical methods, and human risk perception and decision making theories.
Environmental & Energy System Risk	An engineer who is capable of working out countermeasures from the standpoint of information processing technologies such as information security by learning broad theoretical systems concerning cyber risks, e.g., information and network security and modern information theories which include them. As related fields, the engineer also has a deep interest in regional environmental pollution and global-scale environmental problems or risk analysis and assessment technologies for energy systems.
Urban Risk	An engineer who is capable of working out countermeasures from the standpoint of information processing technologies such as information security by learning broad theoretical systems concerning cyber risks, e.g., information and network security and modern information theories which include them. As related fields, the engineer also has a deep interest in comprehensive management and control technologies for risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, and floods), fires, accidents, and crime.
Wide Selection of Each Field	An engineer who is capable of working out countermeasures from the standpoint of information processing technologies such as information security by learning broad theoretical systems concerning cyber risks, e.g., information and network security and modern information theories which include them. The engineer also has wider interest in related fields such as total risk management, environment and energy system risks, and urban and disaster risks.

Major-field: Environmental and Energy System Risk Management

Total risk	An engineer who is capable of totally managing and controlling supply risks for energy systems, and environmental risks, such as global warming and air and water pollution, by learning environment and energy engineering which systematize the problems of environment and energy systems from the standpoint of resources, technology, and economics. As the related fields, the engineer also has deep interest in basic theoretical systems concerning risks, such as uncertainty theories, e.g., probability theories, data analysis and system reliability technology based on statistical methods, and human risk perception and decision making theories.
Cyber risk	An engineer who is capable of totally managing and controlling supply risks for energy systems, and environmental risks, such as global warming and air and water pollution, by learning environment and energy engineering which systematize the problems of environment and energy systems from the standpoint of resources, technology, and economics. As the related fields, the engineer also has deep interest in information processing technologies which are the basements for information and network security, and risk analyses and assessment.
Urban Risk	An engineer who is capable of totally managing and controlling supply risks for energy systems, and environmental risks, such as global warming and air and water pollution, by learning environment and energy engineering which systematize the problems of environment and energy systems from the standpoint of resources, technology, and economics. As the related fields, the engineer also has deep interest in totally management and control of risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, and floods), fires, accidents, and crime.
Wide Selection of Each Field	An engineer who is capable of totally managing and controlling supply risks for energy systems, and environmental risks, such as global warming and air and water pollution, by learning environment and energy engineering which systematize the problems of environment and energy systems from the standpoint of resources, technology, and economics. The engineer also has wider interest in related fields such as total risk management, cyber risks, and urban risks, etc.

Major-field: Urban Risk Management

Total risk	An engineer who is capable of totally managing and controlling the risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, floods), fires, accidents, and crime, based on planning theories etc. which consider analysis method for urban spatial structures, and risk concept (i.e., perception, assessment, analysis, and communication of urban risks). As the related fields, the engineer also has deep interest in basic theoretical systems concerning risks, such as uncertainty theories, e.g., probability theory, data analysis and system reliability technology based on statistical methods, and human risk perception and decision making.
Cyber risk	An engineer who is capable of totally managing and controlling the risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, floods), fires, accidents, and crime, based on planning theories etc. which consider analysis method for urban spatial structures, and risk concept (i.e., perception, assessment, analysis, and communication of urban risks). As the related fields, the engineer also has deep interest in information processing technologies which are the basement for information and network security, and risk analyses and assessment.
Environmental & Energy System Risk	An engineer who is capable of totally managing and controlling the risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, floods), fires, accidents, and crime, based on planning theories etc. which consider analysis method for urban spatial structures, and risk concept (i.e., perception, assessment, analysis, and communication of urban risks). As the related fields, the engineer also has deep interest in regional environmental pollution, global-scale environmental problems, and risk analysis and assessment technologies for energy systems.
Wide Selection of Each Field	An engineer who is capable of totally managing and controlling the risks that exist in urban areas, such as natural disasters (earthquakes, typhoons, floods), fires, accidents, and crime, based on planning theories etc. which consider analysis method for urban spatial structures, and risk concept (i.e., perception, assessment, analysis, and communication of urban risks). The engineer also has wider interest in related fields such as total risk management, cyber risk, environment and energy system risks, etc.

Student Achievement Assessment System for Master's Program Students

1. Purpose of the student achievement assessment.

In the Department of Risk Engineering, "student achievement assessment" based on the Department's educational goals has been implemented from 2008. The achievement assessment system involves assessments of the educational processes that simultaneously meet the educational goals of our major and the general educational targets as a graduate student (the 6 attributes). To everyone who is entering the Master's program, we hope that this explanation will help in understanding the achievement assessment system and that the achievement assessment system is helpful to check his or her study progress.

2. Role of the student achievement assessment for completion of the course

The graduate school requires students to pass the final exam in order for the students to obtain the master's degree. For the Risk Engineering Major students, the final examination includes being certified by the Department that *"the student has achieved at or above the level needed to complete the program for all qualification assessment items."* Document 3 gives a basic arrangement for the achievement assessment. Thus, to complete the program, the following three conditions shall be fulfilled:

1) Acquiring the required number of course credits.
2) Completing the thesis and passing the thesis defense.
3) All students' achievement assessment items have reached the level needed to complete the program.

3. The student achievement assessment

The Student Achievement Assessment is done based on a written self-assessment of all achievements ~~(see Documents 1 and 5~~). The written self-assessment is the student's own report of his or her academic achievements that may not be completely measured with only coursework. The report should be written to portray the student's academic status in the best light. Assessments are made a total of 4 times: end of the second semester in the first year, end of the first year, end of the second semester in the second year, end of the second year. Samples of written self-assessments of achievements are provided as shown Appendix d. Please ask your academic advisor for guidance.

4. Academic evidence and course points

There are two main pillars which support the written self-assessment of all achievements: (1) The Academic Evidence - which forms the backbone of the self-assessment, and (2) The Course's Credit Points - which provide a quantitative means of assessing whether or not each student's achievement attributes has been fulfilled.

1) There are two types of academic evidences which form the backbone of the self-assessment.

   a) Academic materials that the student had created during the program.
   For example, the notes that were taken for Research in Risk Engineering in the Master's program, Group Work in Risk Engineering, internship, etc., research notes for lab seminars, paper manuscripts prepared for academic conferences, meetings, and so on. When necessary, please refer to these materials with writing self-assessments. Since you may be required to submit these materials to provide firm support for your self-assessment, you should save them.

   b) Monthly student portfolio.
   This is a summary of the student's monthly activities and performance. A sample is provided in Appendix a. Since the portfolio is compiled monthly, students will use them as a reference when preparing their self-assessments.

2) Course Credit points acquired from completing a course.

   The required course credit points differ depending on the field, so please refer to the table for the requirement of your field in Appendix d. You should study the table following the curriculum model and arrange your academic schedule so that you will acquire a good balance of points by acquiring the required credit units. The academic study plan will be formulated based on these course points. It will be necessary to refer to the acquired course points to provide information about the progress of your academic study plan within the written self-assessment.

5. Special note

It may appear that making the self-assessment is a complicated matter. Once you grow accustomed to it, however, it can be done in a short period of time, and you will begin to feel that it has many advantages for checking your academic progress. If you have any questions, please feel free to consult not only with your supervisors, but also with the core teaching assistants (TAs). The core TAs who are in the PhD program are particularly experienced because they created such materials in previous years, so they will be happy to give you kind advice. These materials should be submitted through a TA.

6. Advice window

If problems cannot be resolved by consulting with a supervisor or TA, then please consult with one of the following advice windows:

1) Professors in charge of the improvement of the graduate school educational system (Prof. Sadaaki Miyamoto, and Dr. Yasunori Endo)

2) Chair of the Department of Risk Engineering

7. The applicability of the achievement assessment system

The achievement assessment system shall be applied to students who have entered the Master program in the 2008 academic year or later.

8. The achievement assessment for students who entered the program before the 2007 academic year (for reference)

Students who entered the program before the 2007 academic year do not have to undergo the achievement assessment during the final exam. In this way, the achievement assessment is not a requirement for completing the program. However, it is hoped that new students understand the above purposes, and will prepare and submit self-assessments of their achievements.

Student Achievement Assessment System for Doctoral Program Students

1. Purpose of the student achievement assessment

In the Department of Risk Engineering, “student achievement assessment” based on the Department's educational goals has been implemented from 2008. The achievement assessment system involves assessments of the educational processes that simultaneously meet the educational goals of the major and the general educational targets of the graduate student (the 8 attributes). To everyone who is entering the Doctoral program, we hope that this explanation will help in understanding the achievement assessment system and that the achievement assessment system is helpful to check his or her study progress.

2. Role of the student achievement assessment for completion of the course

The graduate school requires students to pass the final exam in order for the students to obtain the master's degree. For the Risk Engineering Major students, the final examination includes being certified by the Department that *“the student has achieved at or above the level needed to complete the program for all qualification assessment items.”* Document 4 gives a basic arrangement for the achievement assessment. Thus, to complete the program, the following three conditions shall be fulfilled:

1) Acquiring the required number of course credits
2) Completing the Doctoral dissertation and passing the dissertation defense
3) All students’ achievement assessment items have reached the level needed to complete the program

3. The student achievement assessment

As is noted in Documents 4 and 5, there is no consideration of “the points acquired from credits.” The qualifications are done by professors' assessment based on the student's self-assessment. Reasons for this are that the number of credits to be acquired is relatively small, and that achievement proceeds mainly within the academic research. The written self-assessment is a report that students make themselves about the status of their academic achievements that may not be measured with coursework alone. Students should write the self-assessment so that it portrays their achievements in the best light. Written self-assessments are submitted twice per academic year: at the end of the second semester, and at the end of the academic year (please see the samples in Appendix e). Please ask your academic supervisor(s) for assistance.

4. Academic evidence

Academic evidence supports the written self-assessment. There are two types of academic evidence:-

1) Academic Materials created during the course of study.

   For example, study notes taken for the Research in Risk Engineering in the Doctoral program, Advanced Seminar in Risk Engineering in the Doctoral program, Doctoral Project Research, etc. research reports for laboratory seminars, paper manuscripts prepared for seminars, conferences, etc. When necessary, please refer to these materials with writing self-assessments. Since you may be required to submit these materials to provide firm support for your self-assessment, you should save them.

2) Monthly student portfolio.

   This is a summary of the student's monthly performance. A sample is provided in Appendix b. Students should use this portfolio as a reference when preparing their self-assessments.

5. Special note

It may appear that making the self-assessment is a complicated matter. Once you grow accustomed to it, however, it can be done in a short period of time, and you will begin to feel that it has many advantages for checking your academic progress. If you have any questions, please feel free to consult not only with your supervisors, but also with the core teaching assistants (TAs). The core TAs who are in the PhD program are particularly experienced because they created such materials in previous years, so they will be happy to give you kind advice. These materials should be submitted through a TA.

6. Advice window

If problems cannot be resolved by consulting with a supervisor or TA, then please consult with one of the following advice windows:

1) Professors in charge of the improvement of the graduate school educational system (Prof. Sadaaki Miyamoto, and Dr. Yasunori Endo)

2) Chair of the Department of Risk Engineering

7. For students in the early completion program

The achievement of students in the early completion program is evaluated within the framework specified by the program. The assessment done in the early completion program and the regular assessment done in the department are compatible to each other. In most cases, the students are not required to prepare two sets of materials.

8. For students in the Global COE program

Since students in the Global COE program tend to have heavy duties, the students are exempt from creating a student portfolio. However, they are required to write self-assessments of their achievements and submit academic evidences. In this case, academic evidence would include materials made for the works in the Global COE program.

9. The application of the achievement assessment system

The achievement assessment system shall apply to students who entered the doctoral program in the 2008 academic year or later.

10. The achievement assessment for students who entered the program before the 2007 academic year (for reference)

Students who entered the program before the 2007 academic year do not have to undergo the achievement assessment during the final exam. In this way, the achievement assessment is not a requirement for completing the program. However, it is hoped that new students understand the above purposes, will prepare and submit self-assessments of their achievements.