

Requirements for Program Completion

Master's Program in Risk and Resilience Engineering (MP-R2E)

【Requirements of MP-R2E】

Course Category		Required Courses	Credits	Electively Required Courses	Credits
Graduate General Education Courses Interdisciplinary Foundation Courses	Foundation Subjects for Major	•Introduction to Risk and Resilience Engineering	1		0
Degree Programs' Common Courses [Course Number Range] 0AL0*** ~ 0AL9***	Foundation Subjects for Major		0	Degree Programs' Common Courses – Foundation Subjects for Major	16~
	Major Subjects		0	Degree Programs' Common Courses – Major Subjects	
Program's Courses [Course Number] 0ALC*** (Note 1)	Foundation Subjects for Major	•Fundamentals of Risk and Resilience Engineering	1		0
	Major Subjects	<ul style="list-style-type: none"> •Seminar in Risk and Resilience Engineering I •Seminar in Risk and Resilience Engineering II •Research in Risk and Resilience Engineering I •Group Project Based Learning in Risk and Resilience Engineering 	9	<ul style="list-style-type: none"> •Research in Risk and Resilience Engineering II •Project Research in Risk and Resilience Engineering (Taking one of the subjects above is required) Risk and Resilience Engineering Associated Courses – Major Subjects	3~5
Subtotal Number of Credits		Required Courses	11	Electively Required Courses	19~
Required Number of Total Credits and Graduation Requirements		<p>Required Number of Total Credits: 30 credits or more</p> <p>Graduation Requirements: The degree (Master of Engineering) is granted to the students who have earned 30 credits as specified in the table and have passed the review of the Master's Thesis (or Project Research) and the final examination. The final examination is based on the achievement evaluation.</p> <p>Note 1: Courses other than Risk and Resilience Engineering Associated Courses in Program's Courses cannot be included in the credits needed for graduation.</p> <p>Note 2: Up to 10 credits earned from the following courses may be included in the set of the required credits in Foundation Subjects for Major for the degree with the preliminary approval of the academic supervisor based on the course record of the relevant student. (1) Courses in Other Degree Programs (2) Interdisciplinary Foundation Courses (3) Graduate General Education Courses</p>			

**[Reference] Degree Programs in Systems and Information Engineering
Course numbering system**

:They can be included in the credits needed for graduation.

:They cannot be included in the credits needed for graduation.

Course Number Range							Course Category								
1	2	3	4	5	6	7	1	2	3	4		5		6	7
0	A	L	0~4	0	0~9 A~Z	0~9 A~Z	Graduate School	Master's Programs	Degree Programs in Systems and Information Engineering	Degree Programs' Common Courses	Foundation Subjects for Major	Foundation Subjects for Major	Common	Serial number for each category	
				1									PPS Associated Courses		
				2									SE Associated Courses		
				3									R2E Associated Courses		
				4									CS Associated Courses		
				5									IMIS Associated Courses		
				6									EME Associated Courses		
				7									EMP Associated Courses		
				8~9 A~Z									Currently unused		
			5~9	0	Major Subjects	Major Subjects					Common				
				1							PPS Associated Courses				
				2							SE Associated Courses				
				3							R2E Associated Courses				
				4							CS Associated Courses				
				5							IMIS Associated Courses				
				6							EME Associated Courses				
				7							EMP Associated Courses				
				8~9 A~Z							Currently unused				
			A	0~4	Program's Courses	PPS Associated Courses				Foundation Subjects for Major					
				5~9						Major Subjects					
				A~Z						Currently unused					
			B	0~4	SE Associated Courses	Foundation Subjects for Major									
				5~9		Major Subjects									
				A~Z		Currently unused									
			C	0~4	R2E Associated Courses	Foundation Subjects for Major									
				5~9		Major Subjects									
				A~Z		Currently unused									
			D	0~4	CS Associated Courses	Foundation Subjects for Major									
				5~9		Major Subjects									
				A~Z		Currently unused									
			E	0~4	IMIS Associated Courses	Foundation Subjects for Major									
				5~9		Major Subjects									
				A~Z		Currently unused									
			F	0~4	EME Associated Courses	Foundation Subjects for Major									
				5~9		Major Subjects									
				A~Z		Currently unused									
G~Z	0~9	Currently unused	Currently unused												
	A~Z		Currently unused												

* To avoid confusion with numbers, the letters "I" and "O" are not used in the 4th to 6th digits.

履修方法・修了要件

システム情報工学研究群 リスク・レジリエンス工学学位プログラム(博士前期課程)

【履修方法・修了要件】

科目区分		必修科目	単位	選択科目	単位
大学院共通科目 学術院共通専門基盤科目	専門基礎科目	リスク・レジリエンス工学概論	1		0
研究群共通科目群 [科目番号範囲] OAL0*** ~ OAL9***	専門基礎科目		0	研究群共通科目群専門基礎科目	16~
	専門科目		0	研究群共通科目群専門科目	
学位プログラム科目群 [科目番号] OALC*** (注1)	専門基礎科目	リスク・レジリエンス工学基礎	1		0
	専門科目	リスク・レジリエンス工学修士特別演習Ⅰ リスク・レジリエンス工学修士特別演習Ⅱ リスク・レジリエンス工学修士特別研究Ⅰ リスク・レジリエンス工学グループPBL演習	9	リスク・レジリエンス工学修士特別研究Ⅱ リスク・レジリエンス工学修士特定課題研究 (上記の内いずれかを必修) リスク・レジリエンス工学学位プログラム専門科目	3~5
総修得単位数		必修科目	11	選択科目	19~
修了単位数・要件		<p>修了単位数: 30単位以上 修了要件: 計30単位以上を取得し、修士論文(もしくは特定課題研究論文)の審査及び最終試験に合格することである。なお、最終試験については達成度評価による。</p> <p>(注1) 学位プログラム科目群のうち、リスク・レジリエンス工学関連科目以外の科目は修了に必要な単位に含まれないので注意すること。 (注2) 下記の授業科目を履修し修得した単位は、その10単位までを専門基礎科目として課程修了に必要な修得単位に含めることができる。ただし、履修に際しては学生の過去の履修歴に基づいて指導教員の事前許可を得ること。 (1) 他研究群開設科目 (2) 学術院共通専門基盤科目 (3) 大学院共通科目</p>			

【参考】システム情報工学研究群 科目番号付番体系

:修了単位に含まれる (算入可)
 :修了単位に含まれない (算入不可)

コード							コードの内容							
1	2	3	4	5	6	7	1	2	3	4	5		6	7
0	A	L	0~4	0	0~9 A~Z	0~9 A~Z	大学院	博士前期課程	システム情報工学研究群	研究群 共通 科目 群	専門基礎科目	専 門 基 礎 科 目	共通	整理上の番号
				1										
				2										
				3										
				4										
				5										
				6										
				7										
			8~9 A~Z											
			0											
			1											
			2											
			3											
			4											
			5											
			6											
			7											
			8~9 A~Z											
			A											
			0~4											
			5~9											
			A~Z											
			B											
			0~4											
			5~9											
			A~Z											
			C											
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0~4														
5~9														
A~Z														
F														
0~4														
5~9														
A~Z														
G~Z														
0~9 A~Z														

※ 4~6桁目については、"I"及び"O"は除外する。