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	Interdisciplinary Foundation Courses	0～10
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	・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	・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		**Required Number of Total Credits:** 30 credits or more **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. **Note 1**: Courses other than Risk and Resilience Engineering Associated Courses in Program's Courses cannot be included in the credits needed for graduation. **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			

[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	0~9	Graduate School	Master's Programs	Degree Programs in Systems and Information Engineering	Foundation Subjects for Major	Common	Serial number for each category	
				1	A~Z	A~Z					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	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						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 A~Z						Currently unused	Currently unused		

(Left vertical label for Course Category column 3 group: "Degree Programs' Common Courses" and "Program's Courses"; column 4 vertical labels: "Foundation Subjects for Major" and "Major Subjects")

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