

Curriculum Mapping (Division of Advanced Science and Technology)

Diploma Policy (Abilities to be acquired)		Curriculum Policy (Lectures)	Curriculum Policy (Laboratory Education)	
M	1	Ability to understand fundamental concepts of advanced science and technology in the major field	Offered hierarchically and systematically groups of lectures consisting of courses for students from a different major and beginner students (Introductory Courses), basic courses of graduate school (Basic Courses), high-level specialized courses (Technical Courses) and developmental and advanced specialized courses (Intermediate and Advanced Courses). Conducted in either English or Japanese language.	Makes students deepen their understanding of basic concepts in their major field through laboratory education. Carries out high-quality laboratory education by taking account of each student's talent and study targets and supervising the level of their goal attainment.
D	7	Ability to extensively understand theories and systems of advanced science and technology in the major field		
M	2	Ability to identify and solve problems by the application of specialized knowledge	Set the target of each lecture at acquiring abilities to understand and utilize serialized knowledge. Introduce active learning methods positively. Carry out strict grading based mainly on examinations.	Makes students obtain abilities of problem identification and problem solving with application of their specialized knowledge through methods including individual guidance, small-class education, and collaborative learning. Provides research guidance and evaluation from different viewpoints by assigning supervisors from different fields.
M	3	Ability to carry out academically and socially valuable research on their own initiative	Educate students to obtain an ability to conduct group research by utilizing basis and methodologies of information science and knowledge science, as well as an ability to aim at improving themselves.	Makes students acquire necessary abilities for a series of research process from making a research plan based on review of relevant researches, executing the research by using acquired knowledge and skills, examining research outcomes, to presenting the outcomes.
D	8	Ability to design a new and original research and produce world-class research achievements		
M	4	Ability to challenge a different field from the major or an unexplored field	Recommend that student take liberal arts courses and courses of the other fields actively.	By assigning a research topic of the adjacent or relevant field related to the specialized field or an internship, makes students acquire abilities to carry out research in different field and environment. Provides opportunities to receive guidance from the viewpoints of different filed or industry. In the doctoral program, aims at enhancing abilities of leadership through the opportunities to work as a teaching assistant or a research assistant.
D	9	Ability to hold a comprehensive view and take leadership in the field of advanced science and technology		
M	5	Ability to comprehend diverse cultures and ability to communicate		
M	6	High ethical perspectives as a researcher or an engineer		In the laboratory environment abound with diversity in goals, backgrounds, nationalities and the like, aims at improving understanding of diverse cultures and communication ability. Through research activities, makes students comprehend their social responsibility and nurture high sense of ethics as a researcher or an engineer.

※ Abilities to be acquired : 【Master's Program】 M、 【Doctoral Program】 M+D (D7 and D8 encompass M1 and M3 respectively)

		Required courses A	Required courses B	Elective courses	Diploma Policy (Abilities to be acquired)											
					1	2	3	4	5	6	7	8	9			
M	Global Communication course			Gxxx courses					★					Master's degree in Knowledge Science, Information Science or Materials Science	Human resources who can take active roles as leaders in society or industrial world with broad vision required in a sustainable society and communication ability in addition to specialization in advanced science and technology	
	Global Liberal Arts course		S101 Innovation Theory and Methodology for Social Competencies	Lxxx courses Mainly courses other than those related to the degree of choice				★	★	★						
	Introductory course		S102 Innovation Theory and Methodology for Creativity	Mainly 1xx courses	★				★	★						
	Basic course	S201 Science and Technology Thesis S202 Science and Technology Project Report S203 Science and Technology Survey for Doctoral Research Plan		Mainly 2xx~6xx courses	★	★	★	★	★	★						
	Technical course		S401 Science and Technology Minor Research Project (Required elective course) S402 Science and Technology Internship (Required elective course)	Mainly 4xx~6xx courses Mainly courses other than those related to the degree of choice							★					
D	Intermediate course		S501 Advanced Science and Technology Minor Research Project (Required elective course) S502 Advanced Science and Technology Internship (Required elective course) S503 Innovation Theory and Methodology for Total Capability Development	Mainly 2xx~5xx courses Mainly 2xx courses other than those related to the degree of choice				★	★					Doctoral degree in Knowledge Science, Information Science or Materials Science		
	Advanced course	S601 Advanced Science and Technology Dissertation	Mainly 6xx courses		★			★	★	★	★	★				
						★					★					