【For Students Enrolled In /After 2021】 Information Systems Science and Engineering Cource Curriculum Chart

●:Mandatory Subjects □:Designated Registration Subjects ①②④:Number of Credits

subjects / semester	1st Year Student — 1st Semester	2st Semester	2st Year Student — 3st Semester	4st Semester	3st Year Student — 5st Semester	6st Semester	4st Year Student — 7st Semester	8st Semester	Number of credits required for graduation
Foreign Language Subjects	English 109① English 110① Professional Communication 301② Academic Literacy 302②		Professional Communication 303② Academic Literacy 304②						**10** or more
Liberal Arts Subjects — B group	※Students can take liberal arts subjects offered in English								**14** or more
Major Foundation — Basic Science Subjects	Physics② Exercises in Physics②								**20** or more
Major Foundation — Mathematics	□Engineering Mathematics 1②	□Engineering Mathematics 2② □Engineering Mathematics 3②	Introduction to Differential Equations② Introduction to Probability and Statistics②	□Engineering Mathematics 4② Statistical Analysis, Simulation, and Modeling②	Optimization and Control Theory② Applied Informatics 1②	Applied Informatics 2②			
Submajor — Information Science	□Introduction to Information Systems Engineering② □Professional Ethics② □Introduction to Experimentation②	Boolean Algebra and Logic Design② □Experimental Design②	Software Engineering② Computer Networks② Digital Signal Processing② Computer Architecture②	Databases② Operating Systems② Computer Security② Computer Graphics② Artificial Intelligence②					**22** or more
Global IT Subjects			Presentation Plus 401②		Writing for Publication 402②				
Graduation Research subjects						●Graduation Research 1②	●Graduation Research 2②	●Graduation Research 3②	
Major Specific — Information Systems Science and Engineering Course	●PBL 1: Problem Analysis and Modeling④ □Introduction to Programming② □Introduction to OOA, OOD, and UML②	●PBL 2: Team-based Design④ ●Programming Practice 1② □Programming Language②	●PBL 3: Creative Design④ ●Programming Practice 2② □Data Structures and Algorithms②	●PBL 4 Team-based Creative Design④ □Imperative Programming② □Imperative Programming Practice② Network Systems② Human Interface②	●PBL 5: Design Evolution④ Distributed Systems② Web Information Engineering② Image Processing② Systems Ergonomics②	□Data Science② Pattern Recognition and Machine Learning② Introduction to Robotic Systems② Data Visualization②			**48** or more
Distribution — Global IT Program		Overseas Training Program for IT and English A④, B② Overseas Training Program for Professional IT A②, B④		International Internship②					**100** or more
Distribution — Selected Topics	Selected Topics(International Career Preparation)②								
									124 or more