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	知能科学プログラム
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- Perspectives for evaluation of the program
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- Evaluation method
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- Policy and method for feedback to students
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	Linear Regression Model		◎	◎	◎																		
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	Information Processing and Industry		○	○	○																		
	Data Science and Management		○	○	○																		
	Frontier of Informatics and Data Science		○	○	○																		
	Research Project		○	○	◎																		
	Long-term Fieldwork I				◎													Intensive course						
	Long-term Fieldwork II				◎																	Intensive course		

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					DGYDQFHG LQIRUPDWLRQ SURFHVVLQJ DQG DQDO\VLV
					UHDOL]H WKHVH VROXWLRQV

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Relationships between the Evaluation Items and Class Subjects

				Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	Weighted values of evaluation items in the subject	Weighted values of evaluation items	
Liberal Arts Education	Introduction to University Education	2	1st grade	100	1													100
Liberal Arts Education	Introductory Seminar for First-Year Students	2	1st grade	25	1			25	1	25	1							25	1	100
Liberal Arts Education	Peace Science Courses	2	1st grade	100	1															100
Liberal Arts Education	Area Courses	8	1st grade	100	1															100
Liberal Arts Education	Basic English Usage I	1	1st grade											100	1					100
Liberal Arts Education	>î? ? ? ? >Ì>ñ? ? ? ? ? ? >Ì? ? ? ? ? B¡		1st grade											100	1					100
Liberal Arts Education	>ï? ? ? ?!? ? ? ? ? ? ? ? >ÌB H	1	1st grade											100	1					100
Liberal Arts Education	>ï? ? ? ?!? ? ? ? ? ? ? ? >ÌB H	1	1st grade											100	1					100
Liberal Arts Education	>ï? ? ? ?!? ? ? ? ? ? ? ? >ÌB¡H	1	1st grade											100	1					100
Liberal Arts Education	>ï? ? ? ?!? ? ? ? ? ? ? ? >ÌB¡H	1	1st grade											100	1					100
Liberal Arts Education	Basic Foreign Languages I	2	1st grade											100	1					100
Liberal Arts Education	>î? ? ? ? >Ì>ò? ? ? ? ? ? >Ì>ø? ? ? ?!? ? ? ? ? B¡	2	1st grade											100	1					100
Liberal Arts Education	Introduction to Information and Data Sciences	2	1st grade					50	1	50	1									100
Liberal Arts Education	Ground zero programming	2	1st grade					50	1	50	1									100
Liberal Arts Education	Health and Sports Course	2	1st grade	100	1															100
Liberal Arts Education	Elements of Calculus	2	1st grade					50	1	50	1									100
Liberal Arts Education	Seminar in Basic Mathematics I	1	1st grade					50	1	50	1									100
Liberal Arts Education	>ÿ? ? ? ? ? ? >Ì? ? >Ì>î? ? ? ? >Ì>ù? ? ? ?!? ? ? ? >ÌB¡	1	1st grade					50	1	50	1									100
Liberal Arts Education	Calculus I	2	1st grade					50	1	50	1									100
Liberal Arts Education	>ï? ? ? ?!? ?!? >õB¡	2	1st grade					50	1	50	1									100
Liberal Arts Education	>ø? ? ? ? ? >Ì>í? ? ? ? ? ? B	2	1st grade					50	1	50	1									100
Liberal Arts Education	>ø? ? ? ? ? >Ì>í? ? ? ? ? ? B¡	2	1st grade					50	1	50	1									100
Specialized Education	Discrete Mathematics I	2	1st grade					50	1	50	1									100
Specialized Education	>ð? ? ? ? ? ? ? >Ì>ù? ? ? ? ? ? ? ? ?? >ÌB¡	2?	1st grade					50	1	50	1									100
Specialized Education	Programming I	2	1st grade					50	1	50	1									100
Specialized Education	>ü? ? ? ? ? ? ? ? ? ? >ÌB¡	2	1st grade					50	1	50	1									100
Specialized Education	>ü? ? ? ? ? ? ? ? ? ? >ÌB¢	2	2nd grade					50	1	50	1									100
Specialized Education	>ü? ? ? ? ? ? ? ? ? ? >ÌB£	2	2nd grade					50	1	50	1									100
Specialized Education	Theory of Automata and Languages	2	2nd grade			34	1	33	1	33	1									100
Specialized Education	Digital Circuit Design	2	2nd grade					33	1	33	1	34	1							100
Specialized Education	Programming Languages	2	2nd grade					33	1	33	1	34	1							100
Specialized Education	Algorithms and Data Structures	2	2nd grade					33	1	33	1					34	1			100
Specialized Education	Fundamentals of Probability Theory	2	1st grade					50	1	50	1									100
Specialized Education	Inferential Statistics	2	2nd grade			34	1	33	1	33	1									100
Specialized Education	>ø? ? ? ? ? >Ì>þ? ? ? ? ? ? ? ? ? ?+ù? ? ??	2	2nd grade			34	1	33	1	33	1									100
Specialized Education	Statistical Test	2	2nd grade			34	1	33	1	33	1									100
Specialized Education	Stochastic Modeling	2	2nd grade									100	1							100
Specialized Education	Numerical Computation	2	2nd grade													100	1			100
Specialized Education	Mathematical Programming	2	2nd grade													100	1			100
Specialized Education	System Optimization	2	2nd grade													100	1			100
Specialized Education	Mathematical Analysis	2	2nd grade			50	1	50	1											100
Specialized Education	Multivariate Analysis	2	2nd grade			100	1													100
Specialized Education	Basic and practice in Categorical data analysis	2	2nd grade													100	1			100
Specialized Education	Mechanism how programs run on computer	2	2nd grade																	

				Evaluation items																alues of s in the
				Knowledge and Understanding				Abilities and Skills						Comprehensive Abilities						
				(1) C1		(2) D1		(1) A		(2) B		(3) D3		(1) C2		(2) D2		(3) E		
Specialized Educatio	>õ? ? ? ? ? ? ? ? ? ? >Ì? ? ? >Ì? ? ? ? >Ì? ? ? ? ? >Ìñ?$? ? ? ? ? ? ? >ÌB	1	3rd grade					33	1	33	1	34	1							100
Specialized Educatio	>õ? ? ? ? ? ? ? ? ? ? >Ì? ? ? >Ì? ? ? ? >Ì? ? ? ? ? >Ìñ?$? ? ? ? ? ? ? >ÌB¡	1	3rd grade					33	1	33	1	34	1							100
Specialized Educatio	>õ? ? ? ? ? ? ? ? ? ? >Ì? ? ? >Ì? ? ? ? >Ì? ? ? ? ? >Ìñ?$? ? ? ? ? ? ? >ÌB¢	1	3rd grade					33	1	33	1					34	1			100
Specialized Educatio	>õ? ? ? ? ? ? ? ? ? ? >Ì? ? ? >Ì? ? ? ? >Ì? ? ? ? ? >Ìñ?$? ? ? ? ? ? ? >ÌB£	1	3rd grade					33	1	33	1					34	1			100
Specialized Educatio	Software Engineering I	2	3rd grade													100	1			100
Specialized Educatio	Software Engineering II	2	3rd grade													100	1			100
Specialized Educatio	Theory of Computing	2	3rd grade			50	1	50	1											100
Specialized Educatio	Image Processing	2	3rd grade									100	1							100
Specialized Educatio	Visual Computing	2	3rd grade									100	1							100
Specialized Educatio	Introduction to Artificial Intelligence	2	2nd grade			50	1					50	1							100
Specialized Educatio	Computer Network	2	3rd grade					50	1			50	1							100
Specialized Educatio	Human Computer Interaction	2	3rd grade									100	1							100
Specialized Educatio	Parallel and Distributed Processing	2	3rd grade									100	1							100
Specialized Educatio	Software Management	2	3rd grade													100	1			100
Specialized Educatio	Natural Language Processing	2	3rd grade			50	1					50	1							100
Specialized Educatio	Information Society and Security	2	3rd grade													100	1			100
Specialized Educatio	Digital Signal Processing	2	3rd grade									100	1							100
Specialized Educatio	Data Mining	2	3rd grade			50	1	50	1											100
Specialized Educatio	>ÿ?!? ?"? ?%F·? ? ? ? ? ?	2	3rd grade													100	1			100
Specialized Educatio	Nonparametric analysis	2	3rd grade					100	1											100
Specialized Educatio	Big Data	2	3rd grade					50	1							50	1			100
Specialized Educatio	Behaviormetrics	2	3rd grade					100	1											100
Specialized Educatio	Econometrics	2	3rd grade													100	1			100
Specialized Educatio	Time Series Analysis	2	3rd grade									100	1							100
Specialized Educatio	Biostatistics	2	3rd grade													100	1			100
Specialized Educatio	Stochastic Processes	2	3rd grade													100	1			100
Specialized Educatio	Financial Engineering	2	3rd grade													100	1			100
Specialized Educatio	Speech Recognition	2	3rd grade							50	1	50	1							100
Specialized Educatio	Text Mining	2	3rd grade							50	1	50	1							100
Specialized Educatio	Machine Learning	2	2nd grade			50	1	50	1											100
Specialized Educatio	Reinforcement Learning	2	3rd grade			50	1					50	1							100
Specialized Educatio	Decision-Making	2	3rd grade							50	1	50	1							100
Specialized Educatio	Introduction to IoT	2	3rd grade									50	1			50	1			100
Specialized Educatio	Biological Information Processing	2	3rd grade					33	1	33	1	34	1							100
Specialized Educatio	Bioinformatics	2	3rd grade					33	1	33	1	34	1							100
Specialized Educatio	Sparse Estimation	2	3rd grade					50	1	50	1									100
Specialized Educatio	Advanced Programming	2	3rd grade					50	1	50	1									100
Specialized Educatio	Neural Networks	2	3rd grade			50	1			50	1									100
Specialized Educatio	Bayesian Statistics	2	3rd grade					50	1	50	1									100
Specialized Educatio	Semiotic AI	2	3rd grade			50	1			50	1									100
Specialized Educatio	Mathematical Statistics	2	3rd grade					50	1	50	1									100
Specialized Educatio	FinTech	2	3rd grade									50	1			50	1			100
Specialized Educatio	Quality Management	2	3rd grade									50	1			50	1			100
Specialized Educatio	Computer Science Seminar I	1	4th grade			33	1					33	1			34	1			100
Specialized Educatio	Computer Science Seminar II	1	4th grade			33	1					33	1			34	1			100
Specialized Educatio	Graduation thesis	3	4th grade											50	1			50	1	100
Practical Subjects	Information Processing and Industry	2	2nd grade	100	1															100
Practical Subjects	Data Science and Management	2	2nd grade	100	1															100
Practical Subjects	Frontier of Informatics and Data Science	2	3rd grade	100	1															100
Practical Subjects	Research Project	2	3rd grade	100	1															100
Practical Subjects	Long-term Fieldwork I	3	3rd grade															100	1	100
Practical Subjects	Long-term Fieldwork II	3	4th grade															100	1	100

Curriculum Map of Intelligence Science Program

Academic Achievement Evaluation Itemas		1st grade Spring	1st grade Fall	2nd grade Spring	2nd grade Fall	3rd grade Spring	3rd grade Fall	4th grade Spring	4th grade Fall
Knowledge and Understandings	(1) C1. Knowledge and capabilities required for solving problems, while understanding that various problems of human beings, societies, and individuals can be interpreted in different ways according social conditions, cultures, etc.	(1T)Introduction to University Education H E,H		(1T)Information Processing and Industry(•)	(3T)Data Science and Management(•)	(1T)Frontier of Informatics and Data Science(•)			
		(1T)Introductory Seminar for First-Year Students H E,H				(2T)Research Project (•)			
		(1T)Area courses H F½H							
		(1T)Health and Sports Courses H F½H							
		(2T)Peace Science Courses H F½H							
	(2) D1. Knowledge and skills required for understanding the theoretical system of statistics and data analysis, and for precisely and efficiently analyzing qualitative/quantitative information in big data.			(1T)Inferential Statistics(=)	>Ô>ß? >Õ>ù?!? ? ? ?"? ? ?	(1T)Data Mining([illegible] •)	>ÔF½>Õ	(1T)Intelligence Science Seminar I(=)	
				7 /LQHDU 5HJUHVV=Y L	(4T)Databases(•)	(2T)Natural Language Processing(•)		(2T)Intelligence Science Seminar II(=)	
				(1T)Theory of Automata and Languages(•)	>Ô>ß? >Õ>ù? ? ? ? ? ? >	(2T)Theory of Computing(")			
				(1T)Information Theory(•)		>Ô>Þ? >Õ>þ? ? ? ? ? ? ? ? ? ?	? ? >Ì>ø? ? ? ? ? ? ? H F½H		
				(2T)Statistical Test(•)		>Ô>Ý? >Õ>ú? ?!? ? ? >	Ì>ú? ? ?#? ? ? ? H F½H		
				(2T)Mathematical Analysis(•)		>Ô>Þ? >Õ>ÿ? ? ? ?	? ? ? >Ì>í>õH F½H		
				>Ô>Ý? >Õ>õ? ? ? ? ? ?!? ? ? ? ? >Ì? ? >Ì>	? ? ? ? ? ? ? ? ? >Ì>õ? ? ? ? ? ? ? ? ? ? ? H F½H				
Abilities and Skills	(1) A. Skills related to the development of an information infrastructure, information processing techniques, and technology for producing new added value through data analysis.	(1T)Elements of Calculus(•)	(3T)CalculusII(=)	Programming B¢H E,H	Programming B£H E,H	(1T)Informatics and data science, Exercise I H=H	(3T)Informatics and data science, Exercise B¢H=H		
		(1T)Introductory Seminar for First-Year Students(=)	(3T)Linear AlgebraII(=)	(1T)Theory of Automata and Languages(•)	(3T)Digital Circuit Design H F½H	(2T)Informatics and data science, Exercise B¡H =H	(4T)Informatics and data science, Exercise B£H =H		
		(2T)CalculusI(=)	(4T)Seminar in Basic Mathematics II(•)	(1T)Inferential Statistics(=)	(3T)Algorithms and Data Structures H E,H	(1T)Data Mining H F½H	(4T)Big Data H F½H		
		(1T)Linear AlgebraI(=)	(3T)Seminar in Basic Mathematics I(•)	(2T)Statistical Test(•)	(4T)Programming Languages H F½H	(1T)Theory of ComputingH " H	(4T)Computer Network(•)		
		(2T)Introduction to Information and Data Sciences(=)	(3T)Ground zero programming(=)	7 /LQHDU 5HJUHVV=Y L	>Ô>ß? >Õ>ù? ? ? ? ? ? >	(2T)Nonparametric analysis([illegible] H	>Ô>ß? >Õ>í? ? ? ? ? ? ? ? ? >Ì>õ? ? ? ? ? ? ? ? ? ? >Ì>ü? ? ? ? ? ? ? ? ? H F½H		
		(2T)Discrete Mathematics I(=)	(3T)Discrete Mathematics š =)	(2T)Mathematical Analysis(•)		(1T)Behaviormetrics(")	>Ô>à? >Õ>í? ?"? ? ? ? ? >Ì>ü? ? ? ? ? ? ? ? ? H F½H		
		Programming I(=)	Programming š =)			>Ô>Þ? >Õ>î? ? ? ? ?	[illegible] H F½H ? ? >Ì>ÿ? ? ? ? ? ? ? ? ? H EgH		
			(4T)Fundamentals of Probability Theory(=)			>Ô>Ý? >Õ>ÿ? ? ? ? ? >Ì>	ñ? ? ? ? ? ? ? ? ? H F½H		
						>Ô>Ý? >Õ>î? ?%? ? ? ? ?	>Ì>ÿ? ? ? ? ? ? ? ? ? H F½H		
	(2) B. Ability to identify and solve new problems on their own by quantitative and logical thinking based on data, diverse perspectives, and advanced skills for information processing and analysis.	(1T)Elements of Calculus H F½H	(3T)Calculus B¡H E,H	Programming B¢H E,H	Programming B£H E,H	(1T)Informatics and data science, Exercise B H =H	(3T)Informatics and data science, Exercise B¢H =H		
		(1T)Introductory Seminar for First-Year Students H E,H	(3T)Linear Algebra B¡H E,H	(1T)Theory of Automata and Languages(•)	(3T)Digital Circuit Design H F½H	(2T)Informatics and data science, Exercise B¡H =H	(4T)Informatics and data science, Exercise B£H =H		
		(2T)Calculus B H E,H	(3T)Seminar in Mathematics B H F½H	(1T)Inferential Statistics(=)	(3T)Algorithms and Data Structures H E,H	>Ô>Ý? >Õ>ÿ? ? ? ? ? >Ì>þ?	>Ô>à? >Õ? [illegible] >Ì>ù? ? ? ? ? H F½H		
		(1T)Linear Algebra B H=H	(4T)Seminar in Mathematics B¡H F½H	(2T)Statistical Test(•)	(4T)Programming Languages H F½H	>Ô>Þ? >Õ>ð? ? ? ? ? ?	[illegible] H EgH ? ? ? ? ? ? ? >Ì>ü? ? ? ? ? ? ? ? ? H F½H		
		(2T)Introduction to Information and Data Sciences H=H	(3T)Ground zero programming(=)	7 /LQHDU 5HJUHVV=Y LRQ¬0RGHO		>Ô>Þ? >Õ>î? ? ? ? ?	[illegible] H F½H ü? ? ? ? ? ? ? ? ? H F½H		
		(2T)Discrete MathematicsI H E,H	(3T)Discrete MathematicsII H E,H			>Ô>Ý? >Õ>ÿ? ? ? ? ? >Ì>	[illegible] H F½H ? ? >Ì>ÿ? ? ? ? ? ? ? ? ? H EgH		
		Programming B H E,H	Programming B¡H E,H			>Ô>Ý? >Õ>ú? ?!? ? ? >	Ì>ú? ? ?#? ? ? ? H F½H		
			(4T)Fundamentals of Probability Theory H E,H			>Ô>Ý? >Õ>î? ?%? ? ? ? ?	>Ì>ÿ? ? ? ? ? ? ? ? ? H F½H		
						>Ô>Þ? >Õ>ÿ? ? ? ?	? ? ? >Ì>í>õH F½H		
					(3T)Digital Circuit Design H F½H	(1T)Informatics and data science, Exercise B H =H	(3T)Visual Computing(•)	(1T)Intelligence Science Seminar I(=)	

Academic Achievement	1st grade		2nd grade		3rd grade		4th grade	
Evaluation Itemas	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
				(3T)Operating Systems(•) (4T)Programming Languages H F½H (4T)Mechanism how programs run on computer(•) (4T)Stochastic Modeling (")	(2T)Informatics and data science, Exercise B¡H =H (2T)Image Processing(•) (2T)Natural Language Processing(•) (1T)Digital Signal Processing(•)	(3T)Human Computer Interaction(•) (4T)Computer Network(•) (3T)Time Series Analysis(") (3T)Parallel and Distributed Processing(")	(2T)Intelligence Science Seminar II(=)	

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>Ô>Þ? >Õ>þ? ? ? ? ? ? ? ? ? ? >Ô>à? >Õ>ô? ? ? ?H ?¿?!? ? ? ? ? >Ì? ? >Ì>õ? ? H F½H

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>Ô>Þ? >Õ>î? ? ? ? ? ? ? ? ? ? ? H F½H

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