Data Science Expert Program (Doctoral Program)

【Requirements of Data Science Expert Program 】

Course Groups		Required points for competencies			
		MDA Advanced Expertise	MDA Interdisciplinary Adaptability	MDA Creativity	MDA Practical Applicability
Courses for fostering AI technology to conduct research by utilizing cutting-edge DS and AI.	Mathematical applications Data science Machine learning	8〜			
Courses for fostering innovative creativity to realize interdisciplinary research by utilizing DS and AI.	Entrepreneur Exercise (Execrise related to commercialization and business model development) DS・AI Colloquium (Interdisciplinary seminar with program faculty and enrolled students)		3〜	2〜	3〜
Course for fostering practical applicability to lead academia and industry	Research-oriented long-term internships (with top AI companies, research institutions in Tsukuba Science City, etc.) Participation in long-term collaborative research. Long-term research study abroad at overseas universities, research institutes, etc.				
Required points and requirments for course completion	Required points and for course completion: Students must earn 8 points or more in MDA Advanced Expertise, 3 points or more in Interdisciplinary Adaptability, 2 points or more in Creativity, and 3 points or more in Practical Applicability to complete the course. Completion Requirements: A certificate of completion in the Data Science Expert Program (DSEP) is granted to students who have earned the required number of points for each competency. *The following course list provides the correspondence between the subjects and points. *Courses related to the DSEP competencies taken in other degree programs at the University of Tsukuba or at other graduate schools can be counted towards the required points for completion by submitting a point certification application for review and approval.				

【Requirements of Data Science Expert Program Plus】

科目群		Required points for competencies				
		MDA Advanced Expertise	MDA Interdisciplinary Adaptability	MDA Creativity	MDA Practical Applicability	MDA Comprehensive Initiative
Courses for fostering AI technology to conduct research by utilizing cutting-edge DS and AI.	Mathematical applications Data science Machine learning	8〜				
Courses for fostering innovative creativity to realize interdisciplinary research by utilizing DS and AI.	Entrepreneur Exercise (Execrise related to commercialization and business model development) DS・AI Colloquium (Interdisciplinary seminar with program faculty and enrolled students)		3〜	2〜	3〜	
Course for fostering practical applicability to lead academia and industry	Research-oriented long-term internships (with top AI companies, research institutions in Tsukuba Science City, etc.) Participation in long-term collaborative research. Long-term research study abroad at overseas universities, research institutes, etc.					
Courses for Top-level human resource development	Special Courses for Top-level human resource development					2〜
Required points and requirments for course completion	Required points and for course completion: Students must earn 8 points or more in MDA Advanced Expertise, 3 points or more in Interdisciplinary Adaptability, 2 points or more in Creativity, 3 points or more in Practical Applicability, and 2 points or more in MDA Comprehensive Initiative to complete the course. Completion Requirements: A certificate of completion in the Data Science Expert Program Plus (DSEP+) is granted to students who have earned the required number of points for each competency. *The following course list provides the correspondence between the subjects and points. *Courses related to the DSEP+ competencies taken in other degree programs at the University of Tsukuba or at other graduate schools can be counted towards the required points for completion by submitting a point certification application for review and approval. *With regard to MDA Comprehensive Initiative, as a general rule, evaluation will be conducted by incorporating external assessments provided by off-campus professional practitioners who participate in the group work of the "MDA Special Exercise for Top-level Human Resource Development."					