Course Structure Diagram for Graduate Program in Intelligent Automation Systems

Course category			1st academic year						2nd academic year					
			1st Semester			2nd Semester			1st Semester			2nd Semester		
			Course Title	Credit(s)	Hours	Course Title	Credit(s)	Hours	Course Title	Credit(s)	Hours	Course Title	Credit(s)	Hours
professional courses	compulsory	**Required credits 6 credits**							Thesis	6	6			
	Elective subject	**Required credits 27 credits**	Optomechatronic System Integration and Control	3	3	Image Processing and Its Applications	3	3	Optomechatronic System Integration and Control	3	3	Image Processing and Its Applications	3	3
			Design of Industrial Controller	3	3	Control of Electric Machines	3	3	Design of Industrial Controller	3	3	Control of Electric Machines	3	3
			Modern Control Systems	3	3	Digital Signal Processing	3	3	Modern Control Systems	3	3	Digital Signal Processing	3	3
			Computer Programming Design and Algorithms	3	3	Game Physics	3	3	Computer Programming Design and Algorithms	3	3	Game Physics	3	3
			Virtual Reality	3	3	Discrete-Time Control Systems	3	3	Virtual Reality	3	3	Discrete-Time Control Systems	3	3
			Cloud-Computing Analysis and Design	3	3	Optimization Approaches	3	3	Cloud-Computing Analysis and Design	3	3	Optimization Approaches	3	3
			Data mining	3	3	Intelligent Systems	3	3	Data mining	3	3	Intelligent Systems	3	3
						Artificial Intelligence Applications	3	3				Artificial Intelligence Applications	3	3

Note：

1. The graduation credits of this graduate program are 33.
2. The required credits are 6, and the elective credits are 27.
3. The courses in the core curriculum of the college belonged are regarded as the credits of the professional courses of this master program, while the courses in the cross-domain courses of the college belonged or the other colleges are regarded as the foreign credits.
4. The criteria of this master program (program, certification, license, regarded credits, and others) are as follows:
   i. Students taking the master program can get a maximum 6 credits each semester.
   ii. The courses marked in I and M of this course structure diagram are the courses offered by this master program and the Department of Mechatronics Engineering, respectively, the other courses are offered by this program and regarded the credits
   iii. Students taking an MCU overseas study program can get the maximum 11 credits which need to be agreed upon by the advising professor, certificated by the oversea university, and confirmed by the program office
   iv. The course Thesis is required.