

### Doctor's Program Subject and Completion Requirement 2023

#### Department of Information and Physical Sciences

Department of Information and Physical Sciences										
Code	Classification	subject name	Instructor	Unit		School hour a week				remarks
				Core Subjects	Elective subject	1st.Grade		2nd.Grade		
						Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	
333201	M	Advanced Operations Research	Yasumasa Fujisaki Hiroshi Morita Takayuki Wada Yutaro Yamaguchi		2	2				
333202	M	Advanced Nonlinear Systems Analysis	Hideyuki Suzuki Sho Shirasaka		2		2			
333205	M	Applied Information Physics	Jun Tanida Yusuke Ogura		2	2				
333206	M	Architecture for Intelligence	Msayuki Numao Kenichi Fukui		2		2			
333605	G・M	Advanced Integrated Sciences	Leibnitz Kenji Ferdinand Peper		2	2				
333406	M	Exercises on Information Engineering for Interactive Creation A	Taro Maeda Haruo Takemura Yuki Uranishi Susumu Date Yuichi Ito		4	4	4			
333706	M	Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi Teppei Niide Taisuke Seike		2	2				
333207	M	Internship on Information and Physical Sciences D	Yasumasa Fujisaki Jun Tanida Hiroshi Morita Masayuki Numao Hideyuki Suzuki		2	3	3	(3)		
333010	G・M	Academic Internship Abroad D(S)	All Staff		4	6	6	(6)		(Common subject for all departments)
333012	G・M	Academic Internship Abroad D(L)	All Staff		8	12	12	(12)		(Common subject for all departments)
333014	M	Humanware Fundamentals I D			2					
333015	M	Humanware Fundamentals II D			2					
333016	M	Humanware Innovation Creation D	Toshimitsu Masuzawa Shigeru Kondo Hideyuki Takahashi		2		2			
333017	M	Humanware Seminar D			2					
333018	M	Humanware Innovation Introduction D			2					
333019	M	Humanware Communication D			2					
333020	M	Humanware Interdisciplinary Project Studies D	Yoshiki Higo Hiroshi Shimizu Ittetsu Taniguchi Shin-ichi Arakawa Takuya Maekawa Nobuyuki Okahashi Taisuke Izumi Suguru Shimomura Satoru Iwasaki MAHZOON HAMED		4	2	2			
333021	M	Humanware Innovation Practice Seminar D			4					
333022	M	Humanware Innovation Activity D	Naoki Wakamiya		2	1	1			
333023	M	Humanware Laboratory Rotation D			2					
333024	M	Humanware PI Interdisciplinary Project Studies D	Hiroshi Shimizu		4	2	2			
333029	M	Advanced Humanware Innovation Practice D			2					
333025	M	Humanware Internship (Short Term) D	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki		2	3	3			
333026	M	Humanware Internship (Long Term) D	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki		4	6	6			
333027	G・M	Humanware Overseas Internship (Short Term) D	Yasuyuki Matsushita Satoru Iwasaki		2	3	3			
333028	G・M	Humanware Overseas Internship (Long Term) D	Yasuyuki Matsushita Satoru Iwasaki		4	6	6			

#### (Requirements for Completion)

Students must receive 4 credits or more, and pass a final evaluation of their doctoral thesis.

- In the case of taking Internship on Information and Physical Sciences D, Academic Internship Abroad D(S), D(L), one unit will be accepted and included into the residency requirement.
- D1,D2 students can register Internship on Information and Physical Sciences D, Academic Internship Abroad D(S) , D(L) from "Fall and Winter Terms" through "Spring and Summer Terms".
- "M" in the classification column represents Major subjects, "G" represents Advanced Global Literacy Educational subjects, and "G・M" represents subjects with both Advanced Global Literacy Educational and Major subjects' characteristics.
- Only Humanware Innovation Program students can register subjects from 333020 to 333028.
- With regard to 333014 ~ 333019, 333023, 333025 ~ 333028, those who have already acquired M version of those subjects in Master course can't register D version of those in Doctoral Course.  
ex.) Those who have already acquired Humanware Fundamentals I M in the Master course can't register Humanware Fundamentals I D in the Doctoral course.