## Doctor's Program Subject and Completion Requirement 2020

Departme	nt of Inforn	nation and Physical Sciences	T	ī	Jnit		School h	our a week		
G 1	Classificat ion	subject name	Instructor			1st.0	Grade	2nd.Grade		₫ .
Code				Core Subjects	Elective subject	Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	remarks
333201	М	Advanced Operations Research	Yasumasa Fujisaki Hiroshi Morita Shunji Umetani Takayuki Wada		2	2				
333202	M	Advanced Nonlinear Systems Analysis	Hideyuki Suzuki Yoshitaka Yamamoto		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 Cruz Jason Paul Miranda		2	2				
333406	М	Exercises on Information Engineering for Interactive Creation A	Taro Maeda Haruo Takemura Toru Fujiwara Yuki Uranishi Susumu Date Yuichi Ito		4	4	4			
333706		Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi		2	2				
333207		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	Takahiro Hara Kazufumi Hosoda Satoru Iwasaki MAHZOON HAMED Yuichi Sudo		2	2				
333015	M	Humanware Fundamentals II D	Takahiro Hara Satoru Iwasaki Yusuke Ogura Ittetsu Taniguchi Shin-ichi Arakawa Kenji Yasunaga Nobuyuki Okahashi Yuichi Sudo Kazufumi Hosoda		2		2			
333016	M	Humanware Innovation Creation D	Masanori Hashimoto Takahiro Hara Kazufumi Hosoda		2		2			
333017	М	Humanware Seminar D	Hiroshi Shimizu MAHZOON HAMED Ittetsu Taniguchi Shin-ichi Arakawa Satoru Iwasaki Kazufumi Hosoda		2	1	1			
333018	M	Humanware Innovation Introduction D	Tatsuhiro Tsuchiya Naoki Wakamiya		2	1	1			
333019	M	Humanware Communication D	Yusuke Ogura Takahiro Hara		2	1	1			
333020		Humanware Interdisciplinary Project Studies D	Kazufumi Hosoda Fumihiko Ino Hiroshi Shimizu Ittetsu Taniguchi Shin-ichi Arakawa MAHZOON HAMED Satoru Iwasaki Kazufumi Hosoda		4	2	2			
333021	M	Innovation Practice Seminar D			4					
333022	M	Humanware Innovation Activity D	Naoki Wakamiya Kazufumi Hosoda		2	1	1			
333023	M	Humanware Laboratory Rotation D	Fumihiko Ino Hiroshi Shimizu		2	1	1			
333024	М	Humanware PI Interdisciplinary Project Studies D	Hiroshi Shimizu Yusuke Ogura Ittetsu Taniguchi Shin-ichi Arakawa Kenji Yasunaga Nobuyuki Okahashi Yuichi Sudo MAHZOON HAMED Satoru Iwasaki Kazufumi Hosoda		4			2	2	
333025	М	Internship (Short Term) D	Naoki Wakamiya Kenji Yasunaga Satoru Iwasaki		2	3	3			
333026	M	Internship (Long Term) D	Naoki Wakamiya Kenji Yasunaga		4	6	6			
333027	G · M	Overseas Internship (Short Term)	Satoru Iwasaki Naoki Wakamiya Satoru Iwasaki		2	3	3			
333028		Orongoog Internahin (Long Torm) D	Naoki Wakamiya Satoru Iwasaki		4	6	6			

(Requirements for Completion)

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

- \* 1. 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.
- \* 2. 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".
- 3. "M" in the classification column represents Major subjects, "G" represents Advanced Global Literacy Educational subjects, and "G·M" represents subjects with both Advanced Liberal Arts Educational and Major subjects' characteristics.
- Advanced Liberal Arts Educational and Major subjects' characteristics.

  4. Only Humanware Innovation Program students can register subjects from 333023 to 333028.
- 5. With regard to 333014, 333015, 333016, 333017, 333018, 333019, 333022, 333023, 333025, 333026, 333027, 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.