Master's Program Subject and Completion Requirements 2023

Department of Information and Physical Sciences

Code	Classification	A completion requirements item name and subject name	Instructor	Unit	School hour a week				Unit multiplication method	Necessary lower limit units	Upper limit units
					1st.Grade		2nd.Grade				
					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms			
		Total							1+2	30	
		1.Advanced Liberal Arts Educational subjects (select from the attached list "「高度教養教育科目リスト(情報数理学専攻)」)								2	
		2.Major Subjects・Advanced Global Literacy Educational subjects							(1)+(2)	28	
		(1)Core Subjects							(1,1)+(1,2)	22	
		(1,1)Core Subjects(Required)							Σ	7	
331212	M	Exercises on Information and Physical Sciences I	All Staff	2	2	2					
331213	M	Exercises on Information and Physical Sciences II	All Staff	2	2	2					
331214	M	Research on Information and Physical Sciences I	All Staff	3	4.5	4.5					
		(1,2)Core Subjects(Elective)							Σ	0	
331203	M	Computational Informatics	Takayuki Wada	2		2					
331204	M	Mathematical Programming	Yasunori Akagi	2	2						
331225	M	Topics on Nonlinear Phenomena	Hideyuki Suzuki	2		2					
331206	M	Nonlinear Analysis	Sho Shirasaka	2	2						
331207	M	Applied Information Analysis	Yasumasa Fujisaki	2	2						
331208	M	Advanced Statistical Analysis	Hiroshi Morita	2		2					
331210	G・M	Seminar on Information and Physical Sciences I	All Staff	2	1	1					
331211	G・M	Seminar on Information and Physical Sciences II	All Staff	2	1	1					
331215	M	Research on Information and Physical Sciences II	All Staff	3			4.5	4.5			
331216	M	Special Lectures on Information and Physical Sciences I	Takashi Ohe	2	2						
331217	M	Special Lectures on Information and Physical Sciences II	(Undecided)	2		2					
331218	M	Information Physics I	Jun Tanida	2	2						
331219	M	Information Physics II	Yusuke Ogura	2		2					
331220	M	Intelligence and Learning	Masayuki Numao	2	2						
331224	M	Knowledge Informatics	Kenichi Fukui	2		2					
331222	M	Advanced Introduction to Information Physical Science	All Staff	2	2						
331223	M	Internship on Information and Physical Sciences	Yasumasa Fujisaki Jun Tanida Hiroshi Morita Masayuki Numao Hideyuki Suzuki	2	3	3					
		(2)Elective subject							(2,1)+(2,2)+(2,3)	0	
		(2,1)Inter-disciplinary Subjects							Σ	0	
331226	M	Introduction to Smart Contracts	Jun Tanida Kenji Taima Hiroshi Noguchi Kayo Yoshimoto	2	2						
331005	M	Information Technology and Ethics	Staffs of dept. of Information Systems Engineering Staffs of dept. of Multimedia Engineering (Michio Nakanishi)	2	2						
331006	G・M	English Presentation Skills	Bettina Wutzl	2	*2	*2					
331014	M	The Foundation of Intellectual Property (Focusing on Computer Science)	(Shuichi Mukai) (Tsuyoshi Masuda) & Other	2		2					
331030	M	Innovation Management	Minoru Eto Yuko Sasahara	2	2						
331130	M	Computational Mathematics I	Daisuke Furihata	2	2						
331131	M	Computational Mathematics II	Tsuyoshi Chawanya	2		2					
331132	M	Applied Mathematics	Yoshie Sugiyama	2	2						
331135	M	Topics in Frontiers of Mathematics	Kouichi Yasui	2		2					
331325	M	Fundamentals of Computer Science	All staff of dept. of Computer Science	2	2						
331338	M	Computational Phogography	Hajime Nagahara Tomoya Nakamura	2		2					
331428	M	Advanced Computing Systems	Noriyuki Miura Jun Shiomi	2	2						
331429	M	Advanced Information Systems		2							
331525	M	Advanced Introduction to Information Networking	All staff of dept. of Information Networking	2		2					
331621	M	Informartion Security	Atsuo Inomata Naoto Yanai	2	2						
331639	G・M	Studies on International Integrated Sciences	Leibnitz Kenji Ferdinand Peper	2	2						
331426	M	Introduction to Exercises on Information Engineering for Interactive Creation A	Taro Maeda Haruo Takemura Yuki Uranishi Susumu Date Yuichi Ito	4	4	4					
331702	M	Molecular Bio-information Analysis		2							
331720	M	Bio-network engineering		2							
331724	M	Introduction to Bioinformatic Engineering	All staff of dept. of Bioinformatic Engineering	2	2						
331732	M	Introduction to Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi Teppei Niide Taisuke Seike	2	2						

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331031	M	Humanware Fundamentals I M	MAHZOON HAMED Satoru Iwasaki Shin'ichi Arakawa Hiroshi Shimizu	2	2						
331032	M	Humanware Fundamentals II M	Satoru Iwasaki Taisuke Izumi	2		2					
331033	M	Humanware Innovation Creation M	Toshimitsu Masuzawa Shigeru Kondo Hideyuki Takahashi	2		2					
331034	M	Humanware Seminar M	Ittetsu Taniguchi Nobuyuki Okahashi Yoshiki Higo MAHZOON HAMED Hiroshi Shimizu	2	1	1					
331035	M	Humanware Innovation Introduction M	Tatsuhiro Tsuchiya Naoki Wakamiya	2	1	1					
331036	M	Humanware Communication M	Shin-ichi Arakawa Suguru Shimomura	2			1	1			
331037	M	Humanware Laboratory Rotation M	Yoshiki Higo	2	1	1					
331038	M	Humanware Internship (Short Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	2	3	3					
331039	M	Humanware Internship (Long Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	4	6	6					
		(2,2)Others								0	
		(2,3)Academic Internship Abroad							MAX{(2,3,1),(2,3,2),(2,3,3)}	0	
		(2,3,1)								0	
331040	G・M	Humanware Overseas Internship (Short Term) M	Yasuyuki Matsushita Satoru Iwasaki	2	3	3					
		(2,3,2)								0	
331025	G・M	Academic Internship Abroad M(S)	All Staff	4	6	6	(6)				
331041	G・M	Humanware Overseas Internship (Long Term) M	Yasuyuki Matsushita Satoru Iwasaki	4	6	6					
		(2,3,3)								0	
331027	G・M	Academic Internship Abroad M(L)	All Staff	8	12	12	(12)				

Note)

1. Σ= Integrate the total number of credits for subjects with a slant line directly below.
2. MAX= Integrate only one subject with the maximum number of credits.
3. The class with * is held twice a year. However, registration is limited according to the department.
4. The class is not offered this year when the instructor's name field is blank.
5. Requirements for Completion; Students must receive 30 credits or more from this table, and pass a final evaluation of their master's thesis. In the 30 credits, students must include 22 credits of Major subjects, 1 credit of Advanced Global Literacy Educational subjects, and 2 credits of Advanced Liberal Arts Educational subjects.
6. M1 students can register Academic Internship AbroadM(S),M(L) from "fall and winter terms" through "spring and summer terms".
7. "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.
8. If you have acquired subjects with both Advanced Global Literacy Educational and Major subjects' characteristics, the credits will be included preferentially for Advanced Global Literacy Educational subjects. If 1 credit of Advanced Global Literacy Educational subjects is already fulfilled, the credits will be included for Major subjects.
9. With regard to Advanced Liberal Arts Educational subjects and Advanced Global Literacy Educational subjects offered by other graduates schools (or other institutions) in Osaka university, the subjects approved by Department of Information and Physical Sciences can be included for Requirements for Completion up to 2 credits for Advanced Liberal Arts and up to 1 credit for Advanced Global Literacy Educational subjects.
   For details, please refer the attached "「高度教養教育科目リスト(情報数理学専攻)」「高度国際性涵養教育科目リスト(情報数理学専攻)」.
10. Only Humanware Innovation Program students can register subjects from 331036 to 331041.