Master's Program Subject and Completion Requirements 2020

Department of Information Systems Engineering

Code	Classification	A completion requirements item name and subject name	Instructor	Unit	School hour a week				Unit multiplication method	Necessary lower limit units	Necessary lower 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(情報システム工学専攻)」)								2	
		2.Major Subjects・Advanced Global Literacy Educational subjects							(1)+(2)	28	
		(1)Core Subjects							(1,1)+(1,2)+(1,3)	22	
		(1,1)Core Subjects(Required)							Σ	4	
331421	M	Research on Information Systems Engineering Ia	All Staff	2	6						
331422	M	Research on Information Systems Engineering Ib	All Staff	2		6					
		(1,2)Core Subjects(Required Elective)							(1,2,1)or(1,2,2)	4	4
		(1,2,1)Required Elective Subjects 1							Σ	0	
331413	M	Exercises on Information Systems Engineering I	All Staff	2	4						
331414	M	Exercises on Information Systems Engineering II	All Staff	2		4					
		(1,2,2)Required Elective Subjects 2							0		
331426	M	Introduction to Exercises on Information Engineering for Interactive Creation A	Taro Maeda Haruo Takemura Toru Fujiwara Yuki Uranishi (Susumu Date) (Yuichi Ito)	4	4	4					
		(1,3)Core Subjects(Elective)							Σ	0	
331003	M	Special Lectures on Information Science & Technology I	(Nobuyuki Shibano) (Hideharu Nakajima) (Hiroaki Sugiyama) (Masakazu Ishihata) (Takashi Hattori) (Masaya Hirashima) (Hiroshi Ban) (Yasushi Naruse)	2	2						
331004	M	Special Lectures on Information Science & Technology II	(Toshiyuki Kano) (Norihiko Taya)	2		2					
331427	M	Embedded System Design	Masanori Hashimoto Hiromitsu Awano	2	2						
331402	M	Introduction to VLSI Design		2							
331404	M	Computer-Aided System-on-a-Chip Design		2							
331408	M	Concurrent Systems		2							
331428	M	Advanced Computing Systems		2							
331429	M	Advanced Information Systems		2							
331409	M	System Interface Design	Haruo Takemura	2	2						
331410	M	Design Methodology of Advanced Information Systems	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiko Imamura Shohei Yamada	2		2					
331411	G・M	Seminar on Information Systems Engineering I	All Staff	2	2						
331412	M	Seminar on Information Systems Engineering II	All Staff	2		2					
331419	M	Integrated System Architecture and Synthesis	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiko Imamura Shohei Yamada	2	2						
331420	M	Dependable Systems	Tatsuhiro Tsuchiya Hiroyuki Nakagawa	2	2						
331423	M	Research on Information Systems Engineering IIa	All Staff	2			6				
331424	M	Research on Information Systems Engineering IIb	All Staff	2				6			
331425	M	Internship on Information Systems Engineering	All Staff (Except Collaborative Division)	2	3	3					
331430	M	Introduction to Reliable Integrated System Design	Masanori Hashimoto	0.5	0.5 (Summer)						
		(2)Elective subject							(2,1)+(2,2)+(2,3)		
		(2,1)Inter-disciplinary Subjects							Σ	0	
331005	M	Informartion 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						
331203	M	Computational Informatics	Takayuki Wada	2		2					
331204	M	Mathematical Programming	Shunji Umetani	2	2						
331222	M	Advenced Introduction to Information Pysicscal Science	All staff of dept. of Information and Physical Sciences	2	2						
331307	M	Algorithm Design	Toshimitsu Masuzawa	2		2					

Master's Program Subject and Completion Requirements 2020

Department of Information Systems Engineering

Code	Classification	A completion requirements item name and subject name	Instructor	Unit	School hour a week				Unit multiplication method	Necessary lower limit units	Necessary lower limit units
					1st.Grade		2nd.Grade				
					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms			
331308	M	Theory of Distributed System Software		2							
331325	M	Fundamentals of Computer Science	All staff of dept. of Computer Science	2	2						
331503	M	Information Network Architecture	Takashi Watanabe Shunsuke Saruwatari	2	2						
331507	M	Mobile Computing	Teruo Higashino Hirozumi Yamaguchi	2	2						
331508	M	Mobile Communication Protocols		2							
331511	M	Economics of Information Network	Teruo Higashino Hirozumi Yamaguchi (Keita Arai)	2	2						
331525	M	Advanced Introduction to Information Networking	All staff of dept. of Information Networking	2		2					
331601	M	Architecture for Multimedia Systems	Shinji Shimojo Susumu Date Kazuhide Kojima Yoshiyuki Kido	2	2						
331635	M	Big Data Engineering		2							
331636	M	Big Data Analytics	Makoto Onizuka Yuya Sasaki	2	2						
331621	M	Information Security		2							
331639	G・M	Studies on International Integrated Sciences	Leibnitz Kenji Ferdinand Peper Cruz Jason Paul Miranda	2	2						
331637	M	Robot Vision	Yasuyuki Matsushita	2		2					
331701	M	Bio-database Engineering		2							
331709	M	Human Information Processing	Taro Maeda	2		2					
331720	M	Bio-network Engineering	Naoki Wakmiya Masaki Ogura	2	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	2	2						
331031	M	Humanware Fundamentals I M	Takahiro Hara Kazufumi Hosoda Satoru Iwasaki MAHZOON　HAMED Yuichi Sudo	2	2						
331032	M	Humanware Fundamentals II M	Takahiro Hara Satoru Iwasaki Yusuke Ogura Ittetsu Taniguchi Shin-ichi Arakawa Kenji Yasunaga Nobuyuki Okahashi Yuichi Sudo Kazufumi Hosoda	2		2					
331033	M	Humanware Innovation Creation M	Masanori Hashimoto Takahiro Hara Kazufumi Hosoda	2		2					
331034	M	Humanware Seminar M	Hiroshi Shimizu MAHZOON　HAMED Ittetsu Taniguchi Shin-ichi Arakawa Satoru Iwasaki Kazufumi Hosoda	2	1	1					
331035	M	Humanware Innovation Introduction M	Tatsuhiro Tsuchiya Naoki Wakamiya	2	1	1					
331036	M	Humanware Communication M	Yusuke Ogura Takahiro Hara Kazufumi Hosoda	2			1	1			
331037	M	Humanware Laboratory Rotation M	Fumihiko Ino Hiroshi Shimizu	2	1	1					
331038	M	Internship (Short Term) M	Naoki Wakamiya Kenji Yasunaga Satoru Iwasaki	2	3	3					
331039	M	Internship (Long Term) M	Naoki Wakamiya Kenji Yasunaga 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	

Master's Program Subject and Completion Requirements 2020

Department of Information Systems Engineering

Code	Classification	A completion requirements item name and subject name	Instructor	Unit	School hour a week				Unit multiplication method	Necessary lower limit units	Necessary lower limit units
					1st.Grade		2nd.Grade				
					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms			
		(2,3,1)								0	
331040	G・M	Overseas Internship (Short Term) M	Naoki Wakamiya Satoru Iwasaki	2	3	3					
		(2,3,2)									
331025	G・M	Academic Internship Abroad M(S)	All Staff	4	6	6	(※6)				
331041	G・M	Overseas Internship (Long Term) M	Naoki Wakamiya 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 27 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 Liberal Arts Educational and Major subjects' characteristics.
8. If you have acquired subjects with both Advanced Liberal Arts 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, it 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 Systems Engineering can be included for Requirements for Completion up to 2 credits for Advanced Liberal Arts Educational subjects and 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(情報システム工学専攻)」「高度国際性涵養教育科目リスト(情報システム工学専攻)」.
10. Only Humanware Innovation Program students can register subjects from 331037 to 331041.