Master's Program Subject and Completion Requirements 2022

Code							our a week		Unit multiplication	Necessary lower limit	
	Classific		Instructor	Unit	1st.Grade Spring and Fall and		2nd.Grade Spring and Fall and				Upper
	ation	and subject name	111501 40101		Spring and Summer Terms	Winter Terms	Spring and Summer Terms	Winter Terms	method	units	limit unit
		Total							1+2	30	
		1.Advanced Liberal Arts Educational subje	cts (select from the attacl	hed list	"「高度教養	教育科目リス	ト(情報ネッ	トワーク学専巧		2	
		2.Major Subjects · Advanced Global Literac	y Educational subjects						(1)+(2)	28	
		(1)Core Subjects	,						(1,1)+(1,2)+(1,3)	22	
		(1,1)Core Subjects (Required)							Σ	4	
331521	M	Research on Information Netwoking Ia	All Staff	2	6						1
331522	M	Research on Information Netwoking Ib	All Staff	2		6					
		(1,2)Core Subjects (Required Elective)							(1,2,1)+(1,2,2)	4	
		(1,2,1)Required Elective Subjects 1							Σ	2	
331514	M	Exercises on Information Networking I	All Staff	2	4					ı	1
331527	М	Exercises on Information Security I	Hirozumi Yamaguchi Akira Uchiyama Naoto Yanai	2	2	2					
		(1,2,2)Required Elective Subjects 2	(Shingo Okamura)					1	Σ	2	$\overline{}$
331515	M	Exercises on Information Networking II	All Staff	2		4					<u> </u>
331528	M	Exercises on Information Security II	Hirozumi Yamaguchi Akira Uchiyama Naoto Yanai (Shingo Okamura)	2	2	2				\	
		(1,3)Core Subjects (Elective)							Σ	0	
331003	М	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	М	Special Lectures on Information Science & Technology II	(Toshiyuki Kano) (Norihiko Taya)	2		2					
331501	M	Information Network Design		2					\		
331502	M	Multimedia Network	Shin-ichi Arakawa	2		2			\		
331503	M	Information Network Architecture	Takashi Watanabe Shunsuke Saruwatari	2	2				\		
331504	M	Network Software		2					1 \		
331506	М	Information Sharing Platform	Toru Hasegawa Yuki Koizumi Katsuhiro Shimano Yasue Kishino Norihito Yasuda	2		2					
331507	M	Mobile Computing	Hirozumi Yamaguchi	2	2				1 \		
331508	M	Mobile Communication Protocols	Akira Uchiyama	2					۱ ۱		
			Masayuki Murata	2		2				\	
331509	M	Gigabit Network	Tomoki Yoshihisa	<u> </u>		2		1		\	
331510	M M	High-Speed Network Architecture Economics of Information Network	Hirozumi Yamaguchi	2	2	1				\	
201011			(Keita Arai)							\	
331512	G · M	Seminar on Information Networking I	All Staff	2	2					\	
331513	M	Seminar on Information Networking II	All Staff	2		2				\	
331520	M	Information Sharing Network Design		2						\	
331523	M	Research on Information Netwoking IIa	All Staff	2			6	1		\	
331524	M	Research on Information Netwoking IIb	All Staff	2				6		/	
331525	M	Advanced Introduction to Information Networking	All Staff	2		2				/	\
331526	М	Internship on Information Networking	Masayuki Murata Takashi Watanabe Toru Hasegawa Hirozumi Yamaguchi Shin-ichi Arakawa Shunsuke Saruwatari Yuki Koizumi Tomoki Yoshihisa Akira Uchiyama Takuya Fujihashi Daichi Kominami Junji Takemasa Tatsuya Amano	2	3	3					

Master's Program Subject and Completion Requirements 2022

	Classific ation			Unit	1st.Grade		ol hour a week 2nd.Grade		Unit	Necessary	
Code		A completion requirements item name and subject name	Instructor		Spring and	Fall and Spring and		Fall and	multiplication	lower limit	Upper limit units
	ation	and subject name			Summer Terms	Winter Terms	Summer Terms	Winter Terms	method	units	mine unit
		(2)Elective subject			Terms	Terms	Terms	Terms	(2,1)+(2,2)+(2,3)	0	
		(2,1)Inter-disciplinary Subjects							Σ	0	
331005	М	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			1 `		
331014	М	The Foundation of Intellectual Property (Focusing on Computer Science)	(Shuichi Mukai) (Tsuyoshi Masuda) Others	2		2					
331030	M	Innovation Management	Minoru Eto Yuko Sasahara	2	2						
331135	M	Topics in Frontiers of Mathematics	Kouichi Yasui	2		2					
331208	M	Advanced Statistical Analysis	Hiroshi Morita	2		2			7		
331222	М	Advanced Introduction to Information Pysical Science	All staff of dept. of Information and Physical Sciences	2	2				1		
331307	M	Algorithm Design	Toshimitsu Masuzawa Taisuke Izumi	2		2			7\		
331308	M	Theory of Distributed System Software	Taisure 12uiiii	2							
331319	M	Theory of Software Design	Shinji Kusumoto	2	2				 		
331325	M	Fundamentals of Computer Science	Yoshiki Higo All staff of dept. of	2	2				┤ \		
331427	M	Embedded System Design	Computer Science	2					┤ \		
331402	M	Introduction to VLSI Design		2					1 \		
331408	M	Concurrent Systems		2					1 \		
331420	М	Dependable Systems	Tatsuhiro Tsuchiya Hiroyuki Nakagawa	2	2				1 \		
331635	M	Big Data Engineering		2] \		
331636	M	Big Data Analytics	Makoto Onizuka Chuan Xiao	2	2						
331621	M	Information Security		2					」 \		
331622	M	Content Security	Toru Fujiwara Atsuo Inomata Naoto Yanai	2	2						
331637	M	Robot Vision	Yasuyuki Matsushita	2		2			 		
331639	G·M	Studies on International Integrated Sciences	Leibnitz Kenji Ferdinand Peper Cruz Jason Paul Miranda	2	2						
331709	M	Human Information Processing	Taro Maeda Masahiro Frukawa	2		2			\		
331720	M	Bio-network Engineering	Naoki Wakamiya Masaki Ogura	2	2				1		
331721	M	Basic Theory of Bio-networks	28444	2					┪ '	\	
331724	М	Introduction to Bioinformatic Engineering	All staff of dept. of Bioinformatic Engineering	2	2						
331732	М	Introduction to Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi	2	2						
331031	M	Humanware Fundamentals I M	MAHZOON HAMED Satoru Iwasaki Taisuke Izumi Hiroshi Shimizu Takahiro Hara	2	2						
331032	М	Humanware Fundamentals II M	Satoru Iwasaki Taisuke Izumi Suguru Shimomura Ittetsu Taniguchi Shin-ichi Arakawa Takuya Maekawa Nobuyuki Okahashi Takahiro Hara	2		2					
331033	М	Humanware Innovation Creation M	Toshimitsu Masuzawa Takahiro Hara Shigeru Kondo Hiroshi Ishiguro	2		2				/	

Master's Program Subject and Completion Requirements 2022

Department of Information Networking

	Classific ation	A completion requirements item name and subject name	Instructor	Unit	School hour a week						
G 1					1st.Grade		2nd.Grade		Unit	Necessary	
Code					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	multiplication method	lower limit units	limit units
331034	М	Humanware Seminar M	Ittetsu Taniguchi Nobuyuki Okahashi Fumihiko Ino MAHZOON HAMED Satoru Iwasaki 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 Takahiro Hara	2			1	1			
331037	M	Humanware Laboratory Rotation M	Fumihiko Ino	2	1	1					\
331038	М	Internship (Short Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	2	3	3					
331039	М	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	Overseas Internship (Short Term) M	Toru Fujiwara Satoru Iwasaki	2	3	3					
		(2,3,2)								0	
331025	$G \cdot M$	Academic Internship Abroad M(S)	All Staff	4	6	6	(6)				
331041	G · M	Overseas Internship (Long Term) M	Toru Fujiwara Satoru Iwasaki	4	6	6					
		(2,3,3)								0	
331027	$G \cdot M$	Academic Internship Abroad M(L)	All Staff	8	12	12	(12)				

Note1)

- 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
- 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 Networking 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(情報ネットワーク学専攻)」「高度国際性涵養教育科目リスト(情報ネットワーク学専攻)」
- $10. \ Only \ Humanware \ Innovation \ \ Program \ students \ can \ register \ subjects \ from \ 331037 \ to \ 331041.$

The requirements to complete "SecCap" course shall be prescribed separately.