Master's Program Subject and Completion Requirements 2024

Departn	ent of M	fultimedia Engineering	T	1		C .1 . 1	h		ı	1	
	Classific ation	A completion requirements item name and subject name	Instructor	Unit	1st.Grade		hour a week 2nd.Grade		Unit	Necessary	Upper limit
Code						Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	multiplication method	lower limit units	units
		Total							1+2	30	
		1.Advanced Liberal Arts Educational subjects (selec	ct from the attached list "	高度教	養教育科目	リスト(マルチ	・メディア工学	専攻)」)		2	
		2.Major Subjects · Advanced Global Literacy Educat	ional subjects						(1)+(2)	28	
		(1)Core Subjects							(1,1)+(1,2)+(1,3)	22	
		(1,1)Core Subjects(Required)							Σ	4	4
331625	M	Research on Multimedia Engineering Ia	All Staff	2	6						
331626	M	Research on Multimedia Engineering Ib	All Staff	2		6			(1,2,1)or(1,2,2)or		
		(1,2)Core Subjects(Required Elective)							(1,2,3)	4	4
		(1,2,1)Required Elective Subjects 1							Σ	0	
331613	M	Exercises on Multimedia Engineering I	All Staff	2	4					_	
331614	M	Exercises on Multimedia Engineering II	All Staff	2		4					
		(1,2,2)Required Elective Subjects 2							Σ	0	
331527	M	Exercises on Information Security I	Hirozumi Yamaguchi Akira Uchiyama (Shingo Okamura)	2	2	2					
331528	М	Exercises on Information Security II	Hirozumi Yamaguchi Akira Uchiyama (Shingo Okamura)	2	2	2					
		(1,2,3)Required Elective Subjects 3							Σ	0	
331426	М	Introduction to Exercises on Information Engineering for Interactive Creation A	Taro Maeda Susumu Date Yuki Uranishi Yuichi Ito Masahiro Furukawa	4	4	4					
		(1,3)Core Subjects(Elective)							(1,3,1)+(1,3,2)	14	
		(1,3,1)Subjects held at the university							Σ	0	
331601	M	Architecture for Multimedia Systems	Susumu Date Kazuhide Kojima Yoshiyuki Kido	2	2						
331635	M	Big Data Engineering		2					\		
331636	M	Big Data Analytics	Makoto Onizuka Chuan Xiao	2	2						
331640	M	Cybernetic Avatar	Norihiro Hagita Takahiro Miyashita Satoshi Satake	2		2					
331611	M	Seminar on Multimedia Engineering I	All Staff	2	2				\		
331612	G · M	Seminar on Multimedia Engineering II	All Staff	2		2			1 \		
331619	М	Multimedia Data Engineering	Takahiro Hara Takuya Maekawa Tadashi Nakano Renee Patrizia Shultz Yasue Kishino	2	2					\	
331620	M	Database Systems		2							
331621	M	Information Security		2						\	
331622	M	Content Security	Atsuo Inomata Kyosuke Yamashita	2	2					\	
331637	M	Robot Vision	Yasuyuki Matsushita	2	ļ	2	1			\	
331638	M	Machine Vision		2						\	
331627	M	Research on Multimedia Engineering IIa	All Staff	2	1	1	6			'	\
331628	M	Research on Multimedia Engineering IIb	All Staff (Osamu Shirakawa)	2	ļ	<u> </u>	1	6			\
331629	М	Special Lectures on Multimedia Engineering	(Usamu Shirakawa) (Tsukasa Okada) (Takashi Taketomi) (Masaki Samejima) (Toshimori Honjo) (Taro Saitou) (Yoshinori Takesako) (Yasuhiro Fujiwara) (Yukiko Kawai)	2		2					
331639	G·M	Studies on International Integrated Sciences	Leibnitz Kenji Ferdinand Peper	2	2					1	\
		(1,3,2)Subjects held outside the university							MAX{(1,3,2,1),(1, 3,2,2)}	0	
		(1,3,2,1)		1	ļ	ļ				0	
331630	M	Internship on Multimedia Engineering	All Staff(Except Collaborative Division)	2	3	3					

Master's Program Subject and Completion Requirements 2024

Department of Multimedia Engineering School hour a week Unit 1st.Grade 2nd.Grade A completion requirements item name and subject Upper limit Code Instructor Unit multiplication lower limit Spring and Fall and pring and ation Fall and Winter units method units Terms (1,3,2,2)0 All Staff(Except 331633 Μ Collaborative Research in Multimedia Engineering 4 6 6 Collaborative Division) (2.1)+(2.2)+(2.3)(2)Elective subject (2,1)Inter-disciplinary Subjects 0 Staffs of dept. of Information Systems Engineering 2 331005 Μ Informartion Technology and Ethics 2 Staffs of dept. of Multimedia Engineering (Michio Nakanishi) 331006 $G \cdot M$ English Presentation Skills Bettina Wutzl 2 *2 *2 (Shuichi Mukai) The Foundation of Intellectual Property (Focusing (Tsuyoshi Masuda) &Other 331014 Μ 2 2 on Computer Science) Minoru Eto 2 2 331030 Innovation Management Yuko Sasahara 331135 \mathbf{M} Topics in Frontiers of Mathematics Makoto Nakamura 2 2 2 2 331203 Μ Computational Informatics Takayuki Wada 2 2 331204 Mathematical Programming Yutaro Yamaguchi 2 2 331208 М Advanced Statistical analysis Hiroshi Morita Advanced Introduction to Information Physical 2 331222 Μ All Staff 2 2 331224 \mathbf{M} Knowledge Informatics Kenichi Fukui 2 Toshimitsu Masuzawa 2 331307 Μ Algorithm Design 2 Taisuke Izumi 331308 2 Μ Theory of Distributed System Software 2 331319 Μ Theory of Software Design Shinii Kusumoto 2 Atsushi Yagi Yuta Nakashima 331337 Μ Image Recognition Yasushi Makihara 2 2 Hideaki Hayashi Hajime Nagahara 331338 Computational Phogography 2 2 Tomoya Nakamura 331404 Μ Computer-Aided System-on-a-Chip Design 2 331408 ${\bf M}$ 2 Concurrent Systems 331409 М System Interface Design Yuki Uranishi 2 2 Takao Onoye Ittetsu Taniguchi 331419 Integrated System Architecture and Synthesis Norio Ito 2 2 Kimihiko Imamura Shohei Yamada 331420 2 ${\bf M}$ Dependable Systems Tatsuhiro Tsuchiya Yoshinobu Kawahara 2 331431 M Machine Learning Systems Theory Takuya Konishi 331501 Information Network Design 2 Hidevuki Shimonishi 331502 Multimedia Network 2 2 Shin-ichi Arakawa Hirozumi Yamaguchi 2 331507 Μ Mobile Computing Akira Uchivama 2 Viktor Erdelyi 331508 Mobile Communication Protocols 2 Masayuki Murata 331509 2 2 Μ Gigabit Network Yuichi Ohshita 331510 Μ 2 High-Speed Network Architecture Hirozumi Yamaguchi 2 2 331511 Economics of Information Network Akira Uchiyama All staff of dept. of 331525 Advanced Introduction to Information Networking 2 2 Information Networking Taro Maeda 331709 Μ 2 2 Human Information Processing Masahiro Fruka 2 331720 Bio-network Engineering Naoki Wakamiya

2

2

331721

331723

Μ

Basic Theory of Bio-networks

Human Information Engineering

Master's Program Subject and Completion Requirements 2024

Department of Multimedia Engineering

	10110 01 10	luitimedia Engineering		1	School hour a week						
Code	Classific ation	A completion requirements item name and subject name	Instructor	Unit	School 1st.Grade		hour a week 2nd.Grade		Unit	Necessary	
					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	multiplication method	lower limit units	Upper limit units
331724	M	Introduction to Bioinformatic Engineering	All staff of dept. of Bioinformatic Engineering	2	2	Terms	Terms				
331732	М	Introduction to Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi Teppei Niide Taisuke Seike	2	2					,	
331031	М	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	М	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	М	Humanware Communication M	Shin-ichi Arakawa Suguru Shimomura	2			1	1			\
331037	M	Humanware Laboratory Rotation M	Yoshiki Higo	2	1	1					1
331038	М	Humanware Internship (Short Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	2	3	3					
331039	М	Humanware Internship (Long Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	4	6	6					
		(2,2)Others									
		(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	$G \cdot M$	Academic Internship Abroad M(L)	All Staff	8	12	12	(12)				

Note1)

- Σ= Integrate the total number of credits for subjects with a slant line directly below.
- $\ensuremath{\mathsf{MAX}}\xspace=\ensuremath{\mathsf{Integrate}}$ only one subject with the maximum number of credits.
- $3. \ \, \text{The class with * is held twice a year. However, registration is limited according to the department.} \\ 4. \ \, \text{The class is not offered this year when the instructor's name field is blank.} \\$
- 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
- 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 with both Advanced Global Literacy Educational subjects with both Advanced Global Literacy Educational and Major subjects with both 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 Multimedia 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(マルチメディア工学専攻)」「高度国際性涵養教育科目リスト(マルチメディア工学専攻)」.
- $10. \ Only \ Humanware \ Innovation \ \ Program \ students \ can \ register \ subjects \ from \ 331036 \ to \ 331041.$

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