Master's Program Subject and Completion Requirements 2021

Department of Multimedia 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(マルチメディア工学専攻								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	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)Core Subjects(Required Elective)							(1,2,1)or(1,2,2)or(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	Morito Matsuoka Yuki Koizumi Naoto Yanai (Shingo Okamura)	2	2	2					
331528	M	Exercises on Information Security II	Morito Matsuoka Yuki Koizumi Naoto Yanai (Shingo Okamura)	2	2	2					
		(1,2,3)Required Elective Subjects 3							Σ	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)							(1,3,1)+(1,3,2)	14	
		(1,3,1)Subjects held at the university							Σ	0	
331601	M	Architecture for Multimedia Systems	Shinji Shimojo Susumu Date Kazuhide Kojima Yoshiyuki Kido	2	2						
331635	M	Big Data Engineering	Makoto Onizuka Chuan Xiao	2	2						
331636	M	Big Data Analytics		2							
331610	M	Multimedia Agent	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					
331619	M	Multimedia Data Engineering		2							
331620	M	Database Systems	Takahiro Hara Takuya Maekawa Tadashi Nakano Renee Patrizia Shultz	2	2						
331621	M	Information Security	Toru Fujiwara Atsuo Inomata Kenji Yasunaga	2	2						
331622	M	Content Security		2							
331637	M	Robot Vision		2							
331638	M	Machine Vision	Yasuyuki Matsushita	2		2					
331627	M	Research on Multimedia Engineering IIa	All Staff	2			6				
331628	M	Research on Multimedia Engineering IIb	All Staff	2				6			
331629	M	Special Lectures on Multimedia Engineering	(Osamu Yonetani) (Osamu Shirakawa) (Yasuhiro Fujiwara) (Hideki Kashioka) (Toshiyasu Sugio) (Katsuyoshi Yamagami) (Masahiro Iwasaki)	2		2					
331639	G・M	Studies on International Integrated Sciences	Leibnitz Kenji Ferdinand Peper Cruz Jason Paul	2	2						
		(1,3,2)Subjects held outside the university							MAX{(1,3,2,1),(1,3,2,2)}	0	
		(1,3,2,1)								0	
331630	M	Internship on Multimedia Engineering	All Staff(Except Collaborative Division)	2	3	3					
		(1,3,2,2)								0	
331633	M	Collaborative Research in Multimedia Engineering	All Staff(Except Collaborative Division)	4	6	6					
		(2)Elective subject							(2,1)+(2,2)+(2,3)		

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		(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						
331135	M	Topics in Frontiers of Mathematics	Masaaki Wada	2		2					
331203	M	Computational Informatics	Takayuki Wada	2		2					
331204	M	Mathematical Programming		2							
331208	M	Advanced Statistical analysis	Hiroshi Morita	2		2					
331222	M	Advanced Introduction to Information Physical Science	All Staff	2	2						
331224	M	Knowledge Informatics	Kenichi Fukui	2		2					
331307	M	Algorithm Design		2							
331308	M	Theory of Distributed System Software	Toshimitsu Masuzawa Taisuke Izumi	2		2					
331319	M	Theory of Software Design	Shinji Kusumoto Yoshiki Higo	2	2						
331337	M	Image Recognition		2							
331338	M	Computational Phogography	Hajime Nagahara Tomoya Nakamura	2		2					
331404	M	Computer-Aided System-on-a-Chip Design	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiko Imamura Shouhei Yamada	2	2						
331408	M	Concurrent Systems	Tatsuhiro Tsuchiya Hiroyuki Nakagawa	2	2						
331409	M	System Interface Design	Haruo Takemura Yuki Uranishi	2	2						
331419	M	Integrated System Architecture and Synthesis		2							
331420	M	Dependable Systems		2							
331501	M	Information Network Design	Morito Matsuoka Shin-ichi Arakawa	2	2						
331502	M	Multimedia Network		2							
331507	M	Mobile Computing		2							
331508	M	Mobile Communication Protocols	Hirozumi Yamaguchi	2		2					
331509	M	Gigabit Network		2							
331510	M	High-Speed Network Architecture	Masayuki Murata Tomoki Yoshihisa	2	2						
331511	M	Economics of Information Network	Hirozumi Yamaguchi (Keita Arai)	2	2						
331525	M	Advanced Introduction to Information Networking	All staff of dept. of Information Networking	2		2					
331709	M	Human Information Processing		2							
331720	M	Bio-network Engineering		2							
331721	M	Basic Theory of Bio-networks	Naoki Wakamiya Masaki Ogura	2	2						
331723	M	Human Information Engineering	Taro Maeda Masahiro Furukawa	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	MAHZOON HAMED Satoru Iwasaki Taisuke Izumi Hiroshi Shimizu Takahiro Hara	2	2						
331032	M	Humanware Fundamentals II M	Satoru Iwasaki Taisuke Izumi Yusuke Ogura Ittetsu Taniguchi Shin-ichi Arakawa Kenji Yasunaga Nobuyuki Okahashi Takahiro Hara	2		2					

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331033	M	Humanware Innovation Creation M	Toshimitsu Masuzawa Takahiro Hara Shigeru Kondo Hiroshi Ishiguro	2		2					
331034	M	Humanware Seminar M	Nobuyuki Okahashi Ittetsu Taniguchi Fumihiko Ino MAHZOON HAMED Shin-ichi Arakawa 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	Yusuke Ogura Shin-ichi Arakawa Takahiro Hara	2			1	1			
331037	M	Humanware Laboratory Rotation M	Fumihiko Ino Hiroshi Shimizu	2	1	1					
331038	M	Internship (Short Term) M	Kenji Yasunaga Naoki Wakamiya Satoru Iwasaki	2	3	3					
331039	M	Internship (Long Term) M	Kenji Yasunaga 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	Overseas Internship (Short Term) M	Toru Fujiwara 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	Toru Fujiwara Satoru Iwasaki	4	6	6					
		(2,3,3)								0	
331027	G・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 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, 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 331037 to 331041.

Note2)
The requirements to complete "SecCap" course shall be prescribed separately.