

Master's Program Subject and Completion Requirements 2025

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	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 "High Education Subject List (Multimedia Engineering Major)"								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	Hirozumi Yamaguchi Akira Uchiyama (Shingo Okamura)	2	2	2								
331528	M	Exercises on Information Security II	Hirozumi Yamaguchi Akira Uchiyama (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 Susumu Date Yuki Uranishi 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	Makoto Onizuka Chuan Xiao	2	2									
331636	M	Big Data Analytics		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								
331619	M	Multimedia Data Engineering		2										
331620	M	Database Systems	Takahiro Hara Takuya Maekawa Tadashi Nakano Renee Patrizia Shultz Yasue Kishino Amagata Daichi Zhang Yibong	2	2									
331621	M	Information Security	Takanori Isobe Kyosuke Yamashita	2	2									
331622	M	Content Security		2										
331637	M	Robot Vision		2										
331638	M	Machine Vision	Fumio Okura	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 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									
		(1,3,2)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								

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		(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)	1				
		(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 Takaaki Kitajima	2	2									
331135	M	Topics in Frontiers of Mathematics	Yuto Miyatake	2		2								
331203	M	Computational Informatics	(Undecided)	2										
331204	M	Mathematical Programming	Yutaro Yamaguchi	2	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	(Undecided)	2										
331307	M	Algorithm Design		2										
331308	M	Theory of Distributed System Software	Taisuke Izumi	2		2								
331319	M	Theory of Software Design	Shinji Kusumoto Shinsuke Matsumoto	2	2									
331337	M	Image Recognition		2										
331338	M	Computational Photography	Hajime Nagahara Tomoya Nakamura	2		2								
331404	M	Computer-Aided System-on-a-Chip Design	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiro Imamura Shohei Yamada	2	2									
331408	M	Concurrent Systems	Tatsuhiro Tsuchiya	2	2									
331409	M	System Interface Design	Yuki Uranishi	2	2									
331419	M	Integrated System Architecture and Synthesis		2										
331420	M	Dependable Systems		2										
331431	M	Machine Learning Systems Theory		2										
331432	M	Machine Learning for Dynamical Systems	Yoshinobu Kawahara Masahiro Ikeda Takuya Konishi Masahiro Fujisawa	2	2									
331501	M	Information Network Design	Hideyuki Shimonishi Shin-ichi Arakawa	2	2									
331502	M	Multimedia Network		2										
331507	M	Mobile Computing		2										
331508	M	Mobile Communication Protocols	Hirozumi Yamaguchi Akira Uchiyama Viktor Evdolovi	2		2								
331509	M	Gigabit Network		2										
331510	M	High-Speed Network Architecture	Yuichi Ohshita	2	2									
331511	M	Economics of Information Network	Hirozumi Yamaguchi Akira Uchiyama (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 Shun Kurokawa	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									

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331732	M	Introduction to Integrated Biological and Information Engineering	Hiroshi Shimizu Fumio Matsuda Yoshihiro Toya Nobuyuki Okahashi Teppei Niide	2	2									
		(2,2)Others												
		(2,3)Academic Internship Abroad							MAX{(2,3,1),(2,3,2)}	0				
		(2,3,1)								0				
331025	G・M	Academic Internship Abroad M(S)	All Staff	4	6	6	(6)							
		(2,3,2)								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 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 Abroad M(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 graduate 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)」。

Note2)

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