Department of Multimedia Engineering School hour a week Necessary Necessary 1st.Grade 2nd.Grade Unit multiplication A completion requirements item name and Unit Spring and Code Instructor lower limit lower limit Fall and Spring and Fall and subject name method Summer Winter Winter units units Summer Terms Terms Terms Terms Total (1)+(2)30 (1,1)+(1,2)+(1,3)22 (1)Core Subjects (1,1)Core Subjects (Required) 4 Research on Multimedia Engineering Ia All Staff 2 6 331626 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)or(1,2,4)(1,2,1)Required Elective Subjects 1 331613 Exercises on Multimedia Engineering I All Staff 2 4 331614 Exercises on Multimedia Engineering II All Staff 4 (1,2,2)Required Elective Subjects 2 Katsuro Inoue Fundamentals of Software Development Shinji Kusumoto 2 2 on Cloud Environment Shusuke Haruna & Other Katsuro Inoue Shinji Kusumoto Exercise for Software Development on 331333 2 2 2Cloud Environment Shusuke Haruna & Other (1,2,3)Required Elective Subjects 3 0 Morito Matsuoka Yuya Tarutani 2 2 2331527 Exercises on Information Security I Naoto Yanai (Shingo Okamura) Morito Matsuoka Yuya Tarutani 331528 Exercises on Information Security II 2 2 2 Naoto Yanai (Shingo Okamura) (1,2,4)Required Elective Subjects 4 Taro Maeda Haruo Takemura Introduction to Exercises on Information Toru Fujiwara 331426 4 Hideyuki Ando Engineering for Interactive Creation A Susumu Date Yuichi Ito (1,3)Core Subjects (Elective) (1,3,1)+(1,3,2)14 (1,3,1)Subjects held at the university 0 Shinji Shimojo Susumu Date Kazuhide Kojima 2 331601 Architecture for Multimedia Systems 2Yoshiyuki Kido (Takashi Yoshikawa) (Lee Chonho) Makoto Onizuka 331635 Big Data Engineering Yuki Arase 2Yuya Sasaki 331636 Big Data Analytics 2Norihiro Hagita 331610 Multimedia Agent Takahiro Miyashita 22Takayuki Kanda Seminar on Multimedia Engineering I All Staff 22 Seminar on Multimedia Engineering II All Staff 2331619 Multimedia Data Engineering 2 Takahiro Hara Takuya Maekawa 331620 Database Systems 22 Tomoki Yoshihisa (Kaname Harumoto) Toru Fujiwara 2 2 331621 Information Security Yasunori Ishihara 331622 Content Security 2 331637 Robot Vision 2 Yasuyuki Matsushita 2 331638 Machine Vision Yusuke Sugano 2Masaki Samejima 331627 Research on Multimedia Engineering IIa All Staff 2 6 331628 Research on Multimedia Engineering IIb All Staff 26 (Osamu Yonetani) (Osamu Shirakawa) (Yasuhiro Fujiwara) Special Lectures on Multimedia 331629 (Hideki Kashioka) 2 2 Engineering (Toshiyasu Sugio) (Katsuyoshi Yamagami) (Masahiro Iwasaki) Leibnitz Kenji Studies on International Integrated Ferdinand Peper 331639 22Sciences Siriteanu Constantin (1,3,2)Subjects held outside the  $MAX\{(1,3,2,1),(1,3,$ university  $\{2,2\}$ (1,3,2,1)All Staff(Except 2 331630 Internship on Multimedia Engineering 3 3 Collaborative Division) (1,3,2,2)Collaborative Research in Multimedia All Staff(Except 331633 6 6 Engineering Collaborative Division) (2,1)+(2,2)+(2,3)(2)Elective subject (2,1)Inter-disciplinary Subjects 0

Department of Multimedia Engineering

	A completion requirements item name and subject name	Instructor	Unit	School hour a week 1st.Grade 2nd.Grade			Grade		Necessary	Necessary
Code				Spring and Summer	Fall and Winter	Spring and Summer	Fall and Winter	Unit multiplication method	lower limit units	lower limit units
331005	Informartion Technology and Ethics	Staffs of dept. of Information Systems Engineering Staffs of dept. of Multimedia Engineering (Michio Nakanishi)	2	Terms 2	Terms	Terms	Terms			
331006	English Presentation Skills	Eum Suyong	2	*2	*2			1 \		
331014	The Foundation of Intellectual Property (Focusing on Computer Science)	Hidefumi Aoe & Other	2		2					
331135	Topics in Frontiers of Mathematics	Satoshi Murai	2		2			] \		
331204	Mathematical Programming	Shunji Umetani	2	2				] \		
331224	Knowledge Informatics	Kenichi Fukui	2		2			] \		
331306	Software Maintenance Engineering		2					] \		
331319	Theory of Software Design	Shinji Kusumoto Yoshiki Higo	2	2						
331337	Image Recognition		2							
331336	Advanced PBL for Software Development on Cloud Environment	Katsuro Inoue Shinji Kusumoto & Other	2		2					
331404	Computer-Aided System-on-a-Chip Design	Takao Onoye Ittetsu Taniguchi	2	2						
331405	Integrated Systems Engineering	Koji Nakamae Katsuyoshi Miura	2	2				] /	\	
331406	Image Signal Processing	Koji Nakamae Katsuyoshi Miura	2		2					
331408	Concurrent Systems	Tatsuhiro Tsuchiya Hiroyuki Nakagawa	2	2						
331409	System Interface Design	Haruo Takemura	2	2						
331419	Integrated System Architecture and Synthesis		2							
331420	Dependable Systems	Morito Matsuoka	2		1	-	1	-	\	
331501	Information Network Design	Shin-ichi Arakawa	2	2					\	
331502	Multimedia Network	biiii ioiii i i anawa	2					1	\	
331507	Mobile Computing		2						\	
331508	Mobile Communication Protocols	Teruo Higashino	2		2				\	
		Hirozumi Yamaguchi				_		4	\	
331509 331510	Gigabit Network High-Speed Network Architecture	Masayuki Murata Go Hasegawa	2	2				-	`	
331511	Economics of Information Network	Teruo Higashino Hirozumi Yamaguchi	2	2				1		
331709	Human Information Processing	(Keita Arai)	2					1		\
331723	Human Information Engineering	Taro Maeda Hideyuki Ando	2		2			1		
331724	Introduction to Bioinformatic Engineering	All staff of dept. of Bioinformatic Engineering	2	2						
331732	Introduction to Integrated Biological and Information Engineering	Hiroshi Shimizu Yoshihiro Toya	2	2						
	(2,2)Others								<u> </u>	
	(2,3)Academic Internship Abroad							MAX{(2,3,1),(2,3,2)}	0	
	(2,3,1)S								0	
331025	Academic Internship Abroad M(S)	All Staff(Except Collaborative Division)	4	6	6	(%6)				
00100=	(2,3,2)L	All Staff(Except		40	4.0	()*/=0)			0	
331027	Academic Internship Abroad M(L)  \[ \sum_{=} \] Integrate the total number of credits for	Collaborative Division)	8	12	12	(※12)				

Note 1) 1.  $\Sigma$ = 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.
- 6. M1 students can register Academic Internship AbroadM(S),M(L) from "fall and winter terms" through "spring and summer terms".
- Note 2) 1. The requirements to complete "Cloud Spiral" course shall be prescribed separately.
  - 2. 331332, 331333 and 331336 are offered only for "Cloud Spiral" course students. (held at Nakanoshima center)

Note 3) The requirements to complete "SecCap" course shall be prescribed separately.