Departr	nent of I	nformation Systems Engineering	T	1		Cal 11	un o 1			1	1
	Classifi	A completion requirements item name and subject			School ho 1st.Grade		our a week 2nd.Grade		Unit multiplication	Necessary	Upper limit
Code	Classific ation	A completion requirements item name and subject name	Instructor	Unit	Spring and Summer	Fall and Winter	Spring and Summer	Fall and Winter	method	lower limit units	units
					Terms	Terms	Terms	Terms			
		Total		de site del de	644000	1 / labeler a			1+2	30	
		1.Advanced Liberal Arts Educational subjects (sele 2.Major Subjects · Advanced Global Literacy Educat		品度教養	を教育科目リス 	くト(情報システ	アム上字専攻	) ])	(1)+(2)	28	
		(1)Core Subjects	nonai subjects						(1,1)+(1,2)+(1,3)	28	
		(1,1)Core Subjects (Required)							Σ	4	
											1
331421	M	Research on Information Systems Engineering Ia	All Staff	2	6				]	_	
331422	M	Research on Information Systems Engineering Ib	All Staff	2		6					
		(1,2)Core Subjects (Required Elective)							(1,2,1)or(1,2,2)	4	
		(1,2,1)Required Elective Subjects 1							Σ	0	
331413	M	Exercises on Information Systems Engineering I	All Staff	2	4					_	
331414	M	Exercises on Information Systems Engineering II	All Staff	2		4					_
		(1,2,2)Required Elective Subjects 2								0	
		*	m 16 1								
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)							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			] \		
331431	M	Machine Learning Systems Theory	Yoshinobu Kawahara Takuya Konishi	2	2						
331404	M	Computer-Aided System-on-a-Chip Design		2							
331419	M	Integrated System Architecture and Synthesis	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiko Imamura Shohei Yamada	2	2						
331410	M	Design Methodology of Advanced Information Systems	Takao Onoye Ittetsu Taniguchi Norio Ito Kimihiko Imamura Shohei Yamada	2		2			\	\	
331428	M	Advanced Computing Systems		2					1	\	
331429	М	Advanced Information Systems	Noriyuki Miura Jun Shiomi	2	2				1	\	
331408	M	Concurrent Systems		2	-	-	1		1	\	
			m . 1 . m . 1 .		_	-			1	\	
331420	M	Dependable Systems	Tatsuhiro Tsuchiya	2	2				4	\	
331409	M	System Interface Design	Yuki Uranishi	2	2					/	
331411	G·M	Seminar on Information Systems Engineering I	All Staff	2	2						\
331412	M	Seminar on Information Systems Engineering II	All Staff	2		2					\
331423	M	Research on Information Systems Engineering IIa	All Staff	2			6		1		\
331424	М	Research on Information Systems Engineering IIb	All Staff	2				6			\
331425	M	Internship on Information Systems Engineering	All Staff (Except Collaborative	2	3	3			1		/
		(2)Elective subject	Division)						(2,1)+(2,2)+(2,3)		
	<u> </u>	·	<u> </u>		<u> </u>	<u> </u>	1	<u> </u>	Σ	0	<u> </u>
		(2,1)Inter-disciplinary Subjects			-	-			4	1 0	<u> </u>
331005	M	Informartion Technology and Ethics	Staffs of dept. of Information Systems Engineering Staffs of dept. of Multimedia Engineering (Michio Nakanishi)	2	2						
221000	G · M	English Presentation Chille	Bettina Wutzl	2	*2	*2	1		1 \		
331006	G · M	English Presentation Skills	Dettina Wutzi	L 4		<u></u>	1	Ī	J 1		

Department of Information Systems Engineering School h 1st.Grade Classific A completion requirements item name and subject Unit multiplication Upper limit ower limit Unit Spring and Fall and Spring and Summer Fall and method ation name units units (Shuichi Mukai) The Foundation of Intellectual Property (Focusing 331014 М (Tsuyoshi Masuda) 2 2 on Computer Science) & Other 2 331030 Innovation Management Yuko Sasahara 331203  $\mathbf{M}$ Computational Informatics Takayuki Wada 2 2 331204 Mathematical Programming Yutaro Yamaguchi 2 2 All staff of dept. of Advenced Introduction to Information Pysicscal 331222 M 2 2 Science Sciences Masayuki Murata Kenji Yamada 331226 Μ Introduction to Smart Contracts Kayo Yoshimoto 2 2 Hiroshi Noguchi Kozou Ohtani Toshimitsu Masuzawa 331307 М Algorithm Design 2 2 Taisuke Izumi 331308 M Theory of Distributed System Software 2 All staff of dept. of 331325 2 2 М Fundamentals of Computer Science Computer Science Hajime Nagahara 331338 М Computational Phogography 2 2 Tomoya Nakamura Takashi Watanabe 331503 М Information Network Architecture 2 2 Hirozumi Yamaguchi 2 331507 Μ Mobile Computing Akira Uchiyama 2 Viktor Erdelyi 331508  ${\bf M}$ Mobile Communication Protocols 2 Hirozumi Yamaguchi 331511  ${\bf M}$ Economics of Information Network Akira Uchiyama 2 2 (Keita Arai) All staff of dept. of 331525 M Advanced Introduction to Information Networking 2 Information Networking Susumu Date 331601 М Architecture for Multimedia Systems 2 Kazuhide Kojima Yoshiyuki Kido 331635 Big Data Engineering 2 Makoto Onizuka 331636  $\mathbf{M}$ Big Data Analytics 2 Chuan Xiao 331621 2 Information Security Leibnitz Kenji  $G \cdot M$ 2 2 331639 Studies on International Integrated Sciences Ferdinand Pener 331637 Μ Yasuyuki Matsushita 2 2 331701 Μ Bio-database Engineering 2 Taro Maeda 331709 Human Information Processing 2 Masahiro Furukawa 331720 M Bio-network Engineering Naoki Wakamiya 2 2 All staff of dept. of 331724 М Introduction to Bioinformatic Engineering 2 2 Bioinformatic Engineering Hiroshi Shimizu Fumio Matsuda Introduction to Integrated Biological and Yoshihiro Toya 331732 2 2 М Information Engineering Nobuyuki Okahashi Teppei Niide Taisuke Seike MAHZOON HAMED Satoru Iwasaki 331031 Shin'ichi Arakawa Hiroshi Shimizu Taisuke Izumi 331032 М Humanware Fundamentals II M 2 2 Toshimitsu Masuzawa 331033 М Humanware Innovation Creation M Shigeru Kondo 2 2

Hideyuki Takahashi

Department of Information Systems Engineering

Code		A completion requirements item name and subject name	Instructor	Unit	School hour a week				1		
					1st.Grade		2nd.Grade		Unit multiplication	Necessary	
					Spring and Summer Terms	Fall and Winter Terms	Spring and Summer Terms	Fall and Winter Terms	method	lower limit units	units
331034	М	Humanware Seminar M	Nobuyuki Okahashi Ittetsu Taniguchi Yoshiki Higo MAHZOON HAMED Hiroshi Shimizu	2	1	1					
331035	M	Humanware Innovation Introduction M	Tatsuhiro Tsuchiya Naoki Wakamiya	2	1	1					\
331036	M	Humanware Communication M	Suguru Shimomura Shin-ichi Arakawa	2			1	1			
331037	M	Humanware Laboratory Rotation M	Yoshiki Higo	2	1	1					1
331038	M	Humanware Internship (Short Term) M	Takuya Maekawa Naoki Wakamiya Satoru Iwasaki	2	3	3					\
331039	M	Humanware 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	ı
		(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	$G \cdot M$	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)				

- Note)

  1. \( \subseteq \) Integrate the total number of credits for subjects with a slant line directly below.

  2. \( \text{MAX} = \) 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. \( \text{The class is not offered this year when the instructor's name field is blank.} \)

- The class is not offered this year when the instructor's name field is blank.
   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.
   M1 students can register Academic Internship AbroadM(S),M(L) from "fall and winter terms" through "spring and summer terms".
   "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 subjects is already fulfilled, it will be included for Major subjects.
   With presents Advanced Global Literacy Educational subjects is already fulfilled, it 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 Systems 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(情報システム工学専攻)」「高度国際性涵養教育科目リスト(情報システム工学専攻)」
  10. Only Humanware Innovation Program students can register subjects from 331036 to 331041.