香	川高等専	門学校	開講年度	開講年度   令和05年度 (2023年度)			情報工学演習(留学生)					
科目基礎	む むんちょう むんちょう かんしん むんしん むんしん むんしん むんしん むんしん むんしん むんしん											
科目番号 5401						専門 / 必修						
授業形態		授業			単位の種別と単位数 履修単位: 2		2					
開設学科		情報工学	科(2019年度以降。	入学者)	対象学年 3							
開設期		诵年			调時間数	2						
教科書/教	材	Hamabe Languag for Begi	Ryuji, "Introducti e", Kindai Kagaku neers", Morikita Pu	on to Logic Circuit Sha. Study Group Iblishing.	Circuits", Morikita Publishing. Hasegawa Satoshi, "Understandable C Group of Information Processing Education, "Programming Workbook							
This class allows the students to acquire the knowledge necessary for understanding classes in the third and subsequent years of the Department of Information Engineering. In particular, the Department of Information Engineering strongly requires the students to know how CPUs work and to be able to write programs, and therefore the primary goal for them is to acquire the basics of logic circuits and basic programming skills. In addition, if students are found not to have sufficient knowledge for understanding classes in the third and subsequent years, the class will flexibly teach necessary knowledge.												
ルーブリック												
			Ideal Level	Ideal Level			Unacceptable Level					
Able to perform basic Windows operations			Can quickly per operations.	form basic	Can perform basic operations.		Cannot perform basic operations.					
Able to cr a word pr	reate docui rocessor	ments usin	<sup>g</sup> Can quickly cre	ate documents.	Can create documents.		Cannot create documents.					
Can add a numbers	and subtra	ct binary	Can add and su numbers.	ubtract binary	Knows how to add or subtract binary numbers.		Cannot add nor subtract binary numbers.					
Understar logic and able to pe algebraic	nd the fund mathemat erform Boo logic opera	damentals ics, and be lean ations.	of Can perform lo in Boolean alge	gical operations bra.	Understands the basics of computer mathematics.		Does not understand the basics of computer mathematics.					
Understar between standard standard table.	nd the rela the truth ta form, and form from	tionship able and th obtain the the truth	Understands the between truth standard forms standard forms tables.	e relation tables and , and can obtain from truth	Understands the relation between truth tables and standard forms.		Does not understand the relation between truth tables and standard forms.					
Can be si Karnaugh	mplified wi diagram	ith a	Can perfom log by Karnaugh m	ic simplification	Understands logic simplification by Karnaugh maps.		Does not understand logic simplification by Karnaugh maps.					
Understar procedure	nd basic pr es	rogrammin	Gan create pro	Can create programs. Understands t procedures of		ie basic programming.	Does not understand the basic procedures of programming.					
Understai of the pro	nd the basi ogram	ic structure	Understands the of programs.	nderstands the basic structure Knows the basi programs.		c structure of	Does not know the basic structure of programs.					
Describe repetition	selection a structures	nd s in C	Can write select repetition struct	tion and tures in C.	Knows selection and repetition structures in C.		Does not know selection and repetition structures in C.					
Understand basic algorithms using arrays			Understands ba using arrays.	asic algorithms	Can use arrays		Cannot use arrays.					
学科の到	達目標項	目との関	係									
教育方法	等											
概要		This clas	s offers exercises y according to the	offers exercises on the study contents of each study item. In addition, assignments will be given as according to the study items. and the students will be required to submit reports on them.								
授業の進め方・方法 授業の進め方・方法 は kills accor			rst semester, the s for the second ye cording to the con	: semester, the students learn basic computer operations and the basics of digital circuits using the or the second year students. In the second semester, the students acquires basic programming rding to the contents studied in Information Processing I in the second yeare.								
注意点		For ques building Office ho	tions, email at ko No.3). ours: Monday afte	ons, email at kondoh@di.kagawa-nct.ac.jp or visit the instructors office (3rd floor of the department o.3). rs: Monday after school - 17:00								
授業の属	属性・履修	▲ 上の区分										
□ アクテ	ィブラーニ	ング	□ ICT 利用	□ ICT 利用 [		ż	□ 実務経験のある教員による授業					
₩₩₽₽₽	1											
12末前四	<u>비</u>	\E				゚゙゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚						
	1stQ	迥 1.泪	投耒内谷		1週ことの到進日標							
		1週	Typing practice	Windows operation		Can perform basis Windows operations (1)						
前期		2迥	xercises of basic Windows operation		ons 1 Can perform basi		c windows operations. C1:1,2					
		<u>3</u> 迥 4调	Exercises of creat	cercises of basic windows operations cercises of creating Japanese docume		Can create documents using a word processor.						
		·~	Word Representation of	epresentation of numbers, Compler		C3:1,2 Can add and sub	tract binary numbers. D2:1.2					
		6週	representation, C	omplement addition	n s							
		7週	Basic laws of Boo	lean algebra	5	Understands the basics of computer mathemati and can perform logic operations in Boolean						
		8週	Logic operations ;	paic operations and logic symbols								
	2ndQ 9週 E		Exercises	xercises								

		1	10週	Standar	d forms fo	addition and multiplication and standard forms from truth ta			e relation betw orms, and can o th tables. D2:1	elation between truth tables is, and can obtain standard ables. D2:1,2	
		1	L1週	Standard forms and truth tables							
		1	12週	Exercises							
		1	13週	Logic of Karnaugh maps				Can perfom logic simplification by Karnaugh maps. D2:1,2			
		1	L4週	Logic simplification by Karnaugh maps							
		1	15週	Exercise	S						
		1	L6週								
後期		1	l週	Exercises of basic UNIX operations							
		2	2週	Exercises of basic operation of C language processing systems				Understands basic programming procedures. D2:1,2, E2:1, E3:1			
		13	3週	Standard input and output							
	3rdO	4	1週	Variable operatio	s, Types, A	Assignments, Ari	thmetic	Understands the basic structure of programs. D2:1,2, E2:1, E3:1			
	0.02	5	5週	Using standard functions							
		e	5週	Case control by the if or switch statement				Can write selection and repetition structures in C. D2:1,2, E2:1,2, E3:1-3			
		5	7週	Repetition by the for statement							
		8	3週	Repetition by the while statement							
		ç	)週	One-din	nensional a	nrrays, Multidime	nsional arrays	Understands basic algorithms using arrays. D2:1,2, E2:1,2, E3:1,2			
		1	LO週	Maxima	/Minima, A	eraging algorithms					
		1	L1週	Sorting algorithms							
	4thQ	1	12週	User functions				Can create functions according to the requirements specification. D2:1,2, E2:1,2, E3:1,2			
		1	13週	File input and output							
		1	L4週	Pointers				Can perform processing using structures/pointers. D2:1,2, E2:1,2, E3:1,2			
		1	L5週	Structur	es						
		1	L6週								
モデルニ	コアカ!	ノキニ	ュラムの	学習内	容と到達	目標					
分類			分野	学	習内容	学習内容の到達目権	<b>一</b>		到這	達レベル 授業週	
評価割合	5										
		Report		quiz		Mutual Evaluations between	Behavior	Portfolio	Other	合計	
					students						
総合評価割合		100		0		0	0	0	0	100	
Basic Proficiency		100		0		0	0	0	0	100	
Specialized Proficiency		0		0		0	0	0	0	0	
Cross Area Proficiency		0		0		0	0	0	0	0	