

National Institute of Technology Meghalaya An Institute of National Importance

CURRICULUM

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Programn Departme		me Bachelor of Technology in Computer Science and Engineering Year of									ear of Re	gulation		2019	-20		
		ent Computer Science and Engineering								Crodit Structure			Ster II Marks Distribution				
Course Code		Course Name												MID		Total	
CS	102			Introduct	ion to Co	mputina			2	1	0	3	50	50	100	200	
		To introdualgorithm, and conce	ntroduce the basic architecture of a computer, the concept of prithm, the basic concepts and terminology of programming in general concept of functional hierarchical code organization.							CO1	Able to explain the basic archited concept of algorithm, and the ba of programming in general.		ecture of a computer, the asic concepts and termin		he ninology		
		To inculcate the ability to do algorithmic thinking to analyse real-world problems and develop algorithms to solve those.								CO2	Able to de analyse a	evelop the a problem a	ability to do algorithmic thinking to nd develop an algorithm to solve it.				
Co	urse	To introduce programming using C language and writing programs in C on a computer, and edit, compile, debug, correct, recompile and run those.							Course	CO3	Able to us various a	se the C pro	ogramming	ng language to implement		nt	
Obje	ctives	To train the students in choosing right data representation formats based OutCom								CO4	Able to choose the right data representation formats based the requirements of the problem.					based on	
		CO5 Able to write programs on a correct recompile and run th									ns on a co nd run tho:	a computer, edit, compile, debug, those.					
										CO6	Able to un	nderstand t anization.	he concep	cept of functional hierarchical			
No	<u> </u>					Mapping	with Progra	am Outo	comes (POs))	j.			Марр	oing with PSOs		
INO.	COS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
1	CO1	3	0	1	0	1	0	0	0	0	1	1	1	0	0	0	
2	CO2	2	3	3	2	1	1	0	0	1	0	0	0	1	1	1	
3	CO3	3	3	3	2	1	0	0	0	1	0	0	0	0	1	2	
4	CO4	3	0	3	2	3	0	0	0	1	0	0	0	0	2	1	
6	CO6	3	2	2	2	0	0	0	0	2	0	0	0	0	0	1	
No.	Introd	uction		I			Content	SYLLA	BUS		J	<u> </u>	Hours Cos CO1 CO2				
I	 Orga Applic Conc Program 	nization o ation Pro cept of Pro	of a Compu grams; Sy ogramming	uter: Von stem Prog and Pro	Neumani grams; O grammin	n archited perating	cture; CP Systems;	U; Mem Numbe	ory; RAM; F er Systems.	ROM; Ha	rdware; S	oftware;		07			
	line ar • Conc	amming la nd in an IE cept of Alg	anguage; C DE gorithm, Fl	owchart,	Assembl Pseudo c	er; Interp	strative P	iker; Lo roblem	ader; Comp Solving Exa	iling a C amples.	program	in comm	and	01			
	Introdu Introdu Featu Data T operat	uction to uction to ures of a Types; Da tors :- A	C program Program Ata Type C	ompiler; owchart, ming lang ning Lang Qualifiers;	guage guage: Cl Variable , Logical	haracter s; Declar	Set; Constantions; e	stants; enum; t	Escape Sec ypedef; Opperators, I	quences arrators ditwise	; Identifie & Express Operators	rs; Keyw sions - B ; Assign	ords; inary			CO3 CO4 CO5	
	Introdu • Cond • Featur Data Tooperato Operato Operato Operato Operato Operato Operato Operato Operato Operato Operato Conversione Statem Flow (C Ladde Iterational Static, Arrays	uction to uction to ures of a Types; Da tors :- An tor; Short tor; Short tor; Short tor Prece rsion), ty nents for s Control - er structur on - while ions; Fun- arameters extern; S s - Single	C program Program Arogram Trogram Ata Type C ithmetic (thand Ass edence an ype castin standard in Conditiona e of if-else Statement ction Type ; Call by V cope Rule Dimensio	aming lang ning Lang Qualifiers; Dperators ignment (nd Association of (explicing) als and B e, switch-of t, do-while s - standa Value; Call : Variable nal Array	Assemble Assemble Pseudo of Pseudo of Quage: Cle Variable Variable Variable Derators ciativity cit type out device Franching case state e Stateme ard librar I by Refer scope - I s, Multi-I	haracter s; Declaid operators; Declaid Operators; Declaid Operators; s; Unary in expre conversions; ent, for Si ent, for Si pent, for Si pent, for Si pent, go conce; pa local, glo	Set; Constrative Presentations; epors, Related Operators on); Stated Statem Statement, S	stants; roblem stants; enum; t tional C s; Tern Data t tements ement, i break a defined zed mai ursion.	Escape Sec ypedef; Op Dperators, I ary Operato ype conve : Assignm f-else State and continue functions; n function;	quences amples. quences erators Bitwise ors; Spe rsion: o ent stat ement, N e. syntax o Storage strings	; Identifie & Express Operators cial Opera coercion cements, ested if-el of functior Classes -	rs; Keyw sions - B s; Assign ators; siz (implicit Input/ O lse State ns; Argun auto, reg	ords; inary ment eof(); type utput ment, nents jister, tring,	29		CO3 CO4 CO5	
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Supplementary Readings
1. Byron S. Gottfried, "Programming with C", McGraw-Hill Education, 4 th edition, 2018.
2. Brian W. Kernighan, Dennis M. Ritchie, "The C Programming Language: ANSI C Version", Pearson Education India, 2 nd edition, 2015.
3. Darrel L. Graham, "C Programming Language", Createspace Independent Publishing, 1 st edition, 2016.