# TEACHING PLAN DEPARTMENT OF COMPUTER SCIENCE BACHELOR OF COMPUTER APPLICATION SBMS COLLEGE, SUALKUCHI

Department:	<b>Computer Science</b>	Semester	I
Course:	Major	Paper No:	BCA-HC-1016
Credit:	6	Marks:	80

Paper	Paper:1						
_	Paper Name: Introduction to C programming						
Unit	Course Content	Allotted to	Hours	Months	Date		
I	Overview of C	Amitabh Sarma	7 Hrs	August- November	1 August- 20 November		
II	Decision Making and Branching Statement	Simanta Sarma	16 Hrs	August- November	1 August- 20 November		
III	Arrays Functions & Structures and Unions, Pointers	Amitabh Sarma	20 Hrs	August- November	1 August- 20 November		
IV	File Management in C	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November		
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November		

Department:	Computer Science	Semester	I
Course:	Major	Paper No:	BCA-HC-1026
Credit:	6	Marks:	80

Paper	Paper:1I					
	Paper Name	e: Computer Fundame	ntals & ICT	Hardware		
Unit	<b>Course Content</b>	Allotted to	Hours	Months	Date	
I	Evolution of Computer system	Dipranjan Baishnab	15Hrs	August- November	1 August- 20 November	
II	Hard Disk Drive: Optical Media	Simanta Sarma	10 Hrs	August- November	1 August- 20 November	
III	Processor	Amitabh Sarma	14 Hrs	August- November	1 August- 20 November	
IV	SMPS	Dipranjan Baishnab	07Hrs	August- November	1 August- 20 November	
V	Practical	Simanta Sarma	10 Hrs	August- November	1 August- 20 November	

Depa	rtment:	<b>Computer Science</b>		Semester		I	
Cour	se:	GE		Paper N	0:	BCA-HG-10	)26
Credi	it:	6		Marks:		50	
Paper	Paper:III Paper Name: OFFICE AUTOMATION						
Unit	Cour	Course Content Allot		ed to	Hours	Month	Month
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Unit	Course Content	Allotted to	Hours	Month	Month
I	Word Processing	Dipranjan Baishnab	7 Hrs	August- November	1 August- 20 November
II	Spreadsheet	Simanta Sarma	16 Hrs	August- November	1 August- 20 November
III	Presentation Tools	Amitabh Sarma	20 Hrs	August- November	1 August- 20 November
IV	DTP Software	Dipranjan Baishnab	10 hrs	August- November	1 August- 20 November
V	Practical	Simanta Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	III
Course:	Major	Paper No:	BCA-HC-3016
Credit:	6	Marks:	80

Paper	Paper:1						
	Paper Name: Software Engineering						
Unit	Course Content	Allotted to	Hours	Months	Date		
Ι	Introduction	Simanta Sarma	16Hrs	August- November	1 August- 20 November		
II	Software Project Planning	Simanta Sarma	12 Hrs	August- November	1 August- 20 November		
III	Software Design	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November		
IV	Software Testing and Maintenance	Dipranjan Baishnab	16Hrs	August- November	1 August- 20 November		

<b>Department:</b>	Computer Science	Semester	III
Course:	Major	Paper No:	BCA-HC-3026
Credit:	6	Marks:	80

Pape	Paper:1I					
Paper Name: Data Structure and Algorithms						
Unit	Course Content	Allotted to	Hours	Month	Date	
I	Definition, Linked Structure	Simanta Sarma	07Hrs	August- November	1 August- 20 November	
II	Linked Structure	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November	
III	Stacks and Queues Binary Trees	Amitabh Sarma	12 Hrs	August- November	1 August- 20 November	
IV	Searching Sorting	Amitabh Sarma	16Hrs	August- November	1 August- 20 November	
V	Practical	Simanta Sarma	10 Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	III
Course:	Major	Paper No:	BCA-HC-3036
Credit:	6	Marks:	80

Paper	Paper:1II						
_	Paper Name: DATABASE MANAGEMENT SYSTEM						
Unit	Course Content	Allotted to	Hours	Month	Date		
I	File Structure	Simanta Sarma	7 Hrs	August- Novemb er	1 August- 20 November		
II	Overview of Database Management System	Simanta Sarma	10 Hrs	August- Novemb er	1 August- 20 November		
III	Relational Models	Dipranjan Baishnab	10 Hrs	August- Novemb er	1 August- 20 November		
IV	Database Design	Amitabh Sarma	12 6Hrs	August- Novemb er	1 August- 20 November		
V	Practical	Simanta Sarma	10 Hrs	August- Novemb er	1 August- 20 November		

Department:	Computer Science	Semester	III
Course:	SEC	Paper No:	BCA-SE-3014
Credit:	6	Marks:	80

Paper	Paper:1V						
	Paper Name: Web Technology						
Unit	Course Content	Allotted to	Hours	Months	Date		
Ι	Overview of the World Wide Web and the internet	Simanta Sarma	10 Hrs	August- November	1 August- 20 November		
II	Inside the firewall AND Linking database to the Web	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November		
III	HTML editors and tools	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November		
IV	HTML editors and tools	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November		
V	Practical	Simanta Sarma	10 Hrs	August- November	1 August- 20 November		

Department:	Computer Science	Semester	III
Course:	GE	Paper No:	BCA-HG-3016
Credit:	6	Marks:	80

Paper	Paper:V					
Paper Name: Introduction to Indian History						
Unit	Course Content	Allotted to	Hours	Month	Date	
I	Features of Indus Valley Civilization	Amitabh Sarma	16 Hrs	August- November	1 August- 20 November	
II	Gupta Period	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November	
III	Foundation of Muslim rule in India	Simanta Sarma	12 Hrs	August- November	1 August- 20 November	
IV	Arrival of Europeans	Dipranjan Baishnab	10Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	V
Course:	Major	Paper No:	BCA-HC-5016
Credit:	06	Marks:	80

Pape	r:1					
Paper Name: Java Programming						
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date	
I	JAVA language basics	Amitabh Sarma	12 Hrs	August- November	1 August- 20 November	
II	Operators and Control Statements	Amitabh Sarma	15Hrs	August- November	1 August- 20 November	
III	Classes and Methods	Amitabh Sarma	12Hrs	August- November	1 August- 20 November	
IV	Inheritance	Dipranjan Baishnab	16 Hrs	August- November	1 August- 20 November	
V	Practical	Dipranjan Baishnab	10 Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	V
Course:	Major	Paper No:	BCA-HC-5026
Credit:	6	Marks:	80

Pape	Paper:1I Paper Name: Operating System				
Unit	Course Content	Allotted to	Hours	Month	Date
I	Introduction	Dipranjan Baishnab	14 Hrs	August- November	1 August- 20 November
II	Processes, Process Synchronization	Amitabh Sarma	15Hrs	August- November	1 August- 20 November
III	Scheduling , Deadlocks Memory management	Simanta Sarma	12Hrs	August- November	1 August- 20 November
IV	File system , I/O management	Dipranjan Baishnab	14Hrs	August- November	1 August- 20 November
V	Practical	Simanta Sarma	10 Hrs	August- November	1 August- 20 November

Department:	Computer Science	Semester	V
Course:	DSE	Paper No:	BCA-HE-5046
Credit:	6	Marks:	50

Paper	Paper :IV Paper Name: Programming in Python					
Unit	Course Content	Allotted to	Hours	Month	Date	
I	Planning the Computer Program	Amitabh Sarma	14 Hrs	August- November	1 August- 20 November	
II	Techniques of Problem Solving	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November	
III	Overview of Programming	Amitabh Sarma	07 Hrs	August- November	1 August- 20 November	
IV	Introduction to Python Creating Python Programs Iteration and Recursion	Dipranjan Baishnab	14Hrs	August- November	1 August- 20 November	
V	Practical	Amitabh Sarma	10 Hrs	August- November	1 August- 20 November	

Department:	Computer Science	Semester	П
Course:	Major	Paper No:	BCA-HC-2016
Credit:	6	Marks:	80

Paper:1						
Paper Name: Mathematics –I						
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date	
I	Determinants and Matrices	Simanta Sarma	16Hrs	January- May	17 January- 25 May	
II	Complex Numbers	Simanta Sarma	15 Hrs	January- May	17 January- 25 May	
III	Limits and Derivatives	Amitabh Sarma	07 Hrs	January- May	17 January- 25 May	
IV	Calculus	Simanta Sarma	14Hrs	January- May	17 January- 25 May	

<b>Department:</b>	Computer Science	Semester	II	
Course:	Major	Paper No:	BCA-HC-2026	
Credit:	6	Marks:	80	
Paper:1I				

Paper Name : Digital Logic Fundamental	S
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Unit	Course Content	Allotted to	Hours	Month	Date
I	Boolean Algebra and Logic Gates	Amitabh Sarma	16Hrs	January- May	17 January- 20 May
II	Combinational Circuit	Amitabh Sarma	15 Hrs	January- May	17 January- 20 May
III	Sequential Circuit	Amitabh Sarma	12 Hrs	January- May	17 January- 20 May
IV	Counters Registers	Simanta Sarma	14Hrs	January- May	17 January- 20 May
V	Practical	Simanta Sarma	10 Hrs	January- May	17 January- 20 May

Department:	Computer Science	Semester	П
Course:	GE	Paper No:	BCA-HG-2026
Credit:	6	Marks:	80

Paper	Paper:1II					
	Paper	Name: Introduction to	o Bio-Inform	atics		
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date	
I	Introduction	Amitabh Sarma	10Hrs	January- May	17 January- 20 May	
II	Biological Databases	Amitabh Sarma	10Hrs	January- May	17 January- 20 May	
III	Molecular Phylogeny	Amitabh Sarma	7Hrs	January- May	17 January- 20 May	
IV	Biocomputing in Genomics and Proteomics	Dipranjan Baishnab	20 Hrs	January- May	17 January- 20 May	

<b>Department:</b>	<b>Computer Science</b>	Semester	IV
Course:	Major	Paper No:	BCA-HC-4016
Credit:	6	Marks:	80

Paper	Paper:1					
	Paper Name	e : Computer Organiza	ation and Arc	hitecture		
Unit	<b>Course Content</b>	Allotted to	Hours	Feb- March	Date	
I	Introduction	Dipranjan Baishnab	10 Hrs	January- May	17 January- 20 May	
II	Register Transfer Logic	Amitabh Sarma	10Hrs	January- May	17 January- 20 May	
III	Processor Logic Design	Simanta Sarma	10Hrs	January- May	17 January- 20 May	
IV	Control Logic Design	Dipranjan Baishnab	10 Hrs	January- May	17 January- 20 May	

<b>Department:</b>	Computer Science	Semester	IV
Course:	Major	Paper No:	BCA-HC-4026
Credit:	6	Marks:	180

Paper	Paper:1I						
_	Paper Name: Mathematics-II						
Unit	<b>Course Content</b>	Allotted to	Hours	month	Date		
I	Sets, Relations and Functions	Dipranjan Baishnab	6 Hrs	January- May	17 January- 20 May		
II	Graph theory	Amitabh Sarma	6 Hrs	January- May	17 January- 20 May		
III	Combinatorics	Simanta Sarma	12Hrs	January- May	17 January- 20 May		
IV	Matrices, Logic	Dipranjan Baishnab	12 Hrs	January- May	17 January- 20 May		

<b>Department:</b>	Computer Science	Semester	IV
Course:	Major	Paper No:	BCA-HC-4036
Credit:	6	Marks:	80

Pape	Paper:1					
	Paper Name: Object Oriented Programming in C++					
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Month	
I	Introduction to object oriented programming	Simanta Sarma	10Hrs	January- May	17 January- 20 May	
II	Classes and objects	Simanta Sarma	16Hrs	January- May	17 January- 20 May	
III	Function and operator overloading	Simanta Sarma	10 Hrs	January- May	17 January- 20 May	
IV	Inheritance	Dipranjan Baishnab	16Hrs	January- May	17 January- 20 May	
V	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May	

Department:	<b>Computer Science</b>	Semester	IV
Course:	SEC	Paper No:	BCA-SE-4034
Credit:	6	Marks:	80

Paper	Paper:1I						
	Paper Name :Advanced Web Technology						
Unit	Course Content	Allotted to	Hours	Month	Date		
I	Web Development Techniques	Simanta Sarma	12 Hrs	January- May	17 January- 20 May		
II	Current Trends in Web Technology	Simanta Sarma	22 Hrs	January- May	17 January- 20 May		
III	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May		

Department:	Computer Science	Semester	IV
Course:	GE	Paper No:	BCA-HG-4026
Credit:	6	Marks:	80

Paper	Paper:1II					
Paper Name INFORMATION SECURITY AND CYBER LAWS						
Unit	Course Content	Allotted to	Hours	Month	Date	
I	Course Introduction	Dipranjan Baishnab	12 Hrs	January- May	17 January- 20 May	
II	Digital Crime	Dipranjan Baishnab	12 Hrs	January- May	17 January- 20 May	
III	Information Gathering Techniques	Simanta Sarma	12Hrs	January- May	17 January- 20 May	
IV	Risk Analysis and Threat	Dipranjan Baishnab	12Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	VI
Course:	Major	Paper No:	BCA-HC-6016
Credit:	6	Marks:	80

Paper	Paper:I						
	Paper Name: System Administration using Linux						
Unit	<b>Course Content</b>	Allotted to	Hours	Month	Date		
I	Introduction	Dipranjan Baishnab	12 Hrs	January- May	17 January- 20 May		
II	Linux file system	Amitabh Sarma	15 Hrs	January- May	17 January- 20 May		
III	Basic Linux Commands	Dipranjan Baishnab	12Hrs	January- May	17 January- 20 May		
IV	Process Creation	Simanta Sarma	12Hrs	January- May	17 January- 20 May		

Department:	Computer Science	Semester	VI
Course:	Major	Paper No:	BCA-HC-6026
Credit:	6	Marks:	80

Paper	Paper:1I						
	Paper Name : Computer Networks						
Unit	<b>Course Content</b>	Allotted to	Marks	Hours	Month		
I	Physical Layer	Dipranjan Baishnab	10	January- May	17 January- 20 May		
II	Digital Transmission	Dipranjan Baishnab	10	January- May	17 January- 20 May		
III	Data Link Layer Network Layer Transport Layer	Dipranjan Baishnab	10	January- May	17 January- 20 May		
IV	Application layer & Network Security	Simanta Sarma	10	January- May	17 January- 20 May		
V	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May		

Department:	Political Science	Semester	VI
Course:	Major	Paper No:	BCA-HE-6036
Credit:	6	Marks:	80

Pape	Paper:III					
Paper Name: Multimedia and Applications						
Unit	<b>Course Content</b>	Allotted to	Marks	Month	Month	
I	Multimedia	Dipranjan Baishnab	10	January- May	17 January- 20 May	
II	Text Sound	Dipranjan Baishnab	10	January- May	17 January- 20 May	
III	Images Internet and Multimedia	Dipranjan Baishnab	10	January- May	17 January- 20 May	
IV	Making Multimedia	Simanta Sarma	10	January- May	17 January- 20 May	
V	Practical	Amitabh Sarma	10 Hrs	January- May	17 January- 20 May	

Department:	Computer Science	Semester	VI
Course:	Major	Paper No:	BCA-HE-6066
Credit:	6	Marks:	100

Paper	Paper:1V							
	Paper Name: ARTIFICIAL INTELLIGENCE							
Unit	Course Content	Allotted to	Hours	Feb- March	Date			
Ι	Introduction	Amitabh Sarma	20Hrs	January- May	17 January- 20 May			
II	Problem Solving and Searching Techniques	Simanta Sarma	10Hrs	January- May	17 January- 20 May			
III	Knowledge Representation	Amitabh Sarma	10Hrs	January- May	17 January- 20 May			
IV	Dealing with Uncertainty and Inconsistencies	Simanta Sarma	10 Hrs	January- May	17 January- 20 May			

Simanta Sarma

**HOD Department of Computer Science**