

JALPAIGURI GOVERNMENT ENGINEERING COLLEGE

JALPAIGURI- 735 102

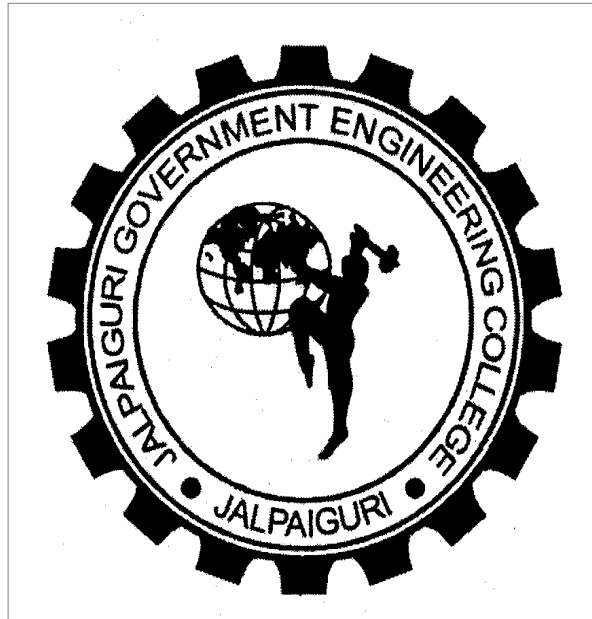
(AN AUTONOMOUS GOVERNMENT COLLEGE)

COURSE STRUCTURE AND SYLLABUS

FOR

B.TECH. IN COMPUTER SCIENCE &ENGINEERING

**(Implemented from the Academic Year 2013-14 -for the new batch
only)**



www.jgec.ac.in

**Phone: 03561 – 255131 (Principal), Fax: 03561 – 256143
255465 (EPABX)- 105(EE)**

Code	Sub.	Contact Hrs./Week		Code	Sub.	Contact Hrs./Week	
		L –T- P-TO	Cr.			L –T- P-TO	Cr.
HU-102	Economics for Engineers	3-0-0-3	3	HU-201	English Language& Technical Communication	2-0-0-2	2
EE-101	Basic Electrical Engineering	3-1-0-4	4	PH-201	Physics – I	3-1-0-4	4
CH-101	Chemistry-I	3-1-0-4	4	CS-201	Principles of Computer Programming	3-1-0-4	4
M-101	Mathematics-I	3-1-0-4	4	M-201	Mathematics-II	3-1-0-4	4
EC-101	Basic Electronics Engineering	3-1-0-4	4	ME-201	Engineering Mechanics	3-1-0-4	4
EE-191	Basic Electrical Engg. Lab.	0-0-3-3	2	PH-291	Physics-I Lab.	0-0-3-3	2
CH-191	Chemistry-I Lab.	0-0-3-3	2	CS-291	Principles of Computer Programming Lab.	0-0-3-3	2
EC-191	Basic Electronics Engineering Lab.	0-0-3-3	2	ME-291	Engineering Drawing & Graphics	0-0-3-3	2
ME-192	Workshop Practice	0-0-3-3	2	HU-281	English Language& Technical Communication Lab	0-0-3-3	2
				XC-281	Extra Curricular Activities(NSS/ NSO/NSO ETC)	0-0-2-2	1
		15-4-12-31	27			14-4-14-32	27
CH 301	Basic Environmental Engineering & Elementary Biology	3-0-0-3	3	HU 401	Values & Ethics in Profession	3-0-0-3	3
M(CS) 301	Numerical Methods	3-0-0-3	3	M 401	Mathematics – III	3-1-0-4	4
CS 302	Data Structure & Algorithm	3-0-0-3	3	PH 401	Physics – II	3-1-0-4	4
CS 303	Computer Organization	3-1-0-4	4	CS 401	Formal Language & Automata Theory	3-1-0-4	4
CS 304	Analog & Digital Electronics	3-1-0-4	4	CS 402	Operating System	3-0-0-3	3
EC(CS)305	Communication Engg. & Coding Theory	3-0-0-3	3	CS 403	Object Oriented Programming (IT)	3-0-0-3	3
M(CS)391	Numerical Methods Lab	0-0-3-3	2	PH 491	Physics – II Lab	0-0-3-3	2
CS 392	Data Structure & Algorithm Lab	0-0-3-3	2	CS 492	Operating System Lab	0-0-3-3	2
CS 393	Computer Organization Lab	0-0-3-3	2	CS 493	Object Oriented Programming Lab	0-0-3-3	2
CS 394	Analog & Digital Electronics Lab	0-0-3-3	2	HU 481	Technical Report writing & Language Lab Practice	0-0-2-2	1
		18-2-12-32	28			18-3-11-32	28
CS 501	Microprocessors & Microcontrollers	3-1-0-4	4	HU 601	Principles of Management	3-0-0-3	3
CS 502	Software Engineering	3-1-0-4	4	CS 601	Database Management System	3-1-0-4	4
CS 503	Design & Analysis of Algorithm	3-1-0-4	4	CS 602	Computer Networks	3-1-0-4	4
CS 504	Free Elective	3-1-0-4	4	CS 603	Professional Elective	3-0-0-3	3
CS 505	Computer Architecture	3-1-0-4	4	CS 604	Free Elective	3-0-0-3	3
CS 591	Microprocessors & Microcontrollers Lab	0-0-3-3	2	CS 605	Advanced Java	3-0-0-3	3
CS 594	Free Elective Lab.	0-0-3-3	2	CS 691	Database Management System Lab	0-0-3-3	2
CS 595	Computer Architecture Lab	0-0-3-3	2	CS 692	Computer Networks Lab	0-0-3-3	2
CS-581	Seminar	0-0-3-3	2	CS 693	Professional Elective Lab.	0-0-3-3	2
				CS 694	Advanced Java Lab		
		15-5-12-33	28			18-2-12-31	28
CS 701	Compiler Design	3-1-0-4	4	HU 801	Financial Management & Accounts	3-0-0-3	3
CS 702	Artificial Intelligence	3-1-0-4	4	CS 801	Open Elective	3-1-0-4	4
CS 703	Professional Elective	3-1-0-4	4	CS 802	Free Elective	3-1-0-4	4
CS 704	Professional Elective	3-1-0-4	4	CS 892	Free Elective Lab.	0-0-3-3	2
CS 705	Web Technology	3-1-0-4	4	CS 881	Grand Viva Voce	0-0-0-0	3
CS 792	Artificial Intelligence Lab	0-0-3-3	2	CS 882	Project II	0-0-9-9	6
CS 795	Web Technology Lab	0-0-3-3	2	CS 883	Group Discussion	0-0-3-3	2
CS 781	Industrial Training Evaluation	0-0-3-3	2				
CS 782	Project - I	0-0-3-3	2				
		15-3-15-33	28			09-02-15-26	24

CS-504-Elective: A. Operation Research (M) B. Multimedia Technology (IT) C. Discrete Mathematics (M)
CS-594-Elective: A. Operation Research Lab. B. Multimedia Technology Lab. C. Programming Lab using C++
CS 603-Elective: A. Computer Graphics B. System Software & Administration
CS 604-Elective: A. Distributed Operating System (CSE) B. Mobile Computing(IT) C. Data Warehousing & Data Mining (IT)
CS 693-Elective: A. Computer Graphics Lab. B. System Software & Administration Lab.
CS 703-Elective: A. Distributed Database B. Cloud Computing C. Parallel Computing
CS 704-Elective: A Soft Computing . B. Image Processing C. Pattern Recognition
CS 801-Elective: A. Cryptography & Network Security B. Bio Informatics C. Natural Language Processing
CS 802-Elective: A. E-Commerce B. Internet Technology (IT) C. Modeling &Simulation (M)
CS 892-Elective: A. E-Commerce Lab. B. Internet Technolog Lab. y (IT) C. Modeling &Simulation Lab. (M)