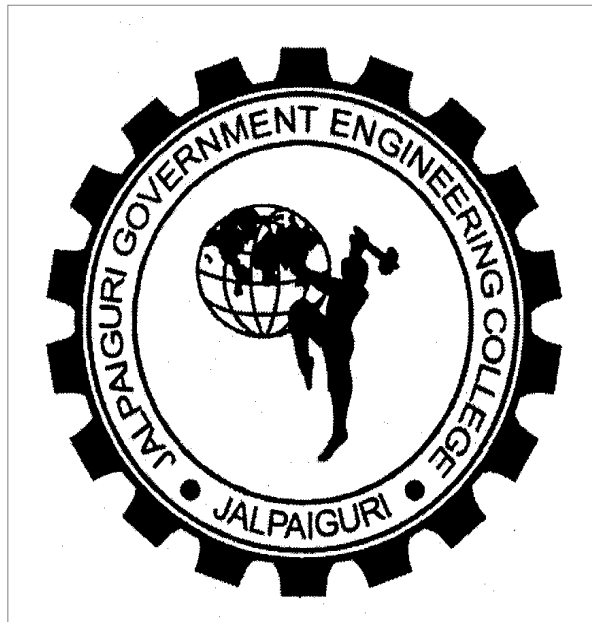


JALPAIGURI GOVERNMENT ENGINEERING COLLEGE
JALPAIGURI- 735 102
(AN AUTONOMOUS GOVERNMENT COLLEGE)

COURSE STRUCTURE AND SYLLABUS
FOR

B.TECH. IN ELECTRICAL ENGINEERING

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



www.jgec.ac.in

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255465 (EPABX)- 105(EE)

Code	Sub.	Contact Hrs./Week		Code	Sub.	Contact Hrs./Week	
		L-T-P-TO	C r.			L-T-P-TO	C r.
HU-101	English Language & Tech. Communication	2-0-0-2	2	HU-202	Economics for Engineers	3-0-0-3	3
PH-101	Physics – 1	3-1-0-4	4	EE-201	Basic Electrical Engineering	3-1-0-4	4
CS-101	Principles of Computer Programming .	3-1-0-4	4	CH-201	Chemistry-I	3-1-0-4	4
M-101	Mathematics-1	3-1-0-4	4	M-201	Mathematics-II	3-1-0-4	4
ME-101	Engineering Mechanics	3-1-0-4	4	EC-201	Basic Electronics Engineering	3-1-0-4	4
PH-191	Physics-I Lab.	0-0-3-3	2	EE-291	Basic Electrical Engg. Lab.	0-0-3-3	2
CS-191	Principles of Computer ProgrammingLab.	0-0-3-3	2	CH-291	Chemistry-I Lab.	0-0-3-3	2
ME-191	EngineeringDrawing. & Graphics	0-0-3-3	2	EC-291	Basic Electronics Engineering Lab.	0-0-3-3	2
HU-181	English Language & Technical CommunicationLab	0-0-3-3	2	ME-292	Workshop Practice	0-0-3-3	2
XC-181	Extra Curricular Activities(NSS/NSO/NSO ETC)	0-0-2-2	1				
		14-4-14-32	2 7			15-4-12-31	2 7
HU-301	Value & Ethics in Profession	3-0-0-3	3	M (CS) 401	Numerical Methods	3-0-0-3	3
PH(EE)-301	Physics-II	3-1-0-4	4	EE-403	Field theory	3-1-0-4	4
M-302	Mathematics-III	3-1-0-4	4	ME(EE)-401	Thermal Power Engineering	3-0-0-3	3
ME(EE)-301	Elements of Mech. Engg.	3-0-0-3	3	CH-401	Basic Environmental Engineering & Elementary Biology	3-0-0-3	3
EC(EE)301	Ana. & Dig. Etr. Ckt.	3-0-0-3	3	EE-401	Electric Machine-I	3-1-0-4	4
EE-301	Electric Circuit theory	3-1-0-4	4	EE-402	Electrical & Electronic Measurement	3-0-0-3	3
EC(EE)391	Ana. & Dig. Etr. Ckt. Lab.	0-0-3-3	2	ME(EE)-491	Thermal power Engineering Lab.	0-0-3-3	2
PH(EE)- 391	Physics-II Lab.	0-0-3-3	2	EE-491	Electric Machine-I Lab.	0-0-3-3	2
EE-391	Electric Circuit Theory Lab.	0-0-3-3	2	EE-492	Electrical & Etr. Measurement Lab.	0-0-3-3	2
HU-381	Technical Report Writing Practice	0-0-2-2	1	M (CS)-491	Numerical Methods Lab.	0-0-3-3	2
		18-3-11-32	2 8			18-2-12-32	2 8
HU-501	Principle of Management	3-0-0-3	3	EE-601	Control System-II	3-1-0-4	4
EE-501	Electric Machine-II	3-1-0-4	4	EE-602	Power System-II	3-1-0-4	4
EE-502	Power System-I	3-1-0-4	4	EE-603	Power Electronics	3-1-0-4	4
EE-503	Control System-I	3-1-0-4	4	CS(EE)-601	Elective-II	3-1-0-4	4
CS(EE)-501	Elective-I	3-0-0-3	3	EE-604	Elective-III	4-0-0-4	4
EE-591	Electric Machine -II Lab.	0-0-3-3	2	EE-691	Control System -II Lab.	0-0-3-3	2
EE-592	Power System-I Lab	0-0-3-3	2	EE-692	Power System-II Lab	0-0-3-3	2
EE-593	Control System -I Lab.	0-0-3-3	2	EE-693	Power Electronics Lab.	0-0-3-3	2
CS(EE)-591	Elective-I Lab.	0-0-3-3	2	CS(EE)-691	Elective-II Lab.	0-0-3-3	2
EE-581	Seminar	0-0-3-3	2				
		15-3-15-33	2 8			16-4-12-32	2 8
EE-701	Electric Drive	4-0-0-4	4	EE-801	Utilization of Electric power	4-0-0-4	4
HU-701	Financial Management & Accounts	3-0-0-3	3	EE-802	Elective-VII	4-0-0-4	4
EE-702	Elective-IV	3-0-0-3	3	EC(EE)-801	Elective-VIII	4-0-0-4	4
EE-703	Elective-V	3-0-0-3	3	EE-881	Project-II	0-0-6-6	4
EC(EE)-701	Elective-VI	4-0-0-4	4	EE-882	Electrical Design Sessional -II	0-0-6-6	4
EE-791	Electric Drive Lab.	0-0-3-3	2	EE-883	Grand Viva	0-0-0-0	4
EC(EE)-791	Elective-VI Lab.	0-0-3-3	2				
EE-781	Electrical Design Sessional -I	1-0-3-4	3				
EE-782	Industrial Training Evaluation.	0-0-3-3	2				
EE-783	Project-I	0-0-3-3	2				
		18-0-15-33	2 8			12-0-12-24	2 4

CS(EE)-501- Elective-I: (a) Data Structure & Algorithm (b) Computer Organization (c) Micro Processor & Micro controller (d) Computer Architecture
CS(EE)-591- Elec-I: (a) Data Structure & Algorithm Lab (b) Computer Organization Lab (c) μ - Processor & μ - Controller Lab (d) Computer Architecture Lab
CS(EE)-601 - Elective-II: (a) Software Engineering (b) DBMS (c) Object oriented programming (d) Computer Network
EE-604-Elective-III: (a) High voltage Engineering(b) Illumination Engineering (c) Energy Management & audit (d) Renewable and Non conventional Energy
CS(EE)-691 - Elective-II: (a) Software Engineering Lab (b) DBMS Lab (c) Object oriented programming Lab (d) Computer Network Lab
EE-702- Elective-IV:(a) Power system-III (b) Control system-III (c) Electric Machine-III (d) Advanced Power Electronics
EE-703-Elective- V:(a) Power plant Instrumentation & Control (b) Sensors & Transducers (c) Biomedical Instrumentation (d) Process control
EC(EE)-701-Elective-VI:(a) RF & Microwave Engg.(b) Digital Signal Processing (c) Optical Communication & N/W (d) Digital Communication
EC(EE)-791-Elective-VI: (a) RF & Microwave Engg. Lab(b) Digital Signal Processing Lab(c) Optical Communication & N/WLab(d) Digital Communication Lab.
EE-802-Elective-VII: (a) FACTs & HVDC Transmission (b) Power Plant Engineering (c) Power Generation and economics (d) Power System Dynamics & Control
(e) AI & Soft Computing (f) Advanced Electric Drives
EC(EE)-801- Elective-VIII:(a) Digital Image Processing, (b)Communication Engg. (c) VLSI & Microelectronics (d) Embedded system
(e) **Satellite** Communication & Remote Sensing..