COURSE STRUCTURE (BEProduction Engineering) Department of Production Engineering BIT Mesra, Ranchi

Subjects	L	Τ	P		СР
· · ·		-		_	
		0		2	
NCC / NSS / PT & Games / C. Arts	0	0	2	1	
					Total 29
		-	-	-	
	-				
		0	0		
Engineering Mechanics	3	1	0	4	
Chemistry Lab	0	0	3	2	
Basic Electrical Engg Lab	0	0	3	2	
Basic Electronics Engg Lab	0	0	3	2	
Data Structure Lab	0	0	3	2	
NCC / NSS / PT & Games / C. Arts	0	0	2	1	
					Total 30
GROUP-B					
I- SEMESTER					
Principle of Electronics Engg	3	0	0	3	
Physics	3	1	0	4	
Engg. Chemistry	3	0	0	3	
Engg. Mathematics	3	1	0	4	
Engineering Mechanics	3	1	0	4	
Engg. Graphics	1	0	3	3	
	1	0	3	3	
Chemistry Lab	0	0	3	2	
Basic Electronics Engg Lab	0	0	3	2	
NCC / NSS / PT & Games / C. Arts	0	0	2	1	
					Total 29
II-SEMESTER					
Technical English	3	0	0	3	
i connear English					
	3	1	0	4	
Advance Engg Mathematics Environmental Science	3	1 0			
Advance Engg Mathematics			0 0 0	4 3 4	
Advance Engg Mathematics Environmental Science Fundamentals of Data Structure	3	0	0	3 4	
Advance Engg Mathematics Environmental Science	3 3	0 1	0 0	3	
	GROUP-A I- SEMESTER Technical English Physics Engg. Mathematics Principles of Electrical Engg Engg. Chemistry Engg. Graphics Fundamental of Unix & C Programming Workshop Practice Physics lab NCC / NSS / PT & Games / C. Arts II- SEMESTER Principle of Electronics Engg Advance Engg Mathematics Environmental Science Fundamentals of Data Structure Principles of Mechanical Engg Engineering Mechanics Chemistry Lab Basic Electronics Engg Lab Data Structure Lab NCC / NSS / PT & Games / C. Arts GROUP-B I- SEMESTER Principle of Electronics Engg Lab Data Structure Lab NCC / NSS / PT & Games / C. Arts GROUP-B I- SEMESTER Principle of Electronics Engg Physics Engg. Chemistry Engg. Mathematics Engineering Mechanics Engg. Graphics Fundamental of Unix & C Programming Chemistry Lab Basic Electronics Engg Lab NCC / NSS / PT & Games / C. Arts	GROUP-AI- SEMESTERTechnical English3Physics3Engg. Mathematics3Principles of Electrical Engg3Engg. Chemistry3Engg. Graphics1Fundamental of Unix & C Programming1Workshop Practice0Physics lab0NCC / NSS / PT & Games / C. Arts0II- SEMESTERPrinciple of Electronics Engg3Advance Engg Mathematics3Environmental Science3Fundamentals of Data Structure3Principles of Mechanical Engg3Engineering Mechanics3Chemistry Lab0Basic Electronics Engg Lab0Data Structure Lab0NCC / NSS / PT & Games / C. Arts0GROUP-BI- SEMESTERPrinciple of Electronics Engg3Engg. Chemistry3Engg. Chemistry3Engg. Mathematics3Engg. Mathematics3Engg. Mathematics3Engg. Graphics1Fundamental of Unix & C Programming1Chemistry Lab0Basic Electronics Engg Lab0Bas	GROUP-AI- SEMESTERTechnical English3Physics3IEngg. MathematicsPrinciples of Electrical Engg31Engg. Chemistry30Engg. Graphics10Fundamental of Unix & C Programming10Workshop Practice000NCC / NSS / PT & Games / C. Arts000NCC / NSS / PT & Games / C. Arts000NCC / NSS / PT & Games / C. Arts31Environmental Science30Advance Engg Mathematics31Principle of Electronics Engg30Games / C. Arts00Basic Electrical Engg Lab000Basic Electronics Engg31Chemistry Lab00Basic Electronics Engg Lab00NCC / NSS / PT & Games / C. Arts00Data Structure Lab00NCC / NSS / PT & Games / C. Arts00Engg. Chemistry30Engg. Mathematics31Engg. Chemistry30Engg. Graphics10Fundamental of Unix & C Programming10Chemistry30Engg. Graphics10Fundamental of Unix & C Programming10Chemistry Lab00Basic Electronics Engg Lab00 <tr<< td=""><td>GROUP-A I - SEMESTER Technical English 3 0 0 Physics 3 1 0 Engg. Mathematics 3 1 0 Principles of Electrical Engg 3 1 0 Engg. Chemistry 3 0 0 Engg. Graphics 1 0 3 Fundamental of Unix & C Programming 1 0 3 Workshop Practice 0 0 3 Physics lab 0 0 2 II- SEMESTER Principle of Electronics Engg 3 0 0 Advance Engg Mathematics 3 1 0 Environmental Science 3 0 0 Fundamentals of Data Structure 3 1 0 Principles of Mechanical Engg 3 0 0 Basic Electronics Engg Lab 0 0 3 Basic Electronics Engg 3 0 0 <t< td=""><td>GROUP-A I- SEMESTER Technical English 3 0 0 3 Physics 3 1 0 4 Engg. Mathematics 3 1 0 4 Principles of Electrical Engg 3 1 0 4 Engg. Chemistry 3 0 0 3 3 Fundamental of Unix & C Programming 1 0 3 2 Physics lab 0 0 3 2 NCC / NSS / PT & Games / C. Arts 0 0 3 2 Principle of Electronics Engg 3 0 0 3 Advance Engg Mathematics 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 Fundamentals of Data Structure 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 2 Basic Electronics Engg Lab 0 0 3 2</td></t<></td></tr<<>	GROUP-A I - SEMESTER Technical English 3 0 0 Physics 3 1 0 Engg. Mathematics 3 1 0 Principles of Electrical Engg 3 1 0 Engg. Chemistry 3 0 0 Engg. Graphics 1 0 3 Fundamental of Unix & C Programming 1 0 3 Workshop Practice 0 0 3 Physics lab 0 0 2 II- SEMESTER Principle of Electronics Engg 3 0 0 Advance Engg Mathematics 3 1 0 Environmental Science 3 0 0 Fundamentals of Data Structure 3 1 0 Principles of Mechanical Engg 3 0 0 Basic Electronics Engg Lab 0 0 3 Basic Electronics Engg 3 0 0 <t< td=""><td>GROUP-A I- SEMESTER Technical English 3 0 0 3 Physics 3 1 0 4 Engg. Mathematics 3 1 0 4 Principles of Electrical Engg 3 1 0 4 Engg. Chemistry 3 0 0 3 3 Fundamental of Unix & C Programming 1 0 3 2 Physics lab 0 0 3 2 NCC / NSS / PT & Games / C. Arts 0 0 3 2 Principle of Electronics Engg 3 0 0 3 Advance Engg Mathematics 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 Fundamentals of Data Structure 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 2 Basic Electronics Engg Lab 0 0 3 2</td></t<>	GROUP-A I- SEMESTER Technical English 3 0 0 3 Physics 3 1 0 4 Engg. Mathematics 3 1 0 4 Principles of Electrical Engg 3 1 0 4 Engg. Chemistry 3 0 0 3 3 Fundamental of Unix & C Programming 1 0 3 2 Physics lab 0 0 3 2 NCC / NSS / PT & Games / C. Arts 0 0 3 2 Principle of Electronics Engg 3 0 0 3 Advance Engg Mathematics 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 Fundamentals of Data Structure 3 1 0 4 Principles of Mechanical Engg 3 0 0 3 2 Basic Electronics Engg Lab 0 0 3 2

As approved by board of studies (09/06/2011)

PE1202	Workshop Practice	0	0	3	2	
AM2202	Engineering Mechanics Lab	0	0	3	2	
CS2302	Data Structure Lab	0	0	3	2	
GA2002/ GA2004 GA2006/GA2008	NCC / NSS / PT & Games / C. Arts	0	0	2	1	
						Total 30

3rd Semester

	Subject	L	Т	Р	С
PE3001	Metallurgy	3	0	0	3
ME3003	Fluid Mechanics and Hydraulics	3	1	0	4
ME3005	Mechanics Of Solid	3	1	0	4
PE3003	Operations Research	3	1	0	4
BT3021/HU4001	Biological Sciences/ Foreign Language	3	0	0	3
EE3202/AM2202	Basic Electrical Engg Lab/Engineering Mechanics Lab	0	0	3	2
PE 3002	Metallurgy Lab	0	0	3	2
ME3004	Mechanics of Solid Lab	0	0	3	2
GA3002/ 4/6/8	NCC/ NSS/ PT & Games/Creative Arts			1	1

Total credit 25

4th Semester

	Subject	L	Т	Р	С
PE4001	Manufacturing Processes - I	3	0	0	3
ME4005	Design of Machine Elements	3	0	0	3
PE4003	Metrology	3	0	0	3
ME4003	Theory of Machine	3	1	0	4
BT3021/HU4001	Foreign Language/ Biological Sciences/	3	0	0	3
PE4002	Manufacturing Process - I Lab	0	0	3	2
ME4004	Machine Design Sessional	0	0	3	2
PE4004	Metrology Lab	0	0	3	2
GA3002/ 4/6/8	NCC/ NSS/ PT & Games/Creative Arts	0	0	1	1

Total credit 23

_	5 th Semester		2000		
	Subject	L	Т	Р	С
PE5001	Manufacturing Processes – II	3		0	3
PE5003	Machine Tool Design	3	1	0	4
PE5005	Statistical Quality Control	3	0	0	3
PE5007	Work Study & Ergonomics		0	0	3
	Breadth Subject V	3	0	0	3
PE5002	Manufacturing Process - II Lab	0	0	3	2
PE5004	Machine Tool Design Sessional	0	0	3	2
PE5006	Work Study & Ergonomics Lab.	0	0	3	2
	Total and it 22				

Total credit 22

6th Semester

	Subject	L	Т	Р	С
PE6001	Tool Design	3	0	0	3
PE6003	Material Deformation Processes	3	0	0	3
PE6005	Production Planning & Control	3	0	0	3
PE6007	Manufacturing Automation and Robotics	3	0	0	3
	Breadth Subject VI	3	0	0	3

As approved by board of studies (09/06/2011)

PE6002	Tool Design Sessional	0	0	3	2
PE6004	Manufacturing Automation & Robotics Lab./ Coursework	0	0	3	2
PE6006	Computer Aided Design Lab./Course work	0	0	3	2

7th Semester

Total credit 21

	Subject	L	Т	Р	С
ELECTIVE-I	(Other Department) Select any two subjects	6	0	0	6
ELECTIVE-II	(Department) Select any two subjects	6	0	0	6
	Breadth Subject VII	3	0	0	3
PE7002	Modelling and Simulation LAB.	0	0	3	2
PE 7004	Material Deformation Process LAB.	0	0	3	2
PE7006	PROJECT	0	0	6	4
	Total credit 23				

8th Semester

	Subject	L	Т	Р	С
PE8002	Industrial Project& Comprehensive viva	0	0	9	6

Total credit 6 Total 179

7thSemesterELECTIVES (Select any two subjects)

PE7001	Enterprise Resource Planning
PE7003	Process Engineering
PE7005	Competitive Manufacturing Strategies
PE7007	Powder Metallurgy
PE7009	Advance Welding Technology
PE7011	Advanced Manufacturing Processes
PE7013	Human Factors & Safety Engineering
PE7015	Value Engineering
PE7017	Processing of Polymer & Composites
PE7019	Advanced Operations Research
PE7021	Maintenance Engineering
PE7023	Eco-friendly Manufacturing
ME	Automotive Engineering
ME	Heat Transfer

Breadth Subject(3 Credits)

Industrial Organisation and Management Project Engineering Engineering Economy

> (Dr. B.K. Singh) Prof. & Head Production Engineering BIT – Mesra, Ranchi