

COURSE STRUCTURE (BEProduction Engineering)

Department of Production Engineering

BIT Mesra, Ranchi

Course No	Subjects	L	T	P	CP
GROUP-A					
I- SEMESTER					
HU-1101	Technical English	3	0	0	3
PH1201	Physics	3	1	0	4
MA1201	Engg. Mathematics	3	1	0	4
EE2201	Principles of Electrical Engg	3	1	0	4
CH1401	Engg. Chemistry	3	0	0	3
ME1202	Engg. Graphics	1	0	3	3
CS1302	Fundamental of Unix & C Programming	1	0	3	3
PE1202	Workshop Practice	0	0	3	2
PH1202	Physics lab	0	0	3	2
GA1002/ GA1004 GA1006/GA1008	NCC / NSS / PT & Games / C. Arts	0	0	2	1
					Total 29
II- SEMESTER					
EC2001	Principle of Electronics Engg	3	0	0	3
MA2201	Advance Engg Mathematics	3	1	0	4
CH2203	Environmental Science	3	0	0	3
CS2301	Fundamentals of Data Structure	3	1	0	4
ME2001	Principles of Mechanical Engg	3	0	0	3
AM1201	Engineering Mechanics	3	1	0	4
CH1402	Chemistry Lab	0	0	3	2
EE3202	Basic Electrical Engg Lab	0	0	3	2
EC2002	Basic Electronics Engg 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
GROUP-B					
I- SEMESTER					
EC2001	Principle of Electronics Engg	3	0	0	3
PH1201	Physics	3	1	0	4
CH1401	Engg. Chemistry	3	0	0	3
MA1201	Engg. Mathematics	3	1	0	4
AM1201	Engineering Mechanics	3	1	0	4
ME1202	Engg. Graphics	1	0	3	3
CS1302	Fundamental of Unix & C Programming	1	0	3	3
CH1402	Chemistry Lab	0	0	3	2
EC2002	Basic Electronics Engg Lab	0	0	3	2
GA1002/ GA1004 GA1006/GA1008	NCC / NSS / PT & Games / C. Arts	0	0	2	1
					Total 29
II-SEMESTER					
HU1101	Technical English	3	0	0	3
MA2201	Advance Engg Mathematics	3	1	0	4
CH2203	Environmental Science	3	0	0	3
CS2301	Fundamentals of Data Structure	3	1	0	4
ME2001	Principles of Mechanical Engg	3	0	0	3
EE2201	Principles of Electrical Engg	3	1	0	4
PH1202	Physics 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	T	P	C
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	T	P	C
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**

5th Semester

	Subject	L	T	P	C
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 credit **22**

6th Semester

	Subject	L	T	P	C
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

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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

Total credit **21**

7th Semester

	Subject	L	T	P	C
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	T	P	C
PE8002	Industrial Project& Comprehensive viva	0	0	9	6

Total credit **6**

Total 179

7th Semester ELECTIVES (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