



In the Name of GOD
Department of industrial engineering

B.sc.

Course Title	Courses Type	Credits	Prerequisite	Credits
Quality Control & Metrology lab.	Optional	2	Manufac. Processes + Statistical Quality Control	28 Credits
Industrial Automation	Optional	3	Numerical Methods+ Manufac. Processes	
Marketing	Optional	2	80 credits	
Industrial Safety & Hygiene	Optional	2	Motion & Time Study	
Transportation Planning	Optional	3	Operations Research I	
Maintenance Planning	Optional	3	Probab. Theory +Appl. +Engineering Economics	
Prod. Planning &Inventory Control II	Optional	3	Prod. Planning &Inventory Control I	
Decision Analysis	Optional	3	Operations Research I	
Systems Analysis	Optional	3	Differential Equations	
Manag. Information Systems Design	Optional	3	Computer Prog.	
Wage and Salary Systems	Optional	3	Accounting & Cost Control	
Gen. Chemistry	Optional	3		
Indust. Feasibility Study	Optional	3	Accounting & Cost Control	
Auto. Workshop	Optional	1		
Mach. Tools Workshop II	Optional	1	Manufac. Processes	
Numerical Control	Optional	3	Numerical Methods+ Manufac. Processes	
Total Quality Management	Optional	3	Statistical Quality Control	
Financial Management	Optional	2	Accounting & Cost Control	
Stoch. Models & Queuing Theory	Optional	3	Probab. Theory +Appl.	
Mechanical Assembly	Optional	3	Plant Layout- Mach. Tools Workshop I	
Human Factors Eng'g.	Optional	3	Motion & Time Study	

Welding Workshop	Major	1		7 Credits
Casting Workshop	Major	1		
Mach. Tools Workshop I	Major	1		
B.S. Final Project	Major	3	Final year	
Industrial Training		1	100 credits	

Course Title	Courses Type	Credit	Prerequisite	Credits
Physics I Lab.	Basic	1	Physics I	22 Credits
Physics II Lab.	Basic	1	Physics II	
Computer Prog.	Basic	3	Calculus I	
Calculus I	Basic	3		
Calculus II	Basic	3	Calculus I	
Physics I	Basic	3	Calculus I	
Physics II	Basic	3	Physics I	
Numerical Methods	Basic	2	Computer Prog.	
Differential Equations	Basic	3	Calculus II	

Elec. Eng. Fund. Lab.	Major	1	Physics II Lab.+ Electrical Eng'g. Fund.	63 Credits
Simulation	Major	3	Engineering Statistics+ Computer Prog.	
Management Principles & Organizations Theory	Major	2	50 Credits	
Engineering Statistics	Major	3	Probab. Theory +Appl.	
Motion & Time Study	Major	3	Manufac. Processes	
Statics & Solids Mechanics	Major	3	Physics I + Calculus I	
Accounting & Cost Control	Major	3	Prod. Planning &Inventory Control I	
Gen. Economics I	Major	2		
Gen. Economics II	Major	2	Gen. Economics I	
Engineering Economics	Major	3	Gen. Economics II	
Production Planning	Major	3	Prod. Planning &Inventory Control I	
Prod. Planning &Inventory Control I	Major	3	Operations Research I	
Probab. Theory +Appl.	Major	3	Calculus II	
Operations Research I	Major	3	Linear Algebra +Probab. Theory +Appl.	
Operations Research II	Major	3	Operations Research I	
Linear Algebra	Major	3	Calculus I	
Manufac. Processes	Major	3	Materials Science+ Mach. Tools Workshop I	
Plant Layout	Major	3	Motion & Time Study + Engineering Graphics + Manufac. Processes	
Materials Science	Major	3		
Statistical Quality Control	Major	3	Engineering Statistics	
Electrical Eng'g. Fund.	Major	3	Physics II	
Project Control	Major	3	Operations Research I	
Engineering Graphics I	Major	2		

General Courses		
Course title	Credit	No.
Two courses from the following:		
Islamic Ideology I	2	1
Islamic Ideology II	2	2
Human Being in Islam	2	3
Social and Political Rights in Islam	2	4
one course from the following:		
Moral Philosophy	2	5
Islamic Ethics	2	6
Family Morality	2	7
Life Style (Practical Morality)	2	8
Islamic Practical Mysticism	2	9
one course from the following:		
Islamic Rev. Fundamen.	2	10
Iranian Constitutions	2	11
Political Thinking of Imam Khomeini	2	12
one course from the following:		
History of Islamic Culture & Civilization	2	13
History of Islam	2	14
History of Imamat	2	15
one course from the following:		
Quran Commentary	2	16
Nahjol-Balagheh Commentary	2	17
All of the following courses:		
Farsi	3	18
English	3	19
Physical Education I	1	20
Physical Education II	1	21
Family and Population Studies	2	22