

Main Courses				
Course Name	Credits		Prerequisite	Parallel
	T	P		
Mechanical properties of materials (Lab)		१	Mechanical Properties of Materials(I)	
Fundamentals of Electrical Engineering (Lab)		१		Fundamentals of Electrical Engineering
Metallugraphy (Lab)		१		Physical Properties of Materials(I)
Statics	२		Physics(I)	
Transport Phenomena	३			Differential Equations
Project		३		
Materials Thermodynamic(I)	३		Physical Chemistry of Materials	
Physical Properties of Materials(I)	३		Crystallography	
Physical Properties of Materials(II)	२		Mechanical Properties of Materials(I)	
Mechanical Properties of Materials(I)	३		Physical Properties of Materials(I)& Strength of Materials	
Physical Chemistry of Materials	३			General Chemistry(I) & Mathematics(II)
Casting(I)	३		Physical Properties of Materials(I)	
General Workshop		१		
Crystallography	३			General Chemistry(I)
Fundamentals of Electrical Engineering	३			Physics(II)
Strength of Materials	३			Statics
Engineering Graphics	१			

Main Courses				
Course Name	Credits		Prerequisite	Parallel
	T	P		
Solidification of Metals (Lab)		۱	Solidification of Metals	
Casting(I) Lab		۱		Casting(I)
Heat Treatment (Lab)		۱		Heat Treatment
Welding Metallurgy(I) Lab		۱	Welding Metallurgy	
Metals Extraction(I)	۲		Materials Thermodynamic(I)	
Metals Extraction(II)	۲		Metals Extraction(I)	
Technical Writing	۱			
Solidification of Metals	۲		Physical Properties of Materials(II)& Transport Phenomena	
Mechanical Properties (II)	۳		Mechanical Properties of Materials(I)	
Corrosion and Oxidation	۳			Thermodynamic
Modern Technics in Materials Analysis	۲		Physical Properties of Materials(II)	
English Language for Materials Engineering	۲		General Language	
Metals Forming(I)	۳		Mechanical Properties of Materials(I)	
Heat Treatment	۲		Physical Properties of Materials(II)	
Powder Metallurgy	۲		Physical Properties of Materials(II)& Mechanical Properties of Materials(I)	
Welding Metallurgy	۳		Solidification of Metals	
Novitiate		۲		

Optional Courses				
Course Name	Credits		Prerequisite	Parallel
	T	P		
Economics and Industrial Management	۲			
Materials Selection	۲			
Non-Destructive Testing	۲			
Casting(II)	۳			Casting(I)
Design and Principal of Industrial Furnaces	۲			Transport Phenomena& Thermodynamic
Surface and Coating Metallurgy	۳			Heat treatment
Advanced Materials	۲			Physical Properties of Materials(II)
Refractories	۲			

Fundamental Courses				
Course Name	Credits		Prerequisite	Parallel
	T	P		
General Chemistry (I) Lab		۱		General Chemistry (I)
Physics (I) Lab		۱		Physics (I)
Physics (II) Lab		۱		Physics (II)
Mathematics(I)	۳			
Mathematics(II)	۳		Mathematics(I)	
Engineering Mathematics	۳		Differential Equations	
General Chemistry	۳			
Physics (I)	۳			
Physics (II)	۳		Physics (I)	
Fundamentals of Computer Programing	۳		Differential Equations	
Numerical Computations	۲		Differential Equations	
Differential Equations	۳		Mathematics(II)	

General Courses				
Course Name	Credits		Prerequisite	Parallel
	T	P		
General English	۳			
General Persian Literature	۳			
Islamic Studies (I)	۲			
Islamic Studies (II)	۲		Islamic Studies (I)	
Life Style	۲			
Islamic Revolution of Iran	۲			
Islamic History	۲			
Quran - Nahjolbalaghah	۲			
Physical Education (I)		۱		
Physical Education (II)		۱	Physical Education (I)	
History of Islamic and Iranian Culture and Civilization	۲			
Knowledge of Family and Population	۲			
Introduction to Fundamentals of the Sacred Defense	۲			
Imam Khomeini's Statement of Will	۱			
Oral Presentation of Quran	۱			

