

Modified E3 (R12) Curriculum for Dept. of Metallurgical and Materials Engineering (RKV Campus)	
E1 Sem1	
Name of the Course	Credits
Mathematics I	4
Physics (Chemistry)	4
English for Communication (Mechanics)	3
Electrical Technology (Programming and Data Structures)	4
Introduction to Manufacturing process & WSP (Engineering Drawing and Graphics)	3
Physics Lab (Chemistry Lab)	2
Electrical Technology Lab (Programming and Data Structures Lab)	2
Total Credits	22
E1 Sem2	
Name of the Course	Credits
Mathematics II	4
Physics (Chemistry)	4
Engineering Mechanics (English)	3
Programming & Data Structures (Electrical Technology)	4
Engineering Drawing and Graphics (Introduction to Manufacturing process & WSP)	3
Physics Lab (Chemistry Lab)	2
Programming & Data Structures Lab (Electrical Technology Lab)	2
Total Credits	22
E2 Sem1	
Name of the Course	Credits
Thermodynamics	4
Physical Metallurgy	4
Mineral Processing	4
Fourier Analysis and Partial Differential Equations	4
Basic Electronics	4
Physical Metallurgy Lab	2
Mineral Processing Lab	2
Basic Electronics Lab	2
Total Credits	26
E2 Sem2	
Name of the Course	Credits
Foundry Technology	4
Mechanical Metallurgy course	4
Iron Making	4
Engineering Mathematics (Probability and Statistics)	4
Phase Transformation and Heat treatment	4

Phase Transformation and Heat treatment Lab	2
Foundry Technology and Lab	2
Mechanical Metallurgy course and Lab	2
Total Credits	26
E2 Summer Sem	
Name of the Course	Credits
Foundation of Management	2
Skill Development	2
Total Credits	4
E3 Sem1	
Name of the Course	Credits
Steel Making	4
Transport Phenomena in Metallurgical Processes	4
Metal Forming Technology	4
Material Characterization	4
Corrosion and Environmental Degradation of Materials	4
Corrosion and Environmental Degradation of Materials Lab	2
Material Characterization Lab	2
Total Credits	24
E3 Sem2	
Name of the Course	Credits
Elective	4
Elective	4
Elective + Lab	6
Free Elective	4
Mini Project	4
Total Credits	22
E3 Summer Sem	
Name of the Course	Credits
Summer Internship	4
Total Credits	4
E4 Sem1	
Name of the Course	Credits
Elective	4
Elective	4
Free Elective	4
Project	6
Total Credits	18
E4 Sem2	
Name of the Course	Credits
Elective	4
Elective	4
Free Elective	4
Project	6

Community Service	2
Total Credits	20
Grand Total Credits	188

Non Destructive Techniques (Compulsory in E3S2)	4
Non Destructive Techniques Lab (Compulsory in E3S2)	2
Metal Joining Technologies (Compulsory in E3S2)	4
Non Ferrous Extractive Metallurgy (Compulsory in E3S2)	4
Engineering Polymers (Compulsory in E3S2)	4
Introduction to Ceramic Technology (Compulsory in E4S1)	4
Metal Forming and Materials Joining Technology Lab (Compulsory in E4S1)	2