

TOTAL EXAMINATION PROGRAM
PEO Syllabus of Examinations, 2012 Edition

METALLURGICAL ENGINEERING

INTRODUCTION

A full set of Metallurgical Engineering examinations consists of the following, three-hour examination papers and an engineering report. Candidates will be assigned examinations based on an assessment of their academic background. Examinations from discipline syllabi other than those specific to the candidates' discipline may be assigned at the discretion of PEO's Academic Requirement Committee.

BASIC STUDIES EXAMINATIONS

04-BS-1	Mathematics
04-BS-2	Probability and Statistics
04-BS-3	Statics and Dynamics
04-BS-4	Electric Circuits and Power
04-BS-6	Mechanics of Materials
04-BS-7	Mechanics of Fluids
04-BS-10	Thermodynamics
04-BS-11	Properties of Materials

PROFESSIONAL EXAMS – SPECIFIC TO METALLURGICAL ENGINEERING

GROUP A

10-Met-A1	Metallurgical Thermodynamics
10-Met-A2	Metallurgical Rate Phenomena
10-Met-A3	Metal Extraction Processes
10-Met-A4	Structure of Materials
10-Met-A5	Mechanical Behaviour and Fracture of Materials
10-Met-A6	Phase Transformation and Thermal Treatment of Metals and Alloys
10-Met-A7	Corrosion and Oxidation

GROUP B

10-Met-B1	Mineral Processing
10-Met-B2	Hydrometallurgy and Electrometallurgy
10-Met-B3	Ironmaking and Steelmaking
10-Met-B4	Non-Ferrous Extractive Metallurgy
10-Met-B5	Metal Fabrication
10-Met-B6	Physical Metallurgy of Iron and Steel
10-Met-B7	Physical Metallurgy of Non-Ferrous Metals and Alloys
10-Met-B8	Ceramic Materials
10-Met-B9	Structure and Properties of Polymers
10-Met-B10	Advanced Electronic Materials

COMPLEMENTARY STUDIES

11-CS-1	Engineering Economics
11-CS-2	Engineering in Society – Health & Safety
11-CS-3	Sustainability, Engineering and the Environment
11-CS-4	Engineering Management

3.2	Engineering Report
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