Manufacturing Technology Training
An IMTMA initiative

Metallurgy for Non-Metallurgists
Date : 27 to 28 April, 2026
Venue : IMTMA Technology Centre, Gurugram

INTRODUCTION

Metallurgy is a branch of material science that focus on the physical and chemical behaviour of metallic elements and its alloys. Knowledge of metallurgy is very important for any design and production engineers. Design of any part generally based on Strength, which comes from alloy composition and metallurgical structure. It is not just enough if design engineer select right alloy but also have to specify metallurgical requirements to achieve required properties. Production engineers have to understand the metallurgical requirements and develop process to achieve that. Hence awareness of metallurgy play an important role in today's engineering world.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 2 day programme on "Metallurgy for non-metallurgist". This course provides important metallurgical knowledge to those who are not metallurgists. You will learn how metals can be made stronger, more corrosion resistant, formable etc. This course will help to choose right metals, alloys and processing solutions best suited for your production goals.

FOCUS AREAS

- Introduction to engineering metals and alloys
- Roles of various alloying elements
- Introduction to metal atomic structures and its importance
- Classifications of metals and alloys and its phase diagram
- Strengthening of metals
- Ferrous metallurgy
    1. Steel
    2. Cast Iron
- Nonferrous metallurgy
    1. Aluminium
    2. Copper
    3. Magnesium
    4. Titanium
- Heat treatment of ferrous and nonferrous alloys

KEY TAKE AWAYS

After undergoing the programme, the participants will be able to -

1. Understand basics of metallurgy
2. Learn various strengthening mechanisms of metals
3. Understand metals and alloy classifications
4. Understand all ferrous group of alloys and its metallurgy
5. Understand Important nonferrous metals and its alloys
6. Metallurgical changes during Heat treatment

PARTICIPATION FEE

Rs. 4999/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 200/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

This programme will benefit Managers, Engineers from OEMs, MSMEs, R&D, NPD, Engineering Service Providers (ESP), Foundry engineers and supervisors, Faculties from academic institutes, Any foundry/MSMEs, Auto OEMs, Auto ancillaries, Pump manufacturers, Aerospace ancillaries, Defence & Railway Establishment (PSUs / OFBs), General Engineering, Engineering Service providers (ESP), Faculty from engineering colleges, Students from engineering colleges.

FACULTY

This Program will be conducted by **Mr. Ganapathi K N**.

Mr. Ganapathi K N, is a corporate trainer and consultant .Experience 16yrs. Industrial and 22yrs academic and training. He is a post graduate in metal casting science and engineering from UVCE Bengaluru.

Prior to working at IMTMA, Mr. Ganapathi has worked at various capacity in both Ferrous and nonferrous foundries. He has thorough understanding of all foundry operations and has experience of providing solutions to the foundry problems. He has also imparted specialized training on metal casting domain to more than 300 engineers across manufacturing companies in India. He has also taught metal casting topics to post graduate engineering students. At IMTMA, his role is to develop and introduce new programs for enhancing competitiveness of industry.

For Registration Contact
Ms. Smita Saimons
Sr. Executive Officer
+91 9873932138
smita@imtma.in
Back End Operations
9742626488
enquiry@imtmablr.com

Contact Address
INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
Plot 249F, Phase IV, Udyog vihar,Sector - 18,
Gurgaon - 122015
Tata no- +91-124-6463101
Tel : 0124 4014101 - 04
Fax : +91-124-4014108

imtmatrainning.67038796@hdfcbank

REGISTRATION : Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.
Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.