

# 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 6 Hrs online programme on "Metallurgy for non-metallurgist-Ferrous Materials". 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.

Special Offer: Participants will be provided FREE ACCESS to IMTMA E'learning course on "Heat treatment-Metallurgy and Processes" towards continual learning and up skilling. Access will be valid from 09 Dec to 24 Dec 2021.

### **FOCUS AREAS**

- Introduction to engineering metals and alloys
- Roles of various alloying elements
- Introduction to crystal structures and its importance
- Classifications of metals and alloys and its applications
- Ferrous metallurgy
  - Steel
  - Cast Iron
- Heat treatment of ferrous and nonferrous alloys

# **KEY TAKE AWAYS**

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

- Understand basics of metallurgy
- Understand metals and alloy classifications
- Understand all ferrous group of alloys and its metallurgy
- Understand metallurgical changes during heat treatment

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 4500/-

+18% GST IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others USD 180/-Overseas Participants

Group Concession : 20% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

## FACULTY

This Program will be conducted by Mr.Ganapathi K N

Ganapathi K N, is an Advisor Training of IMTMA Technology Centre having 16 years of industrial and 14 years of academic experience. He is a post graduate in metal casting science and engineering. Prior to working at IMTMA, he has worked at various capacity in both Ferrous and nonferrous foundries. He has also imparted specialized training on Metallurgy, Heat treatment and other manufacturing processes domain to more than 2000 engineers across manufacturing companies in India. He has also taught above topics to post graduate engineering students.

#### For Registration Contact Rathan B Programme Coordinator

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**REGISTRATION :** Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.