

Indian Institute of Metals Short Professional Course (Online) on “Basics of Data Science for Metallurgy and Manufacturing” (Course Number IIM-21-101)

19 - 21 July, 2021, 09:30 – 13:30 each day

Background: The significant enhancement in computational capabilities and the availability of large data has given rise to a discipline called ‘Data Science’ which facilitates accelerated understanding of process- structure- property-performance relations in materials. While Machine Learning (ML) and Artificial Intelligence (AI) help in shortening the research-design-development-deployment (RD³) cycle, and are the tools of Data Science, its foundation lies in statistics. The present course is aimed at introducing elements of statistics that form the basis of Data Science as applicable to metallurgy and manufacturing

Speaker Profile: The faculty of the course consists of

1. Prof. M P Gururajan, IIT Bombay, Mumbai
2. Prof. Hina Gokhale, IIT Bombay, Mumbai
3. Dr. Amit Gupta, Aditya Birla Science & Technology Corporation, Navi Mumbai

Program Outline	Who should attend and about certificates.
<ul style="list-style-type: none"> ▪ Random Variables and distributions ▪ Hypothesis testing ▪ Regression analysis and Analysis of Variance ▪ Curve fitting and smoothing ▪ Error Propagation, Bootstrapping and MC simulation ▪ The course will also introduce ‘R’, the statistical language for programming and present case studies 	<ul style="list-style-type: none"> ✓ Engineers/Managers from industries and plants, faculties from engineering colleges, research scholars from educational institutes, and students ✓ A test will be conducted at the end, preferably based on the analysis of data brought by the participants, and an E-Certificate will be given to successful participants. For others, a normal participation certificate will be given.

Registration Fees and Payment Methods

IIM Members: Rs. 5000 + Rs 900 (18% GST) = Rs 5900
IIM Non-member: Rs. 7500 + Rs 1350 (18% GST) = Rs 8850
Student, Member: Rs. 500 + Rs 90 (18%GST) = Rs 590
Student, Non-member: Rs. 750 + 135 (18%GST) = Rs 885

1) Advance payment of Registration fees is mandatory, 2) Participation fee is non-refundable; however, change in nomination is possible, 3) Students may furnish suitable proof of they being students while filling in the online form, 4) 10% discount shall be offered for registering more than 5 person

Participants are requested to register via <https://tinyurl.com/SCDSIIM> and pay online as per the details given below. The online transaction receipt, mentioning the course number IIM-21-101 may be uploaded by using the link provided in google form. Alternately, a demand draft in favour of “The Indian Institute of Metals” payable at Salt Lake, Kolkata can be posted to

Prof. Sushil Mishra, Professor, Department of Mechanical Engineering, IIT Bombay, Powai, Mumbai 400076, with a scan copy emailed to sushil.mishra@iitb.ac.in

Bank Details

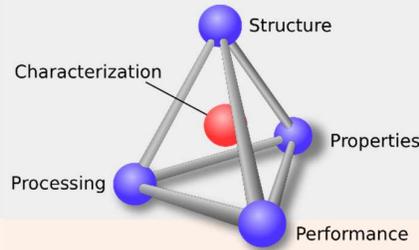
A/c name: The Indian Institute of Metals
 Bank: State Bank of India, SME Branch, Salt Lake,
 Branch Code: 04289,
 IFSC Code: SBIN0004289
 Current A/c No.: 54015600024
 GST: 19AAATT3359D1ZF
 PAN: AAATT3359D



Indian Institute of Metals Short Professional Course
(Online) on

“Lightweight Materials for Transportation” (Course Number IIM-21-102)

26 - 27 July 2021, 09:30 – 12:30 and 14:00 - 17:00 each day



Background Weight reduction of the components is one of the key factors in improving the fuel economy and lightweight materials are widely used for this purpose. In this view, industries are continuously developing new lightweight materials or modifying the existing ones. It is important to understand processing-structure-property correlation in lightweight materials. This is particularly vital for developing newer alloys and to meet the light-weighting needs of the country in various sectors. With this background, **IIM is organizing virtual classes which will take place during 26-27 July at 9:30 – 12:30 and 14:00 – 17:00 each day.**

Speaker Profile: The faculty includes professional experts from industry, R&D and academic institutions, such as:

- Dr. Shankar Venugopal (Mahindra and Mahindra)
- Dr. Srinivas Gunti (Mahindra and Mahindra)
- Dr. Amit Bhattacharjee (DMRL)
- Dr. Ashish Garg (IIT Kanpur)
- Dr. Jayant Jain (IIT Delhi)
- Dr. Sudhanshu Shekhar Singh (IIT Kanpur)

Program Outline	Who should attend and about certificates.
<ul style="list-style-type: none"> ▪ Industrial perspectives on lightweighting in Automotives ▪ General characteristics of Magnesium alloys, Aluminium alloys, Titanium alloys, Polymers and Composites ▪ Understanding structure-property correlation Magnesium, Aluminium, Titanium alloys and Polymers/Composites 	<ul style="list-style-type: none"> ✓ Engineers/Managers from industries and plants, faculties from engineering colleges, research scholars from educational institutes, and students ✓ A test will be conducted at the end, and an E-Certificate will be given to successful participants. For others, a normal participation certificate will be given.

Registration Fees and Payment Methods

IIM Members: Rs. 5000 + Rs 900 (18% GST) = Rs 5900
IIM Non-member: Rs. 7500 + Rs 1350 (18% GST) = Rs 8850
Student, Member: Rs. 500 + Rs 90 (18%GST) = Rs 590
Student, Non-member: Rs. 750 + 135 (18%GST) = Rs 885

1) Advance payment of Registration fees is mandatory, 2) Participation fee is non-refundable; however, change in nomination is possible, 3) Students may furnish suitable proof of they being students while filling in the online form, 4) 10% discount shall be offered for registering more than 5 persons.

Participants are requested to register via <https://tinyurl.com/SCLMIIM> and pay online as per the details given below. The online transaction receipt, mentioning the course number IIM-21-102 may be uploaded by using the link provided in google form. Alternately, a demand draft in favour of "The Indian Institute of Metals" payable at Salt Lake, Kolkata can be posted to

Prof. Sushil Mishra, Professor, Department of Mechanical Engineering, IIT Bombay, Powai, Mumbai 400076, with a scan copy emailed to sushil.mishra@iitb.ac.in

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