Optimization Tools for Business Analytics
Optimal Decision Making Through Intelligent Modelling

Scope and Intent: Business runs on decision making and business excellence is only possible when the decisions are made optimally. Mathematical models and algorithms are indispensable to arrive at optimal decisions. Many typical industrial and business problems are intelligently modelled as mathematical problems and can be effortlessly solved with the computing power available today. Unaware of this, managers and executives continue to make decisions based on experience and subjective evaluations which often turn out to be deficient or suboptimal. Majority of contemporary training programs, including courses offered in academic programs at both undergraduate and postgraduate levels, predominantly emphasize theoretical foundations. Consequently, learners and beneficiaries often miss the opportunity to appreciate the practical applications and benefits inherent in the field of Operations Research.

This program has been meticulously designed with the primary objective of fostering awareness and motivation among recipients, emphasizing minimal theoretical content and maximizing practical applications. The focal point lies in highlighting the significance of modelling within the field of Operations Research. The program should be particularly useful to those who are involved in teaching and promoting Operations Research and hence may be considered as a *Faculty Development Program*. Additionally, as the mathematical content in the program is kept at a minimal level, it offers great learning potential to students as well as industrial executives.

Course Structure & Contents: Starting with basic introduction to optimization models, the course will focus on modelling various standard problems such as assignment, transportation and network, material and production planning, project management, staff management, call centre management, product mix, vehicle routing and so on. A number of live case studies will be presented at length. The participants will be introduced to professional OR software as well as excel based solver, and will be provided hands on experience in using these software for solving the models.

Who Can Attend the Course: This programme will be useful to faculty teaching Optimization/Mathematical Modelling, students pursuing studies in Statistics/Applied Mathematics/Machine Learning/Data Science. Participants are expected to have acquaintance with mathematics at the intermediate level.

Programme Schedule: This programme will be conducted through ***online sessions*** via Zoom. The total duration of the course is about 50 hours spread over 6 weeks. The sessions will be conducted on Mondays to Fridays from 6.15AM to 7.15AM (1-hour sessions), and 3-hour sessions on every Sunday from 9AM to 12Noon. For the benefit of those who cannot participate in the week-day morning sessions, these sessions will be repeated on the respective days from 3PM to 4PM provided there is adequate demand for the afternoon sessions. See the tentative schedule for the programme in Annexure.

Certification: Participants will be evaluated on a continual basis for their performance in the assigned tasks and will be issued a certificate after completion of the programme.

Course Fee: Rs. 4,250/- for academic participants, Rs. 8,500/- for non-academic participants. In addition, GST@18% on the course fee has to be borne by the participant. Eligibility for academic qualification will be decided by the Course Director based on the records submitted by the participants. Applicants are advised to first submit the application form, and pay the fee only upon approval from the Course Director/intimation from the Course Coordinator/Director.

Last date for receiving applications: November 30, 2023.
The application from can be downloaded from the web site or can be obtained from Course Coordinator. Filled in application form, without payment, should reach ISI on or before November 30, 2023.

Mode of Payment : Selected/eligible candidates need to pay the fee in the form of Demand Draft drawn in the favour of "Indian Statistical Institute, Payable at Hyderabad" or Online (NEFT) Bank Transfer (Name of the Account holder: Indian Statistical Institute, Current A/C No : 30451010000079 IFSC Code : CNRB0013045, Canara Bank, J S N Colony, Habsiguda, Hyderabad.). **Payment should be made only after receiving the admission confirmation from the course Director/Coordinator**.

For more details contact Course Director/Coordinator at the following address:

Dr. G S R Murthy
Course Director
murthygsr@gmail.com

K Venkata Ramana
Course Coordinator
vrkota@isihyd.ac.in

INDIAN STATISTICAL INSTITUTE

SQC & OR Unit, Road # 8, Habsiguda, Hyderabad - 500 007

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Training Programme on

Optimization Tools for Business Analytics

Optimal Decision Making through Intelligent Modelling

[Through online sessions from December 2023 to January 2024]

REGISTRATION FORM

Last date for registration : November 30, 2023

Name :

Designation :

Organization/Institution :

Mailing Address:

Phone : (M) (O) (R)

E-mail : FAX :

Participant Profile : Please enclose a brief background about yourself.

Course Fee:

Academic: Rs. 4250/- + GST 765/- (@18%): Rs. 5,015/- (Total)
Non-academic: Rs.8500/- + GST 1530/- (@18%): Rs. 10,030/- (Total)

Payment Particulars

Amount : DD No. / NEFT No.

Bank: Date:

Signature : Date:

Eligibility for registration under academic category: Participants under this category must be either a faculty in an academic/research institute or a student pursuing an academic course in a regular university or college. Participants registering under this category must submit the necessary supporting documents such as Identity cards, admission letters/letters from appropriate authority.

Annexure: Programme Schedule

Programme Calendar

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Dec-23	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						
	Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
Jan-24		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14						