

**Registration Form for QIP Short Term Course on
“Operation Research : Principles and Applications”
(30 December 2019 – 3 January 2020)**

Name (block letters):

Designation & pay scale:

Organization:

Address for communication:

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Pin code: Ph. No.:

E-mail:

Highest academic qualification:

Specialization:

Experience (in years) :

(a) Teaching (b) Industrial

Accommodation required (Yes/ No):

DD No. & Date:

Bank :

Amount :

Please register me for the QIP short term course on “Operation Research: Principles and Applications” to be held at IIT (BHU) Varanasi.

Place :

Date : Signature of the applicant

Sponsorship

Prof./Dr./Mr./Ms./Mrs./ _____

an employee of our institute, is hereby sponsored for the course. The applicant will be permitted to attend the QIP short term course on “Operation Research: Principles and Applications” at IIT (BHU), Varanasi, to be held during 30 December 2019 – 3 January 2020, if selected.

Signature with date of Sponsoring Authority:

Designation :

Official Seal :

Registration procedure

The caution money is to be paid in the form of a **Bank Draft of Rs.2000** in favor of “**Registrar, IIT (BHU), Varanasi**” payable at Varanasi (Branch Code: 11445). The DD along with completed application form is to be sent to The Coordinator, QIP short-term course on “Operations Research: Principles and Applications”, Department of Mechanical Engineering, IIT (BHU) Varanasi-221005, U.P., India. Also, send a scanned copy of the Registration form and the DD details through an email to ajinkya.mec@iitbhu.ac.in and also to coordinator.qip@iitbhu.ac.in.

How to reach

The city of Varanasi is well connected by road, rail and air with all the important cities of India. Regular flights are there from Varanasi to Delhi, Mumbai, Chennai, Hyderabad, Bangalore, Kolkata, Khajuraho and Lucknow. The IIT (BHU) campus is about 10 Km away from Varanasi Cantt Railway Station and 20 Km from Mughalsarai Railway Station and 35 Km from the Babatpur (Varanasi) airport.

About Varanasi

The holy city Varanasi is the oldest living city in the world. It is also known as the capital of the spiritualistic world. The city has a great historical and cultural importance. This religious and cultural capital of India is situated at the bank of the holy river Ganges and is famous for temples of Lord Shiva, Buddha (at Sarnath), Sankat Mochan etc. Varanasi is the premiere most place of oriental learning. It simultaneously keeps pace with modern advanced knowledge. This vibrant city with multiple dimensions of knowledge and liberation has a magnetic attraction for people from all over the world.

Important dates

Last dates for receiving the registration form **December 10, 2019**

Confirmation for the participation shall be communicated on first-come first-served basis to facilitate the participants to book the reservation in time. Since the number of seats is limited, the participants are advised not to wait for the last moment.

Participants are required to carry with them two passport size photographs to be submitted with the Coordinator.

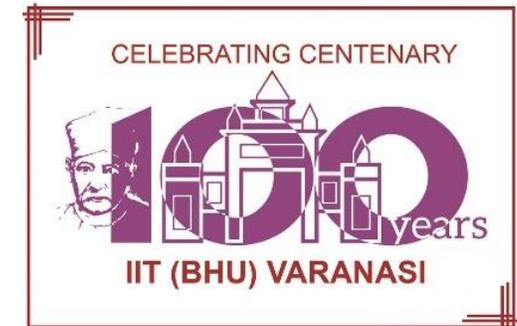


**AICTE Sponsored
QIP Short Term Course**

on

**“Operation Research : Principles and
Applications”**

30 December 2019 – 3 January 2020



Jointly organised by:

Department of Mechanical Engineering
and

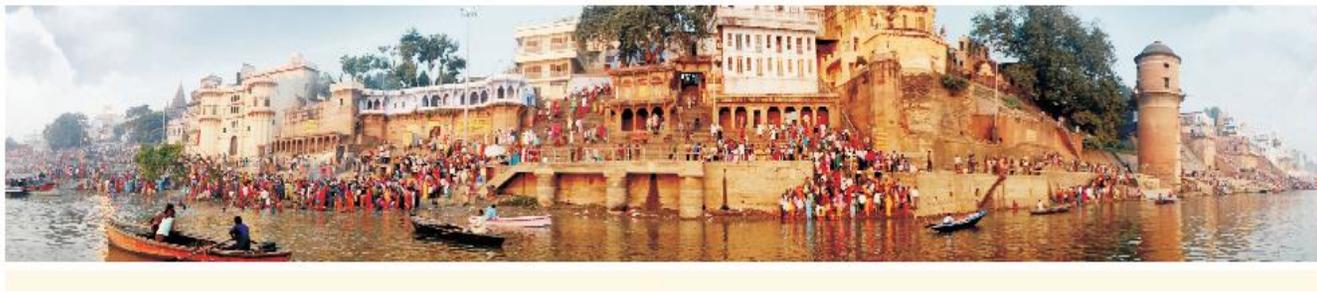
Department of Mathematical Sciences
**Indian Institute of Technology (BHU)
VARANASI-221005**

Coordinators:

Dr. Ajinkya Nandkumar Tanksale (Mech. Engg.)
Dr. Anuradha Banerjee (Math. Sci.)

Contact:

ajinkya.mec@iitbhu.ac.in
M: 9434198067, 8881764775



Introduction

The Institute for Operations Research and the Management Sciences (INFORMS) defines Operations Research (OR) as the discipline that deals with application of scientific & mathematical methods to the study & analysis of problems involving complex systems. The discipline of OR was originated and nurtured in the efforts of military planners during World War II. The decades after that OR techniques are applied widely to the problems in the areas such as manufacturing, inventory management, supply chain management, finance, project management, health care, and education. Today, OR is used by virtually every business and government throughout the world and remains an active area of academic research and pedagogy. The course on Operations Research has got a place in the curriculum of almost every engineering/management undergraduate and postgraduate programs. In the view of this, we are proposing a short term ONE week QIP course on Operations Research with an emphasis on its underlying principles and application areas.

Topics to be covered:

- Fundamentals of Linear programming problems (LPP)
- Simplex algorithm for solution of LPP
- Special cases of LPP
- Transportation, assignment and transshipment problems
- Integer programming
- Selected topics on Stochastic process (Markov chain and its properties, Poisson process, Birth death process, Fundamentals of Queuing theory)
- Dynamic programming
- Basics of Non-linear programming
- Hands-on practice of some mathematical programming solvers.

Expert speakers

Subject experts will be drawn from the premier academic institutions.

Who should attend?

Faculty members Schools with any academic background from University/ Engineering colleges/Management recognized by AICTE are eligible to attend the course. Interested participants are requested to send their filled in registration-form at the earliest. This will help us in making necessary arrangements.

Registration Fee

Participants	TA and Accommodation	Registration Fee
Teachers from AICTE approved Engineering/management institutions	*III-AC to and from fare by the shortest railway route, and free boarding and lodging at IIT guest house	Free (Rs.2000/- refundable caution money)

Note:

- Candidates, from AICTE approved colleges and attending the course in full, will only be eligible for TA. For any other participants, no TA will be paid by IIT (BHU), Varanasi.
- The caution money is for confirmation of participation and will be returned back only if the participant attends the course.
- The course fee includes hospitality and study material
- Efforts will be made to accommodate in the institute guest house on twin sharing basis on receipt of request from the participants. Please note that no family accommodation is available.

Department of Mechanical Engineering IIT (BHU)

The Department of Mechanical Engineering came into existence in 1919 under the leadership of Professor Charles A. King, the first Head of the Department and Principal of the erstwhile Benaras Engineering College (BENCO). Over the last century, the department has grown multi fold to become the largest department of the Institute. The post-graduate and doctoral programs in the department are well-established and infrastructural facilities exist for studies and research in a range of specialization as mentioned below.

Machine Design	since 1964
Thermal and Fluid Engineering (Previously, Heat Power)	since 1966
Production Engineering	since 1977
Industrial Management	since 1979

The faculty is well qualified with vast experience in various fields of Mechanical Engineering. The department has executed several research projects with funding from agencies such as BRNS, DST, AICTE, DRDO etc. Faculty members have collaborations with some leading Universities/Laboratories/Institutes around the globe.

Department of mathematical Sciences IIT (BHU)

Department of Mathematical Sciences began its journey as a section to assist engineering departments of the institute which, in the true sense, pioneered engineering education in the Indian Nation. It soon acquired the status of a full-fledged department in 1985. Its importance lies in the fact that it caters to the needs of the undergraduate as well as post-graduate students of the Institute. In addition, the department runs its own 5 year Integrated Dual Degree course in Mathematics & Computing. The department aims to give emphasis to research in analysis, algebra, topology, mathematical transforms etc. Be it fluid dynamics, gas dynamics, biomechanics, fracture mechanics, digital image processing, generalized thermo-elasticity, heat and mass transfer, cryptology and many more fields of applied nature, department's contribution is enormous in terms of numerous research papers published in reputed international journals over the past few decades. Computing is the glamour of the department.

Venue

All the sessions will be held in the Department of Mechanical Engineering, IIT (BHU), Varanasi.