

# Infrastructure Projects Planning and Modelling

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## Overview

The economic growth of a nation is strongly influenced by the quality of infrastructure services provided to drive the various sectors and industries driving the country's economy. In order to realize the spillover effects of infrastructure, it is very important to meticulously plan the development of infrastructure projects. Infrastructure planning therefore involves steps wherein the projects are assessed for economic and financial feasibility, limit the adverse impacts on the environment, and minimize the social impacts of the project. Ensuring the economic and financial viability of the infrastructure projects is very essential and guaranteed return on investment is considered as one of the key criteria for evaluating the infrastructure projects across most countries. However, involvement of multitude of stakeholders in modern infrastructure projects demands projects being socially inclusive and the social value created by the projects meets the expectation of the wider community. Thus the questions, such as how much investment is enough, why such investment should be made, where the fund should come from and when should invest and how much social value is created over short and long terms etc., can easily be answered only if one has the right set of competency to deal with in a project context.

The course aims to develop fundamental knowledge in project financial modelling and evaluation by taking a broad view on business viability analysis of public and private sector projects besides building expertise on the basics of planning of major infrastructure projects. The course has been divided into two modules. Module A – Infrastructure planning covers topics relating to fundamentals and basic concepts of infrastructure planning, tools and techniques for economic viability assessment while Module B will deal with topics on cost estimation and baseline planning, capital formation, role of interest rates, assessing financial feasibility and the investment decision, project financing and financing instruments, profitability, socio-economic impact of projects, cost-benefit analysis, and revision of forecasts and financial decisions during project implementation.

<b>Modules</b>	<b>A: Infrastructure Planning : June 27, 2016 to July 01, 2016</b> <b>B: Infrastructure Projects Modelling : July 04, 2016 to July 08, 2016</b> <b>Number of participants for the course will be limited to fifty.</b>
<b>You Should Attend If...</b>	<ul style="list-style-type: none"> <li>▪ you are a civil engineer who is interested in evaluation of infrastructure projects to assess financial and economic viability of projects.</li> <li>▪ you are a construction manager or planner interested in learning advanced tools and techniques for project appraisal and financial management.</li> <li>▪ you are a faculty member or student from academic institution interested in learning how to plan infrastructure projects and modelled them to meet diverse socio, economic and financial objectives of infrastructure development.</li> <li>▪ you are a professional involved with decision-making on project selection, project prioritization, feasibility analysis, integrated cost planning and budgeting in infrastructure development organizations.</li> </ul>
<b>Fees</b>	<p>The participation fees for taking the course is as follows:</p> <p><b>Participants from abroad: US \$200</b>  <b>Industry/ Research Organizations: INR 10,000</b>  <b>Faculty Members/Researchers from Academic Institutions/ Research Organisations: INR 5,000</b>  <b>Students from Academic Institutions: INR 1,000</b>  <b>(Student registration refundable subject to participation)</b></p> <p>The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility. The participants will be provided accommodation on payment basis.</p>

## The Faculty



**Dr Hemanta Dolo** is currently a Senior Lecturer in Property, Construction and Project Management at the Faculty of Architecture, Building and Planning at the University of Melbourne. His research interests in the field of construction and project management research include project failures and success, risks and uncertainty minimisation and quantification of social sustainability and value creation in capital projects



**Dr. L. Boeing Singh** is an Associate Professor of Indian Institute of Technology Guwahati. His research interests include infrastructure management, sustainable infrastructure development, Public Private Partnerships, and construction management.

## Course Co-ordinator

**Dr. L. Boeing Singh**

Phone: +91 361 258 2433

E-mail: [boeing@iitg.ernet.in](mailto:boeing@iitg.ernet.in)

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