

Course title: Infrastructure Project Finance				
Course code: BSI 127	No. of credits: 2	L-T-P distribution: 28-0-0	Learning hours: 28	
Pre-requisite course code and title (if any):				
Department: Department of Business Sustainability				
Course coordinator (s): Dr Manipadma Datta			Course instructor (s): Mr. Sanjeeva Shivesh	
Contact details: shivesh@entrepreneurship.edu.in				
Course type	Core	Course offered in: Semester 2		
Course description				
This course intends to provide an understanding and appreciation of a financing technique that is widely used to finance infrastructure projects today. The key areas where the course intends to delve into deeper details are:				
<ul style="list-style-type: none"> - Challenges in Financing Infrastructure Projects – Sponsor, Developer and User Perspective - Models of Infrastructure Financing - Risk Paradigm in Infrastructure Projects - Project Valuation - Financial Structuring and Documentation of Projects - Financial Instruments and Innovation 				
Course objectives				
<ul style="list-style-type: none"> ▪ Understand and appreciate financing techniques for infrastructure projects. ▪ Learn how to forecast and structure infrastructure project finance transactions ▪ Gain insights into a project finance model through a series of real-world case studies ▪ Become aware of and capable of handling problems encountered in financing infrastructure projects 				
Course content				
Module	Topic	L	T	P
1.	Challenges in Financing Indian Infrastructure Overview of Indian Infrastructure Financing landscape, Role of Promoters, Investors and Lenders, Investor challenge, Banking Challenge, differences in Public Sector and Private Sector objectives	2	0	0
2.	Key Infrastructure finance concepts Capital budgeting and Valuation of infrastructure projects, Present values, Future values, Cash Flow, Concepts of Equity, Debt and Leverage, Capital asset pricing model and how this relates to the structure of infrastructure transactions, Investment appraisal techniques, Long-term and working capital Case study: Bidding for a highway concession	4	0	0
3.	Models of Financing Infrastructure Public Infrastructure Financing - PPP Principles, Concepts of non or limited recourse Project Finance, different structures and degrees of private participation, Contracting Methods, Design Build (DB), DBM, DBO, DFBO, BOT, BOO and Concession Contracts, Governance Model, Regulatory framework for different models Project Work: Smart City Financing Models	4	0	0
4.	Risk Paradigm for Infrastructure Projects Risk areas - Macroeconomic factors, Political risks & role of the government, Construction, Operational and management, Environmental considerations, Counterparty risks, Inflation, Devaluation, Interest Rate, Legal, Lessons from mega projects - rail, road and power sector. Case study: Gurgaon Expressway	3	0	0
5.	Risk Mitigation and Allocation How are risks typically allocated, Guarantees and credit enhancement, Cash flow enhancement, Construction related enhancements Case Exercise: Negotiation of risk allocation from investor and user perspective	2	0	0

6.	Project Finance Bankers perspective - Testing the assumptions realistic, Identifying key financial risks in a infrastructure transaction, Different elements of cash flow, Cash available for Debt Service, DSCR, ISCR, Free cash flow, Quantitative indicators, Cash-flow related ratios, Project vs. Corporate related cash flow analysis, Rating of Project Developers - Financial analysis of Infrastructure firms	3	0	0
7.	Project Finance Instruments and Innovation Structuring Project Finance issues, Loans vs. Bonds, ECA, Commercial Banks, Leasing, Capital Markets, Local vs. foreign currency, Senior vs. subordinated debt, Interest and currency exposure, Multilateral Guarantees and Credit Enhancements Sovereign Guarantee, ECB Case study: International Oil and Gas Project	4	0	0
8.	Project Finance Documentation Project Finance documentation, Covenants, 3rd party credit support, Security, Debt service reserve, Escrow and maintenance accounts, Termination provisions, Exercise: On debt financing term sheet for an Infrastructure project	4	0	0
9.	Project Presentations	2	0	0
	Total	28	0	0
Evaluation criteria				
<ul style="list-style-type: none"> ▪ Mid-Term Examination 30% ▪ Project Work – Report and Presentation 30% ▪ End-term Examination 40% 				
Learning Outcomes				
By the end of the course, students will be able to:				
<ul style="list-style-type: none"> ▪ Understand financing techniques for infrastructure projects ▪ Exercise critical judgement in forecasting and structuring infrastructure project finance transactions ▪ Critically assess problems encountered in financing infrastructure projects 				
Pedagogical approach				
A combination of class-room interactions and assignments with special emphasis on case studies and real life examples.				
Suggested Readings:				
Principles of Project and Infrastructure Finance by Willie Tan				
Principles of Corporate Finance by Richard Brealey, Stewart Myers and Franklin Allen				
Projects: Planning, Analysis, Selection, Financing, Implementation, and Review by Prasanna Chandra				
Project Finance in Theory and Practice by Stefano Gatti				
PPP and Project Finance by Prabuddha Das				
Additional information (if any)				
Student responsibilities				
Attendance, feedback, discipline, guest faculty etc.				

Course Reviewers:

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