NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE)

ANNOUNCES

MANAGEMENT DEVELOPMENT PROGRAMMES

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SPONSORED RESEARCH & INDUSTRIAL CONSULTANCY (SRIC)

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NURTURING INDUSTRY TOWARDS EXCELLENCE

MANAGEMENT DEVELOPMENT PROGRAMME 2021 – 22

FOR PRACTISING MANAGERS, ENGINEERS, PROFESSIONALS AND ADMINISTRATORS

PROGRAMME CODE	COURSE	COURSE LEADER/S
1 22 1 01	Management of Intellectual Property for Gaining Competitive Advantage	B. Koteswara Rao Naik
1 22 1 02	Smarter Experimentation for Creating Successful Innovations	B. Koteswara Rao Naik
1 22 1 03	Manufacturing Excellence	L Ganapathy / Jinil D. Persis
1 22 1 04	Analytical Thinking for Problem Solving	B. Koteswara Rao Naik
1 22 1 05	Financial Time Series Modeling using Python	Ajaya Kumar Panda / Rakesh Verma
1 22 2 06	People Analytics	Sumi Jha
1 22 2 07	Project Risk Analytics	Ruchita Gupta / V. B. Khanapuri
1 22 2 08	Excellence in Virtual Human Communication	Nikhil K Mehta
1 22 2 09	Data Analytics for Entrepreneurial Success	B. Koteswara Rao Naik
1 22 2 10	Applications of AI/ML in Operations & Supply Chain Management	Sushmita Narayana / Priyanka Verma / Debabrata Das
1 22 2 11	AI/ML Driven Customer Relationship Management	Purnima Sangle / Neeraj Pandey / Debabrata Das
1 22 2 12	Business and People Analytics	Sumi Jha
1 22 2 13	Innovation and Entrepreneurship	B. Koteswara Rao Naik / T Prasad
1 22 2 14	Decision Making Under Uncertainty	Rakesh Verma / Ajaya Kumar Panda
1 22 2 15	Project Planning & Scheduling	Kanchan Joshi / V. B. Khanapuri
1 22 2 16	Network, Crowd, and Market: Decision Making in a connected World	Mainak Mazumdar
1 22 2 17	Competition Policy	Utpal Chattopadhyay / Poonam Singh
1 22 2 18	On My Own: Essentials for Women Entrepreneurs in Early-Stage Start-Ups	Upasna Agarwal
1 22 3 19	Strategic Decision-Making using System Simulation	Padmanav Acharya
1 22 3 20	Management of Intellectual Property for Gaining Competitive Advantage	B. Koteswara Rao Naik
1 22 3 21	Financial Analytics with Time Series Modeling and Neural Networks using Python	Ajaya Kumar Panda / Rakesh Verma
1 22 3 22	Financial Engineering & Data Science for Investment	Vipul Kumar Singh
1 22 3 23	Marketing Strategy for Hi-Tech Products	M. K. Jha

1 22 3 24	Creating Value through Innovation and Technology Transfer Analytics	Ruchita Gupta
1 22 3 25	Case Writing and Teaching	Neeraj Pandey
1 22 3 26	Business Analytics for Consumer & Employee Relationship Management	Neha Srivastava / Sumi Jha / Poonam Singh
1 22 3 27	Industrial Safety and Environmental Management# Compliances and ESG Framework	Seema Unnikrishnan / Hema Diwan
1 22 3 28	Sustainable supply chain management in post covid-19 era	V. V. Gedam / Seema Unnikrishnan / Shirish Sangle
1 22 3 29	Managing Cloud Based ERP Implementation	Purnima Sangle
1 22 4 30	Project Management	L Ganapathy
1 22 4 31	Managerial Skills for Technical Personnel	D. K. Srivastava
1 22 4 32	Data Science & Machine Learning Applications in Finance & Economics	Vipul Kumar Singh
1 22 4 33	Sustainability Leadership Development in Post Covid-19 Era	V. V. Gedam / Shirish Sangle
1 22 4 34	Strategic Pricing	Neeraj Pandey
1 22 4 35	Application of SPC And Doe in Manufacturing and Service Sectors	Ravindra Gokhale
1 22 4 36	Self-Awareness and Effective Communication in Projects	Nikhil K Mehta
1 22 4 37	Managerial Decision Making for Technical Personnel	L Ganapathy
1 22 4 38	Business to Business Marketing	M. K. Jha
1 22 4 39	Leadership and Team Building	D. K. Srivastava
1 22 4 40	Thinking Strategically; business strategies for competitive advantage.	S S Bhattacharyya
1 22 4 41	Understanding Economic Indicators for Managerial or Business Decision Making	Mainak Mazumdar
1 22 4 42	Business Strategies for Emerging Markets	Utpal Chattopadhyay / Binilkumar A. S.
1 22 4 43	Applications of AI/ML in Operations & Supply Chain Management	Sushmita Narayana / Priyanka Verma / Debabrata Das
1 22 4 44	Project Procurement and Contract Management	V. B. Khanapuri / Kanchan Joshi
1 22 4 45	Business Competitiveness through Operational Excellence	B. E. Narkhede / Jinil D. Persis
1 22 4 46	Decision Making Under Uncertainty	Rakesh Verma / Ajaya Kumar Panda
1 22 4 47	Consumer Insights for Business Growth	Sanjeev Verma
1 22 4 48	Statistical Process Control and Design of Experiments	Rakesh Raut / Ravindra Gokhale

MANAGEMENT OF INTELLECTUAL PROPERTY FOR GAINING COMPETITIVE ADVANTAGE

ABOUT THE PROGRAM

IP is an invaluable asset which can create a billion-dollar business in no time. In this 21st century only those organizations will sustain the global competition when they create 'value' on a continuous basis with the changing dynamic business environment. Value creation is something comes from the intellectual thought process which leads to creation of intellectual property. IP management is a function of creation, protection and leveraging of IP.

OBJECTIVE OF THE PROGRAMME

- To get a clarity on technology with the make or buy decision
- How to identify research-gap/ white-space
- How to solve your existing R&D problems for a feasible and commercially viable solutions
- How to create intangible IP assets
- How to protect your IP assets for competitive advantage
- How to leverage from your IP assets

COVERAGE

- Problem identification, research gap identification, R&D decision making (live patent database will be used in explaining the real-time data analysis for identifying the white space)
- IP creation (various methods in problem solving, ideation, feasibility & screening, TRIZ, lateral thinking, what is invention & innovation etc.).
- IP Protection (different forms of IP, Protection mechanism, what is patentable & what not, what comes under the umbrella of copyrights, International treaties & conventions which help inventors in gaining advantage of global protection, drafting/documentation, strategies in selecting protection mechanism & territories).
- IP Leveraging (IP portfolio management, technology transfer, technology licensing, identifying partners / collaborators, policing & enforcement, compulsory licensing).

This program uses the live patent database and cases to explain how the strategic decisions are made for competitive business advantage with IP analytics. Helps in building strategic partnerships in terms of R&D Collaboration, Technology Development, Technology Licensing, Technology Transfer, Technology Know-How and Know-Why.

FOR WHO MEANT

This program is useful to Entrepreneurs, Start-ups, R&D Managers, R&D Institutions, Senior Executives, Inventors, Teachers who are engaged in teaching IP, Heads of Technical Academic Institutions, Researchers and Ph.D. Students

COURSE LEADER

B. KOTESWARA RAO NAIK

SMARTER EXPERIMENTATION FOR CREATING SUCCESSFUL INNOVATIONS

ABOUT THE PROGRAM

This program will use Design of Experiment (DoE). DoE will help in delivering results faster and more efficiently. DoE approach accelerates R&D and having right tools to make critical resource decisions. It saves time, resources and money. It gives a much-needed edge in competitive global market.

OBJECTIVE OF THE PROGRAMME

Providing a solid theoretical understanding on design of experiment (DOE) complemented by hands on exercises that will give the participants an experience of using JMP's statistical discovery software to accelerate innovation in new product development.

COVERAGE

- Introduction to DoE
- Factorial Experiments
- Screening Experiments
- DoE guidelines and best practices.

FOR WHO MEANT

Engineers, Managers, and other decision makers.

COURSE LEADER

B. KOTESWARA RAO NAIK

MANUFACTURING EXCELLENCE

ABOUT THE PROGRAM

Manufacturing industry in the era of Industry 4.0 is facing phenomenal shift in terms of practices and opportunities. India is a rapidly growing economy with a thrust on manufacturing under “Make in India” and other initiatives. Several researchers and studies have explored the opportunities to improve productivity, reliability, sustainability and profitability of these industries by adopting technologies such as artificial intelligence, data science, robotics and cyber-physical manufacturing. Present-day manufacturing industry generates huge volumes of heterogeneous spatial-temporal industrial data from assets, products, customers and manufacturing/external environment. Facilitating data-driven operational, tactical and strategic decision making and providing information-based-services to various stakeholders of the industry are proven to lead towards manufacturing excellence. Large-scale data-driven simulation models and optimization models are found to represent complex dynamic systems in manufacturing setup in real-world which are rudimentary in the development of automated and autonomous manufacturing systems. This course will focus on to unleash the opportunities of optimizing and improving the manufacturing processes using analytical tools and techniques for enhancing the productivity and profitability across manufacturing supply chain thereby driving towards manufacturing excellence. This will be demonstrated through manufacturing case studies that help in creating better plans and shop floor schedules real-time capturing the dynamics of the production system. This also helps to explore several possible combinations of “what-if” scenarios and come up with various configuration designs and alter the manufacturing systems for better flexibility and efficiency. This course also helps operations manager to assess and improve the existing manufacturing practices by diving deep into the multi-stage manufacturing process using analytical models and determining the latent relationships and patterns among several process variables and then optimize the process for better yield and quality.

HIGHLIGHTS OF THE PROGRAM

- Recent Perspectives and Practices in Manufacturing for achieving excellence
- Case Examples in Technological Advances, Current trends, Future of Manufacturing
- Analytical Modelling for manufacturing
- Industry 4.0 in Manufacturing
  - Building Visibility in Manufacturing Systems
    - Industrial Big Data for Condition Awareness
    - Industrial Internet of Things (IIoT)
- Performance assessment and prediction models for manufacturing excellence

Practical sessions in

- MS Excel® based Analytics
- Matlab Simulink based Analytics
- ML in RStudio and Google Colab platforms

FOR WHO MEANT

Junior & mid-level graduate/diploma engineers with experience in manufacturing industry

COURSE LEADER

L GANAPATHY / D JINIL PERSIS

NURTURING INDUSTRY TOWARDS EXCELLENCE

ANALYTICAL THINKING FOR PROBLEM SOLVING

ABOUT THE PROGRAM

In this virtual world, every field deriving insights from data which is central to problem solving, innovation and growth. But, without an understanding of which approach to use, and how to interpret & communicate results, the best opportunities will remain undiscovered.

OBJECTIVE OF THE PROGRAMME

Providing practical skills in problem solving using data, JMP's statistical discovery software which accelerate data enabled decision making.

COVERAGE

- Statistical thinking and problem solving
- Decision making with data
- Exploratory data analysis
- Quality methods
- Correlation
- Regression models and Predictive Modelling.

FOR WHO MEANT

Engineers, Middle level managers, Scientists and Researchers.

COURSE LEADER

B. KOTESWARA RAO NAIK

NURTURING INDUSTRY TOWARDS EXCELLENCE

FINANCIAL TIME SERIES MODELING USING PYTHON

ABOUT THE PROGRAM

The field of financial econometrics using advanced tools and techniques has emerged over the last decade. The intention of this course is to help practitioners cut through the vast literature on financial time series models, focusing on the most important and useful empirical concepts. This course is expected to develop a sound background in quantitative analysis of financial time series. It offers a guide to analyze and model time series properties of financial data using Python and is intended for researchers and practitioners in the finance industry. Our aim is to provide a road map from academic prospective to the research issues that are important for researchers and practitioners.

OBJECTIVE OF THE PROGRAMME

This short course aims to discuss a broader aspects of time series modelling on financial data. It covers applied econometric tools relating to financial time series using Python, with an emphasis on model building and analysis. The course aims to develop insights of financial modeling to analyze real world financial and business time series.

COVERAGE

- Fundamentals of Financial Time series
- Univariate Time series modeling
- Modeling return volatility
- Introduction to Multivariate Time series models

FOR WHO MEANT

Academicians, Research Scholars, Industry professionals.

COURSE LEADER

AJAYA KUMAR PANDA / RAKESH VERMA

PEOPLE ANALYTICS

ABOUT THE PROGRAM

The most important pillar on which industry resides is their own employees. Effective research outputs regarding employees, would have elements of qualitative or quantitative perspectives. Quantitative research requires collection, analysis and interpretation of large data into meaningful conclusion and long-term contribution. People analytics program has been designed to enable HR professional to conduct quantitative analysis meaningfully. It will familiarize participants with data and interpretation of its output from R stats and SPSS.

OBJECTIVE OF THE PROGRAMME

- To understand the term analytics and complexity of people data
- To familiarize participants with the questionnaire and scale
- To understand different types of data and its relevant analysis
- To understand and interpret descriptive and inferential statistical analysis applicable for a given problem

COVERAGE

- The program will cover the importance of scale (nominal, ordinal, interval and ratio) while developing questionnaire
- Interpretation of inferential statistics (Correlation, Regression and ANOVA) with the help of R and SPSS package
- Interpretation of inferential statistics (Logistic Regression) with the help of R and SPSS package
- Interpretation of inferential statistics (Cluster analysis) with the help of R and SPSS package
- Interpretation of inferential statistics (Time series analysis) with the help of R and SPSS package
- Understanding various factors contributing to organizational climate and employee satisfaction. Interpretation of Factor analysis with the help of R and SPSS packages.
- Understanding qualitative people data for managerial purposes

FOR WHO MEANT

The program is meant for working professionals, students and research scholars interested in honing their people analytical skills

COURSE LEADER

SUMI JHA

PROJECT RISK ANALYTICS

ABOUT THE PROGRAM

Risk management plays a key role in project management methodology. For any investment decisions under conditions of uncertainty, the three dimensions -Uncertainty, Complexity, and Risk becomes critical to be understood for appropriately managing projects. Project managers want to make better decisions, especially regarding impactful projects that require significant resource commitments to resolve technical challenges.

There is a strong desire to increase insights about the past, present and future for higher-quality decisions. Risk analytics quantifies risk, providing information to facilitate decision-making on projects with significant investment risk. To make the best decisions about innovation projects, leaders need to understand fully how quantitative risk analysis can help.

This Project risk analytics program will emphasize on building data-driven models for managing risks in projects across sectors. It will Integrates practitioners' and managerial experience with the decision-theoretic frameworks. This program will enable young industry professionals to advanced methods and transform their projects towards success.

OBJECTIVE OF THE PROGRAMME

The objective of the program is to enable and equip the young industry professionals with the skills and competence in achieving answers to below QUESTIONS

- Are you worried about identifying risks/blind spots in your project?
- Are you worried about prioritizing risks and allocating resources?
- Are you facing challenge in weighing alternative paths for project success?

To seek the answers, attend this program on- Project Risk Analytics

COVERAGE

- Understanding Challenges of VUCA
- Introduction to Risk and Uncertainty
- Structuring Risk identification through analytic frameworks
- Creating WBS and RBS mapping
- Quantifying and assessment of Risk- Using Multi Criterion Decision making Techniques
- Learning and Practicing Simulation

FOR WHO MEANT

Young Industry Professionals (1-5 years of experience) managing Projects across sectors, faculty members.

COURSE LEADER

RUCHITA GUPTA / V. B. KHANAPURI

EXCELLENCE IN VIRTUAL HUMAN COMMUNICATION

ABOUT THE PROGRAM

Effective communication is the necessity of any organization. It helps in satisfaction of personal and professional needs. Unsatisfied needs not only impede an individual's progress but also dissuades organizational productivity. With VUCA and COVID-2019, communication has become even more challenging, and now virtual human communication has become the new normal.

"Excellence in virtual human Communication" is an endeavour that aims at working on communication challenges. Constant engineering of our training method has enriched the learning experiences of our participants. This program has helped them in strengthening their communication competencies effectively. To improve their excellence, we extend our hands in the journey called "Excellence in virtual human communication."

OBJECTIVE OF THE PROGRAMME

To aid participants in having awareness and applications of possible interventions that shall help them in:

- identifying and enabling participants to resolve human communication issues in virtual setup.
- dealing with issues of virtual negotiations.
- making progress in their interpersonal and intrapersonal communication
- improving written communication

COVERAGE

- diagnosis of human communication issues in the virtual context
- working on several interventions for improving oral and written communication skills.

Content: Interpersonal Communication, Team Communication, Transactional Analysis Proper, Public Speaking, Written Communication

FOR WHO MEANT

We welcome participants from all functional area working at any level of management.

COURSE LEADER

NIKHIL K MEHTA

NURTURING INDUSTRY TOWARDS EXCELLENCE

DATA ANALYTICS FOR ENTREPRENEURIAL SUCCESS

ABOUT THE PROGRAM

In a practical and data driven universe, the digital age has changed the way data is collected, stored, analyzed, visualized, and protected. Entrepreneurial success depends on transforming business opportunities into actionable insight and thus making more informed decisions.

OBJECTIVE OF THE PROGRAMME

Providing practical skills for entrepreneurs in using data to solve problems and identify opportunities better using JMP's statistical discovery software to accelerate entrepreneurial success.

COVERAGE

Road map of data analytics for entrepreneurial success, descriptive, predictive, and prescriptive analytics for better decision making.

FOR WHO MEANT

For all the budding entrepreneurs, Engineers, Managers, and Executives.

COURSE LEADER

B. KOTESWARA RAO NAIK

APPLICATIONS OF AI/ML IN OPERATIONS & SUPPLY CHAIN MANAGEMENT

ABOUT THE PROGRAM

This programme aims to acclimatize the participants with the fundamental concepts of Artificial Intelligences/Machine Learning (AI/ML) for decision making in operations and supply chain management. The problems in operation and supply chain management that require AI/ML approaches include forecasting, inventory management, facility location, product classifications, vehicle routing, etc.
The program is designed keeping in mind the various techno-managerial aspects that need to be addressed by the participants. NITIE faculty have been working on different domains of applications of statistics, operations research, artificial intelligence, and machine learning, and are actively involved in consulting and applied research projects in the area of operations and supply chain management. The program is designed as the effective blend for application orientation with plenty of hand-on case exercises.

OBJECTIVE OF THE PROGRAMME

Upon successful completion of this program, participants
1) will be familiarized with the concepts of AI and ML.
2) will be able to formulate, solve and analyze complex operations and supply chain management problems systematically.
3) will be able to apply various AI and ML tools in real life decision making, specifically in the context of operations and supply chain management.
4) will learn coding and solving the operations and supply chain management problems in Python/R.

COVERAGE

This training program is designed for web-based learning with hands-on exercises for executives in managerial positions in any organization. The topics covered include the following:
- Supervised Learning Algorithm
- Linear Regression Analysis
- Logistic Regression Analysis
- Decision Tree
- Random Forest
- Unsupervised Learning Algorithm
- k-Means Clustering
- Hierarchical Clustering
- Reinforcement Learning Algorithm
- Markov Decision Problems
- Application of AI/ML tools in operations and supply chain management.

FOR WHO MEANT

Professionals involved in operations & supply chain management and related functional areas.

COURSE LEADER

SUSHMITA A. / PRIYANKA VERMA / DEBABRATA DAS

AI/ML DRIVEN CUSTOMER RELATIONSHIP MANAGEMENT

ABOUT THE PROGRAM

This programme aims to acclimatize the participants with the fundamental concepts of Artificial Intelligences/Machine Learning (AI/ML) for decision making in Multichannel customer relationship management (CRM). Customer relationship management (CRM) comprises a set of processes and enabling systems supporting a business strategy to build long term, profitable relationships with specific customers. Companies understand that Al/ML driven CRM has significant potential, but they face the challenge in implementation. The problems in CRM that require AI/ML approaches include customer segmentation, predicting customers' behaviour, churn, detecting fraudulent transactions, customer satisfaction, price optimization, Lifetime Value of Customer etc.
NITIE faculty have been working on different domains of applications of artificial intelligence and machine learning and are actively involved in consulting and applied research projects in the area of Marketing, Multichannel CRM, Operations, Supply chain management, Finance, etc. The program is designed as the effective blend for application orientation with plenty of hand-on case exercises.

OBJECTIVE OF THE PROGRAMME

Upon successful completion of this program, participants
1) will be familiarized with the concepts of AI and ML
2) will be able to formulate, solve and analyze complex CRM problems systematically
3) will be able to apply various AI and ML techniques in real life decision making, specifically in the context of CRM
4) will learn coding and solving the CRM problems in Python

COVERAGE

This training program is designed for web-based learning with hands-on exercises. The topics covered include the following:
- AI/ML applications in CRM
- Omni Channel and role of AI/ML in managing it
- Roadmap for the Implementation of Multichannel CRM
- Use cases in Pricing, CRM, and other Marketing activities
- AI/ML Algorithms
- Decision Tree
- Random Forest
- Market Basket Analysis
- RFM Technique
- k-Means Clustering
- k-Mode Clustering
- Hierarchical Clustering
- Markov Chain
- Cloud-based CRM

FOR WHO MEANT

For executives working in customer relationship management and related functional areas.

COURSE LEADER

PURNIMA SANGLE / NEERAJ PANDEY / DEBABRATA DAS

BUSINESS AND PEOPLE ANALYTICS

ABOUT THE PROGRAM

The two most important pillars on which industry resides are their own employees and customers. Effective research outputs regarding employees and customers, would have qualitative or quantitative perspectives and data. Quantitative research requires collection, analysis, and interpretation of large data into meaningful conclusion and long-term contribution. Business and People analytics program has been designed to enable industry professionals to conduct quantitative analysis meaningfully. It will familiarize participants with data and interpretation of its output from R stats.

OBJECTIVE OF THE PROGRAMME

- To understand the term analytics and complexity of people and customer data
- To familiarize participants with the questionnaire and scale
- To understand different types of data and its relevant analysis
- Application of findings to business problems and its implications

COVERAGE

- The programme will cover the importance of scale (nominal, ordinal, interval, and ratio) while understanding problem
- Interpretation and application of Correlation, Regression and ANOVA with the help of R
- Interpretation and application of Logistic Regression with the help of R
- Interpretation and application of Cluster analysis with the help of R
- Interpretation and application of Time series analysis with the help of R
- Understanding various factors contributing to customer satisfaction, organizational climate, and employee satisfaction. Interpretation of Factor analysis with the help of R
- Understanding qualitative data for managerial purposes
- Measuring employee and customer attrition

FOR WHO MEANT

Industry professionals having interest in making their profession in analytics.

COURSE LEADER

SUMI JHA

INNOVATION AND ENTREPRENEURSHIP

ABOUT THE PROGRAM

In recent past, Start-up activity has become a culture across the country. For the start-up, innovation is the backbone to stand-high in the global competitive market. This program will help the budding entrepreneurs in understanding the basics of innovation and entrepreneurship for taking right decisions on right time.

OBJECTIVE OF THE PROGRAMME

1. Will help in problem solving, Creating invention, innovation, and intellectual property.

2. How to create a start-up

3. Design of Experiment (DoE) approach in solving the problem for better decision making.

COVERAGE

Introduction to DoE, Problem solving techniques like lateral thinking, TRIZ etc. and Innovation.

FOR WHO MEANT

All the budding entrepreneurs.

COURSE LEADER

B. KOTESWARA RAO NAIK / T. PRASAD

DECISION MAKING UNDER UNCERTAINTY

ABOUT THE PROGRAM

This short course aims to discuss a broader aspect of Decision Making under Uncertainty, participants learn the basics concepts as well as tools and practices of decision making under uncertainty and perfect as well as imperfect information. The participants of the course learn how to structure and improve decision processes to make better decisions. Despite introducing basic concepts to deal with decision problems under uncertainty, participants also learn how to implement statistical as well as fuzzy decision making techniques to solve the problems.

OBJECTIVE OF THE PROGRAMME

The aim of this short course is to provide participants with the most important concepts, tools, and techniques of making decisions under uncertainty and (im) perfect information. The content helps participants to structure complex decision problems under uncertainty and provide recommendation to the participants to apply in their context.

COVERAGE

• Concept of Uncertainty, Type of Uncertainty, Decision under Risk, and (im) Perfect Uncertainty, Analysis of the value of perfect as well as imperfect information

• Statistical Decision Theory: Structuring decision problems under uncertainty using influence diagrams, Analysis, and implementation of decision problems under uncertainty using Bayesian Theory and decision trees

• Analysis of complex decision problems using Monte Carlo simulation

• Decision Making in Fuzzy Environment

• Application of DM in Operations, Finance under Uncertainty.

FOR WHO MEANT

The programme is aimed at Executives, Middle-level Managers, Teachers, and all other Professionals - in Public and Private Sector.

COURSE LEADER

RAKESH VERMA / AJAYA KUMAR PANDA

PROJECT PLANNING & SCHEDULING

ABOUT THE PROGRAM

This course will provide a comprehensive understanding of Project planning and scheduling using the various network scheduling techniques. The program will discuss key issues related to the project planning in terms the Scope, Time, Cost and Quality along with resources – both Human and Material resources, and risks associated with the projects. The key processes associated with the Project Life cycle in terms of the initiation, planning, execution, monitoring, and control along with project closure will be discussed in how to ensure the success of project. The program in particular will focus on understanding the tools and the different software related to project planning and scheduling.

OBJECTIVE OF THE PROGRAMME

• Understanding the challenges of Projects and adopting a structured approach to project planning and scheduling

• Understand and apply the concepts of Project Network scheduling techniques.

• Analysis of the project schedules and develop suitable risk response strategies for success of the project.

COVERAGE

• Project Initiation and Feasibility Studies – Overview

• Project Planning – Tools and techniques

• Project Network Scheduling Techniques – CPM / PERT / CCPM

• Project Simulation techniques

• Project Analytics

• Risk Analysis and Management

• Hands on session for using MS based tools

FOR WHO MEANT

For Junior & Middle Management Level professionals working on projects.

COURSE LEADER

V. B. KHANAPURI / KANCHAN JOSHI

NURTURING INDUSTRY TOWARDS EXCELLENCE

NETWORK, CROWD, AND MARKET: DECISION MAKING IN A CONNECTED WORLD

ABOUT THE PROGRAM

Social networks often determine exchange opportunities for trading goods and for launching creative partnerships. They diffuse political opinions, gossip, ideas, and job offers. Sometimes they act as a large collective brain, aggregating information, and thoughts wisely, and sometimes not so wisely. They affect how we value different goods and activities, and they provide essential insurance against a variety of contingencies that lie beyond the reach of formal insurance schemes. They are also the basic platform for wielding the sticks and carrots prescribed by many social norms. It is thus plausible that social networks play a central role in our lives, and in particular in our economic lives.

OBJECTIVE OF THE PROGRAMME

1. Explain the role of the economic and social networks in different decisions like the purchase of products, hiring workers, venturing into new markets, and other management problems.
2. Understanding financial contagions, the transmission of risk, and other decision-making problems in the light of network theory.

COVERAGE

1) The role of the network in market decision making: the strength of ties, Homophily.

2) Signed network Understanding Cooperation and Competition in the Market.

3) Strategic Network Formation: An economic approach to network formation

4) Network Models of markets with intermediaries, Matching market.

5) Network Effect in Innovation, Tipping and Contagions: Positive externalities, strategic complements, path dependence, diffusion of innovation, and tipping in technology, financial, and product markets. Application: the rise of Microsoft and contagion phenomena.

6) Behaviour and learning Networks: Diffusion on Networks. Components, Cohesiveness and Contagion, Infection. Neighborhood effects in Diffusion and Play. Bayesian Learning on Networks, Bounded Rational Learning, Convergence of Beliefs, Influence.

7) Power Law and Rich getting richer phenomenon.

8) Networks and Markets. Empirical Studies of Bargaining and Trading on Networks, Experiments on Network Transactions, Price Dispersion, Labor Markets.

9) Bargaining and power in Network. Wealth Dynamics in Market.

FOR WHO MEANT

For all level of managers.

COURSE LEADER

MAINAK MAZUMDAR

COMPETITION POLICY

ABOUT THE PROGRAM

This programme aims to equip the executives and members of the legal fraternity with the new developments in competition policy and to update them from time to time.

OBJECTIVE OF THE PROGRAMME

1. To provide an understanding of the nuances of the Competition Act 2002 pertaining to Anti-competitive Agreements, Horizontal Agreements and Business Combinations.

2. To provide an understanding of the interplay of economics and competition policy.

3. To provide an overview of the recent challenges in competition landscape and the ways to tackle them.

COVERAGE

1. Regulation and Competition: A paradigm shift
   a. Understanding Competition Act 2002
   b. Fundamentals of Economics in Competition Law
   c. Recent Developments in Competition Policy
2. Anti- Competitive Agreements: Horizontal Agreements and Vertical Agreements
   a. Price Fixing or Cartels, Territorial Restrictions
   b. Bundling
   c. Exclusive Dealing
3. Abuse of Dominance
   a. Predatory Pricing
   b. Joint Dominance
   c. Relative Dominance
4. Mergers and Acquisitions under Competition Policy

FOR WHO MEANT

Managers in Legal and Compliance and other relevant Departments in Public and Private Enterprises, Lawyers, Company Secretaries, Compliance Officers, Consultants, and Free Lance Practitioners etc.

COURSE LEADER

UTPAL CHATTOPADHYAY / POONAM SINGH

ON MY OWN: ESSENTIALS FOR WOMEN ENTREPRENEURS IN EARLY-STAGE START-UPS

ABOUT THE PROGRAM

We hear stories of grit and strength of India's women entrepreneurs – be it Jaswantiben Popat of Lijjat Papad or Kiran Mazumdar Shaw of Biocon. These examples prove that Indian women can become successful entrepreneurs and can scale their businesses. However, on the other hand, Bain & Co. report in 2019 says that "By 2030, India's working age population will exceed 1 billion but up to 400 million women's economic potential may be left unaddressed" (Bain & Co., 2019). If entrepreneurship is the engine of economic growth, then women need to be firmly in the driver's seat.

While a lot of structural level support is being provided by the Government in terms of easy access to loans and knowledge base, research and interviews have shown that women entrepreneurs also require dispositional support. It doesn't mean that structural support is not important, but that the opportunity to develop an entrepreneurial mindset, sharpen their skills and self-belief, needs to be given to women. Leadership skills, negotiation skills, navigating the entrepreneurial networks and other such mentoring support are desired by women entrepreneurs. Without these, the societal implicit biases and gender stereotypes will continue to hamper the growth of their start-ups making scalability a tougher proposition than it is meant to be.

OBJECTIVE OF THE PROGRAMME

On My Own: Essentials for Women Entrepreneurs in Early-Stage Start-Ups, a Management Development Program from NITIE introduces the essentials of the entrepreneurial journey from finding an idea, setting goals, building networks, gaining traction in the marketplace to raising capital. This course has been developed with the above ideas in mind and explains how entrepreneurs can develop an entrepreneurial mindset and refine their business strategy.

The program borrows from Sarasvathy's effectuation model. Through OMO, we intend to provide systematic training in the area of entrepreneurship.

COVERAGE

The programme is divided into three modules that will help you develop skills and knowledge required for starting up on your own and being successful in your chosen business area.

Module 1: Who I am?

This module will help participants to set their goals, identify ideas and set realistic expectations for oneself. The participants will also be able to map their skill gaps and work towards sharpening their skills.

Key takeaways:

- Business ideas and converting the same to a business plan
  - Market study
  - Consumer research
  - Persona mapping
  - Business Plan
  - Understanding of the existing channels
- Entrepreneur as the brand - goal setting, personal branding, PR etc.
- Developing Gravitas and Communicating Effectively
- Personal risk and leadership style
- Maintaining stress

Module 2: Who do I know?
One of the pitfalls of starting on your own, is the lack of finance and infrastructure that is almost taken for granted when working in a corporate or a family-owned business.
The module will also focus on the importance of building a personal brand right at the beginning of the entrepreneurial journey.

Key takeaways:
- Financing the Business
  - Funding sources – social capital, pitching to Angels or Venture Capitalists. Is crowdfunding an option?
- Learning the Art of Networking
- Getting the support service setup together – recruitment, accounts, legal, marketing channels etc.

Module 3: What do I know?
Apart from understanding oneself and the social capital one has, there are certain basics of building a sustainable business such as getting and deepening the relationship with the customer base.

Key takeaways:
- Using technology platforms to deepen the supply chain
- Digital Marketing, Business Development, Sales & Distribution
- Unit cost economics and scaling the business

FOR WHO MEANT

The Programme as such is useful for all women who have started or are intending to have a start-up, irrespective of their business area of interest or previous experience. Women in early, middle or late career stages, who intend becoming or are entrepreneurs in early-stage start-ups will greatly benefit from the programme.

STRATEGIC DECISION-MAKING USING SYSTEM SIMULATION

ABOUT THE PROGRAM

This program will introduce various decision-making tools to support middle management and above in companies and introduce the participants to the wonderful world of simulation which can support unstructured decision making.

OBJECTIVE OF THE PROGRAMME

It will help develop in working personnel, a systems approach to managing organisation for its better overall growth. It will help develop skills for better unstructured decision making. It will develop perspective to appreciate the dynamic simulation approach for more making more wholistic decisions.

COVERAGE

It will introduce the Dynamic simulation-based approach to scenario building and policy analysis in organisations. It will involve case studies and discuss the solution with the analytical tools (and software).

FOR WHO MEANT

This program is meant for middle and upper middle management people in all kinds of product as well as service industry.

COURSE LEADER

PADMANAV ACHARYA

FINANCIAL ANALYTICS WITH TIME SERIES MODELING AND NEURAL NETWORKS USING PYTHON

ABOUT THE PROGRAM

This course is expected to develop a sound background in quantitative analysis of financial time series. It also aims to develop sound understanding in sequential data analysis by building a Long Short-term memory model (LSTM) of Neural Network. It offers a guide to analyse and model time series properties of financial data using machine learning approach through Python. The course is designed for researchers and practitioners in the finance industry.

OBJECTIVE OF THE PROGRAMME

This short course aims to discuss a broader aspect of time series modeling on financial data with advanced tools and techniques. It covers applied econometric tools relating to univariate financial time series models and LSTM using Python. The course aims to develop insights of financial models with univariate time series analysis and neural networks models using stock market indices.

COVERAGE

- Understand Time Series and Neural network properties of Financial data
- Theoretical and empirical implications of Financial Time series
- Univariate Time series modeling and forecasting.
- Advanced research in LSTM

FOR WHO MEANT

Finance Professionals, Academicians, Research Scholars, Industry participants

COURSE LEADER

AJAYA KUMAR PANDA / RAKESH VERMA

FINANCIAL ENGINEERING & DATA SCIENCE FOR INVESTMENT

ABOUT THE PROGRAM

Quant analyst swarm Wall street and other Financial hubs across the world. However, there is no dearth of material discussing the hardcore mathematical skills and computational mechanism related to asset valuations. However, most of it is too mathematical & technical to understand by the industry practitioners. The course not only brings the best of quant finance knowledge intuitively but also brides the gap between conceptual underpinning and practical application, harnessing the powerful packages of empirical finance available in "R." As the finance industry in India is transgressing towards the use of High-Frequency trading, the market demand for Quant professional is going to witness an upsurge. Hence, the course content is relevant to future analysts and a way for the current financial experts to upgrade their knowledge from a quant perspective. For academicians, researchers related to the field of Finance & Operations, the course is highly recommended to develop conceptual clarity about the stochastic process and do a practical computational exercise.

OBJECTIVE OF THE PROGRAMME

The course is useful for aspiring to upgrade the knowledge to tackle the complex financial problem from an Analyst perspective. A quant-focused curriculum with practical hands-on using "R" will equip participants to fill the current Fintech industry demand and differentiate themselves from the already existing Financial Analyst pool, which deploys traditional methodologies to address complex financial tasks. Pedagogy imparted from academic experts from the National Institute of Industrial Engineering, where teaching rests on computation and quant modeling pillars, will give a real glimpse of how the Big Financial giants value assets in financial markets.

COVERAGE

1. Introduction to R working environment and R studio tour, Data import using excel & csv, Data visualization.
2. Plotting time series data & introduction to dataframe, R functions, conditional statements, loops & group manipulation, data subsetting.
3. Concept of Arbitrage & Law of one price for financial asset valuation, refresher on Derivatives, exposure to NSE website for analyses of Option chain, use of Bloomberg for option chain data download.
4. Introduction to discreet & continuous process, with idea of synthetic portfolio creation using Binomial pricing Model: Practical R exercise to compute Binomial price along with Binomial colored plotting.
5. Stochastic calculus primer: intro to stochastic process, Markov process, Weiner process, & Geometric Brownian motion simulation.
6. ItÔ lemma corollary & Monte Carlo simulation
7. Continuous Model: Option price computation using Black Scholes Merton model. Option chain calibration & implied volatility computation using non-linear optimization algorithms {Brent, Nelder-Mead}
8. Volatility smile & volatility surface plot discussion
9. Practitioner Black Scholes Model computation using deterministic volatility function for IV approximation.
10. Adjustment to skewness & Kurtosis and introduction to Gram Charlier Model.
11. Stochastic volatility model – Hull & White price computation algorithm & Particle Swarm Optimization algorithm.
12. Heston Model & limits of numerical integration.

FOR WHO MEANT

Industry practitioners, portfolio managers, individual traders, academic researchers, bankers, etc.

COURSE LEADER

VIPUL KUMAR SINGH

NURTURING INDUSTRY TOWARDS EXCELLENCE

MARKETING STRATEGY FOR HI-TECH PRODUCTS

ABOUT THE PROGRAM

This program deals with the Marketing strategy of High Technology Products. Different Models and strategy will be discussed during this program. This program will be of three days.

OBJECTIVE OF THE PROGRAMME

- To provide Hi-Tech products scenario in our country.
- To provide Various marketing Strategy and techniques.

COVERAGE

- PLC of Hi-Tech Products.
- Understanding Customer and competitor.
- Product planning and strategy
- Pricing and distribution of Hi-Tech products.

FOR WHO MEANT

Those working in Sales and marketing Area and dealing with Hi-Tech Products.

COURSE LEADER

M. K. JHA

NURTURING INDUSTRY TOWARDS EXCELLENCE

CREATING VALUE THROUGH INNOVATION AND TECHNOLOGY TRANSFER ANALYTICS

ABOUT THE PROGRAM

The high rate of technological changes is leading to disruptions at an unprecedented scale, transforming the businesses and operations (shift from industry 1.0 to now industry 4.0) connected via multiple technologies across domains. The "Make in India" focus and the current era of COVID-19 has led Indian companies to innovate and move towards building capabilities in various technological areas for self-dependency.
However, for business competitiveness the right technology acquisition and exploitation strategy, timely, is critical for survival and is extremely risky. Technological uncertainty along with market and regulatory uncertainty makes the technology acquisition and innovation decisions more complex and challenging in the current era. Innovation analytic and technology transfer qualitative tools assisted with analytics-based decision models aid in reducing this state of uncertainty fast, giving early warning signs and address where and when trade-offs must be made between uncertain costs, uncertain benefits, and other risk.

OBJECTIVE OF THE PROGRAMME

- To CREATE VALUE through technology and innovation for organizations
- To PRACTICE the technology and innovation Intelligence gathering process through Analytics
- To IDENTIFY and EVALUATE technology assets.
- To APPLY data driven models for effective technology transfer decisions and economic gains

COVERAGE

- Understanding VUCA and business dilemma – India Vs Global, Challenges and way ahead
- Understanding Innovation concepts and frameworks - lead user
- Modelling your competitive advantage: Monitoring through technology intelligence via technology and innovation analytics.
- Assessing technology, market, and regulatory readiness
- Technology capability assessment and fitness toolkit for tech transfer decisions
- Technology transfer strategy selection- Multi-criterion decision modelling.
- Data driven technology evaluation and licensing mechanism.

FOR WHO MEANT

This course is especially designed for professionals involved in Start-ups, R&D, Innovation projects, Business Development. This course will help not only established organizations but start-ups, and potential entrepreneurs in their start-ups Journey.

COURSE LEADER

RUCHITA GUPTA

CASE WRITING AND TEACHING

ABOUT THE PROGRAM

The case study is an integral part of the learning process. It is being used in academic teaching, training, and industry induction sessions. The case method helps to bring the real-life business dilemma and situations faced by managers to the classroom. It is also used for making the participants learn about the concepts and applications of the various framework besides analytical techniques used in the industry. There is an art and science of case writing and teaching which this programme aims to make the participants learn and facilitate in writing contextual case studies. The programme will cover case development and writing, besides making the participants learn the art of case navigation techniques in a classroom (both offline and online) setting.

OBJECTIVE OF THE PROGRAMME

The core objective of the programme is to help participants develop skillset for case writing and teaching.

COVERAGE

- Introduction to case development and writing
- Understand case method as a pedagogical tool in facilitating student learning
- Identifying the appropriate lead for case writing
- Deciding the learning objective for the case
- Steps in case study development and writing
- Role of research in case writing
- Steps in developing Teaching Notes for the case
- Case navigation and teaching techniques
- Practical hands-on exercise leading to Case study submission for publication

FOR WHO MEANT

The programme is primarily designed for all faculty members in B-Schools, Universities, Autonomous Institutes, Managers/Executives in all functional areas; and also, for the trainers and consultants.

COURSE LEADER

NEERAJ PANDEY

NURTURING INDUSTRY TOWARDS EXCELLENCE

BUSINESS ANALYTICS FOR CONSUMER & EMPLOYEE RELATIONSHIP MANAGEMENT

ABOUT THE PROGRAM

Business environment is more disruptive and challenging today and the success lies in how well an organization can establish relationship with both its customers and employees in an effective manner. To achieve competitive edge, managers need to know the analytical models of consumer-centricity, buyer-seller relationship, employee performance and interpersonal effectiveness. This program will draw on real issues confronting organization with respect to consumer and employee management through analytical mindset and frameworks.

OBJECTIVE OF THE PROGRAMME

- To understand and analyze value based management of consumers.
- To understand and appreciate customer centric analytics.
- To analyze the behavioral pattern of employees and reducing employee renege.
- To examine techniques for employee motivations and engagement.

COVERAGE

- Consumer value identification and relationship management tools
- Statistical consumer segmentation
- Consumer acquisition analytics
- Consumer engagement: pricing analytics & usage
- Analyzing employee motivation and engagement data
- Analyzing employee engagement after accepting offer letter and before joining.

FOR WHO MEANT

Managers / Executives working in any organization.

COURSE LEADER

NEHA SRIVASTAVA / SUMI JHA / POONAM SINGH

INDUSTRIAL SAFETY AND ENVIRONMENTAL MANAGEMENT# COMPLIANCES AND ESG FRAMEWORK

ABOUT THE PROGRAM

The implications of Safety and Environmental Compliance management and ESG Frameworks on corporate performance has high significance today. Sustainability is being used to manage risks and disruptions in the unprecedented times of today. sustainability performance of the firm is a function of ESG and alignment of the corporates strategies towards this is instrumental in meeting the triple bottom line. The Programme will help the participants to understand and meet the various Safety and Environmental compliance requirements required towards license to operate.

OBJECTIVE OF THE PROGRAMME

• To understand the obligatory requirements for the Management under various safety and Environmental laws

• To meet the stakeholder expectations on ESG For Corporates

• To address the sustainability management and legal compliances for corporates for meeting the business goals

COVERAGE

Safety and Environmental Compliance

• Compliances for Safety and Environmental Management

• Mapping obligations and responsibilities of corporates for legal requirements

• Factories Act with focus on chapter 4 on safety, The water and Air Acts, The Environment Protection Act with rules specifically the MSIHC rules, Public Liabilities Insurance Act, CSR Regulations

• Interpretation through Case laws exercises

Sustainability & ESG

• Environmental Standards & Guidelines

• GRI and Integrated Reporting

• Sustainability Performance Metrics

FOR WHO MEANT

Practicing Managers, Consultants, Officers from Government, PSUS and Corporates, Faculty, and officers from Various educational Institutes.

COURSE LEADER

SEEMA UNNIKRISHNAN / HEMA DIWAN

NURTURING INDUSTRY TOWARDS EXCELLENCE

SUSTAINABLE SUPPLY CHAIN MANAGEMENT IN POST COVID-19 ERA

ABOUT THE PROGRAM

Due to increased attention towards ecosystem, Industries need to improve their supply chain operation in a more efficient and sustainable way. Developing an understanding of sustainability in rapidly changing and complex post covid-19 business scenarios is paramount. This program focuses to train supply chain executives to integrate sustainability in the supply chain operation to build more resilient and sustainable supply chains in post covid-19 era. The course is designed to support post covid-19 sustainable supply chain issues.

OBJECTIVE OF THE PROGRAMME

- Implementation issues in sustainable supply chains in post covid-19 era.
- Sustainability risk management in supply chain operations.
- Best practices in sustainable supply chain management in post covid-19 era.

COVERAGE

- Sustainability in the post covid-19 era.
- Setting sustainability agenda for suppliers.
- Best practices in sustainable supply chain management
- Carbon footprint and water footprint assessment in supply chain and engaging supply chains for climate action.
- Life Cycle Assessment (LCA) in supply chain.
- SDGs as tool to build resilience in supply chain.
- Circularity and Circular Economy (CE) in supply chain.

FOR WHO MEANT

The program is targeted to executives endeavoring to navigate and catalyze significant and sustainable change in their supply chains. The program is especially recommended for executives, professionals and leaders who are looking for new ideas; eager to engage with fellow participants in discussion and consultation and committed to implementing an action plan for change in the existing supply chain towards sustainable supply chain.

COURSE LEADER

V. V. GEDAM / SEEMA UNNIKRISNAN / SHIRISH SANGLE

MANAGING CLOUD BASED ERP IMPLEMENTATION

ABOUT THE PROGRAM

This course will provide a comprehensive understanding of Enterprise Resource Planning system (ERP) and best practices in ERP Implementation. We will discuss key business processes including procurement, fulfilment, production, warehouse management and material planning. Processes will be discussed in terms of how they are executed and their impact on financial and managerial accounting. Particular attention will be given to the integrated nature of business processes. This course deals with details for effectively managing successful cloud-based ERP implementation.

OBJECTIVE OF THE PROGRAMME

- Understanding key challenges and opportunities for cloud based pre and post ERP implementation stages
- Understand the cross-functional nature of business processes and their relationship to organizational areas
- Explain the role of ERP Systems in supporting integrated business processes
- Effectively use an ERP system to extract meaningful information about various business processes

COVERAGE

- Roadmap to Implement ERP
- ERP project implementation life cycle from a project management perspective.
- Procure to Pay, Order to Cash, Accounting to Financial reporting.
- Cloud based ERP implementation
- Best practices in ERP implementation.
- Case Studies

FOR WHO MEANT

For Middle level managers.

COURSE LEADER

PURNIMA SANGLE

PROJECT MANAGEMENT

ABOUT THE PROGRAM

Timely completion of projects can give the organisation strategic advantage over the competitors. Successful implementation of project concepts within the framework of time, budget and organisational resources is a challenging task. This programme aims at discussing the necessary skills for the purpose.
The focus of discussions will be a technique for project planning and scheduling using network models, such as time-cost trade offs, resources planning and monitoring and control of project cost and progress.

OBJECTIVE OF THE PROGRAMME

• Provide an understanding of representing project information using network.

• Provide the knowledge of techniques for planning, scheduling, implementing, and monitoring of projects.

• Provide a platform for exchange of ideas and experiences on managerial and other implementations issue for assessing and directing project performance at various stages.

COVERAGE

• Feasibility studies and Project Report

• Techniques for project planning and scheduling, network, models, time-cost trade off concepts, resource allocation and Project monitoring.

• Project monitoring and control.

FOR WHO MEANT

Executives working on various Projects pertaining to diversification, expansion, and greenfield project as well as for the executives from functional areas such as Purchase, Material Finance, Production, Strategic Management and Maintenance.

COURSE LEADER

L GANAPATHY

MANAGERIAL SKILLS FOR TECHNICAL PERSONNEL

ABOUT THE PROGRAM

After Covid, work environment has drastically changed. The programs will focus on managerial skills required in the post Covid work environment.

OBJECTIVE OF THE PROGRAMME

- To develop managerial skill of technical personnel
- To develop leadership and team building skills

COVERAGE

Role of managers in virtual work environment, understanding self and others Motivation, team building and management of change.

FOR WHO MEANT

Executives of public and private sector companies.

COURSE LEADER

D. K. SRIVASTAVA

DATA SCIENCE & MACHINE LEARNING APPLICATIONS IN FINANCE & ECONOMICS

ABOUT THE PROGRAM

The course introduces participants to the application of data science & machine learning, to solve problems of finance in an easy & computational manner. The shift is largely attributed to the mammoth rise in computational power of commercial business machines. Henceforth, the complex mathematical way to tackle problems of finance such as "Time series analysis", "Portfolio optimization", "asset price modeling", "Risk Analytics", "Real-Time Trading & back-testing of trading strategies" has shifted to an easy algorithmic way. Modern-day easy to learn open source general-purpose programming languages "Python" has made possible for the financial practitioners to do away from complex coding environment to analyze large and intense financial data. Thus, the course is intended to lay the foundations for the usage of python as a tool to analyze simple to complex financial data set using basic and advance time series models including machine learning concepts in an easy to learn environment. Apart from the implementation of the existing Financial Models, the course includes many new Machine Learning and Deep Neural network models to excavate the hidden information encapsulated within the large financial data sets. The completion of the course will equip the participants to use data science in innovative ways in an easy applied setting to address complex modern financial economics problems and devise their own strategies.

OBJECTIVE OF THE PROGRAMME

The course is useful for participants aspiring to upgrade the analytical knowledge to tackle the complex financial problem through modern-day data science applications and easy to learn a programming language such as Python. A quant focused curriculum with practical hands-on using "Python" will equip participants to fill the current Fintech industry demand and thus differentiate themselves from the already existing pool of Financial Analyst, which deploys traditional statistical methodologies to address complex financial tasks. Pedagogy imparted from academic and industry experts from UK, USA, Canada, etc, will give a real glimpse of how the Big Financial giants use data science & machine learning applications for risk management, investment decisions, and algorithmic trading in financial markets. How deeper and more effective analysis of the financial sector data can result in improvement in such high-value decisions as capital markets investments, derivatives trading, credit risk management, financial fraud risk management, among others.

COVERAGE

1. Intro to Data Science in Finance – Example Applications
2. Introduction to Python environment & its libraries
3. Introduction to Bloomberg Database Terminal
4. Statistical Background, clustering, data modeling, prediction, data visualization
5. Data Collection, Cleaning, and Preparation
6. Working with Basic Financial Time Series Models
7. Working with Advance Financial Time Series Models
8. Understanding Modern Finance Problems such as Hedging and Pricing; Portfolio Dynamics and Optimization; and High-frequency data
9. Uses and Effectiveness of Machine Learning to solve Modern Finance Problems
10. Introduction to Big Data Ecosystem
11. Big Data Ecosystem – Using Databases with Big Data
12. Fintech Revolution - Era of Artificial Intelligence

FOR WHO MEANT

Industry Professionals, Students, Academicians

COURSE LEADER

VIPUL KUMAR SINGH

NURTURING INDUSTRY TOWARDS EXCELLENCE

SUSTAINABILITY LEADERSHIP DEVELOPMENT IN POST COVID-19 ERA

ABOUT THE PROGRAM

Addressing the world's problems is not just for non-profits. In fact, companies that integrate environmental and social impact into their core strategy outperform companies that only focus on financial gains. Discover why aligning your business model with positive environmental and social outcomes can strengthen your competitive position, reveal new sources of revenue, and boost the bottom line. The program aims to develop new thinking and solutions to enable senior executives to play a transformative role towards a sustainable business.

Business is at the centre of the global sustainability transition. No solution to the climate, ecological and inequality crises is possible without business action. At the same time the role, contribution, and impact of business in society is under growing scrutiny. Current approaches to business excellence and leadership fail to provide companies with the tools and mechanisms to respond. As a result, even ambitious organisations that seek to lead progress are unclear how best to deliver effective solutions across markets and supply chains. There is an urgent need to address this challenge. Over the next decade companies will need to align purpose, strategy, and ambition with long-term value creation for society to motivate their people and thrive commercially as a sustainable business. To achieve this, companies will have to adopt transformational practices and organisational innovations and implement ambitious strategies and programmes for change.

OBJECTIVE OF THE PROGRAMME

- Develop a sustainability value proposition as a source of competitive differentiation
- Establish a corporate purpose that drives shareholder value by addressing social or environmental challenges
- Identify new opportunities for innovation by transforming sustainability challenges into business opportunities
- Develop and implement an effective corporate Sustainability Value strategy
- Identify and drive organizational changes that support your Sustainability Value strategy

COVERAGE

- Identifying and analysing social issues and unmet societal needs
- Entering underserved markets to gain a strategic advantage
- Developing sustainability agenda for your company
- Co-creating 'Sustainability Value' with stakeholders
- Managing the transition from conventional to Sustainable Value business models
- Conceiving and launching new offerings to address sustainability challenges
- Implementing the changes necessary to innovate and support Sustainability Value
- Measuring and reporting the sustainability and business benefits of the Sustainability Value created
- Forging successful cross-sector partnerships to create Shared Value
- Making the Business Case of Sustainability Value.
- Case studies, guest speakers, group, and panel discussions.

FOR WHO MEANT

Senior corporate executives engaged in corporate and sustainability strategy, new business development, and operations management.

COURSE LEADER

V. V. GEDAM / SHIRISH SANGLE

STRATEGIC PRICING

ABOUT THE PROGRAM

Pricing is the only 'P' in marketing mix which adds to the revenue. Understanding of pricing not only aids in better client negotiations but also helps in garnering more profits for the organization. Also, there is need to understand the customer and competitor response towards various pricing cues and price based promotions. It helps in right kind of price framing depending on the target audience. This programme aims at developing a thorough understanding of the strategic pricing issues, apart from discussing the basic pricing techniques used in various industries. It also enables the business executives to better understand and handle pricing war situation in their respective industry.

OBJECTIVE OF THE PROGRAMME

- Familiarize with the principles of pricing
- Develop an understanding of pricing techniques
- Discuss strategic pricing issues using case studies
- Managing pricing wars
- Legal compliance in pricing
- Latest best pricing practices in the industry

COVERAGE

- Principles of Pricing
- Steps in pricing a new product and service
- Conjoint analysis for pricing
- Price framing and Customer response
- Competitive Pricing Strategies
- Managing Pricing Wars
- Legal issues in pricing
- Modern trends in pricing

FOR WHO MEANT

This program is aimed at middle/senior level managers of private and public sector firms involved with pricing related activities at various functional levels including those working in marketing, finance, operations, IT, or general management area.

COURSE LEADER

NEERAJ PANDEY

APPLICATION OF SPC AND DOE IN MANUFACTURING AND SERVICE SECTORS

ABOUT THE PROGRAM

Statistical Process Control (SPC) is a very widely used quality control tool. Although more suitable for typical mass production type of manufacturing setup, the tool can also be effectively used for service industries. The tool, however, should be used with a thorough knowledge of the underlying concepts. This will enable supervisors and managers to use the tool effectively. Another powerful tool for process improvement in the Design of Experiments (DoE). This scientific method will enable improve the quality of the product and meeting the customer requirement in the long run. A good understanding of this tool will enable managers to effectively and systematically drive quality improvement efforts.

OBJECTIVE OF THE PROGRAMME

- Discuss the concepts of process and product quality.
- Discuss the principles of statistical process control.
- Analyze the use of SPC and DoE for various manufacturing and service situations.
- Apply the tools discussed for selected practical examples.

COVERAGE

- Introduction to statistics.
- Basic quality control tools
- Control Charts
- Process capability analysis
- Analysis of Variance (ANOVA)
- Design and Analysis of Experiments

FOR WHO MEANT

Junior and middle level executives of manufacturing and service organizations

COURSE LEADER

RAVINDRA GOKHALE

SELF-AWARENESS AND EFFECTIVE COMMUNICATION IN PROJECTS

ABOUT THE PROGRAM

Self-awareness and effective communication in projects play an important role in project success. Various issues such as the difference of opinions, conflict, competition, insensitivity within project teams could create organisational toxicity. Self-awareness in such an organisational environment helps one in managing self and managing project. Effective communication synergises team dynamics and morale to overcome challenges. This programme engages participants in enhancing their communication, keeping self-exploration at the base.

OBJECTIVE OF THE PROGRAMME

After attending this programme, one should be able to understand the following with reference to their working in project teams:

- Human and social issues.
- be aware of possible ethical dilemmas.
- make reflections and design strategies to deal with project team crisis.
- work on self-intrapersonal and interpersonal skills.
- communicate effectively and build team efficacy.
- learn the strategies to manage conflicts in the team.

COVERAGE

We work with cross sectional team covering various levels of management and diverse range of employees to create various organizational realities. This is real-life simulation based programme and shall cover:

- Real-Life simulation
- Fundamentals of Transactional Analysis
- Experiential learning on team and project dynamics
- Ethical Issues in managing teams
- Intrapersonal and Interpersonal skills
- Negotiation Strategy
- FIRO-B®
- Conflict Management

FOR WHO MEANT

Employees working in project teams (from any level of management).

COURSE LEADER

NIKHIL K MEHTA

MANAGERIAL DECISION MAKING FOR TECHNICAL PERSONNEL

ABOUT THE PROGRAM

Although every person takes several decisions of varying importance every day, very few people are aware of the process and the implications. This training programme will help the participants in developing the skills that are required for arriving at good decisions.
The motivation for this programme comes from the realisation that every organization has many people who are technically very competent in their function but lack the skills essential for decision making. The ability to make consistently good decisions requires, among other things, the ability to analyse consequences, and the ability to cope with the risk and stress of decision in order to achieve the goals.
This training programme will help the participants, coming from different functional departments, to arrive at sound decisions relating to their work environment. They will learn to use these skills & techniques at the behavioural level as well as organisation level.

OBJECTIVE OF THE PROGRAMME

This programme will emphasize on a problem-solving approach for decision making both at individual and organisational level. Through a wide range of examples from the workplace, the participants will be able to relate the classroom discussions to their daily work and will develop an aptitude for solving them.

COVERAGE

- Decision Making Models
- Decision making Tools and Techniques
- Decision making using computers

FOR WHO MEANT

This Programme is designed for managers from diverse backgrounds for fruitful interaction and sharing of experiences. Participants from different areas such as HRD, Planning, Marketing, Manufacturing, Logistics, Finance, and others will benefit from this programme in their transaction to decision making roles.

COURSE LEADER

L GANAPATHY

BUSINESS TO BUSINESS MARKETING

ABOUT THE PROGRAM

B2B Marketing can no longer be confined to mechanics of selling a product and delivering it to the Business House. It also encompasses establishment of new products and new ventures. The Program is of three days duration and will benefit all employees related to Marketing.

OBJECTIVE OF THE PROGRAMME

- To provide B2B marketing Scenario in our country.
- To provide various Marketing Strategies and Techniques used in B2B Marketing.
- To provide an understanding of the utilization of marketing Research, Marketing intelligence etc.

COVERAGE

- B2B Marketing System – Overview-Buying Processes and buying situation.
- Identification of target Market-Segmentation-Development of B2B Marketing plan.
- Developing product policy, Price determination.
- Organizing B2B Marketing Channel Functions

FOR WHO MEANT

B2B Marketing Strategy course is designed for those who are related to marketing activities and wants to improve their skills

COURSE LEADER

M. K. JHA

LEADERSHIP AND TEAM BUILDING

ABOUT THE PROGRAM

This program will focus on development of leadership and team building skills.

OBJECTIVE OF THE PROGRAMME

- To understand different leadership styles
- To develop skills for leading
- To improve team building skills

COVERAGE

- Role of managers in virtual work environment
- Leadership Theories
- Leadership Effectiveness
- Team building and motivation

FOR WHO MEANT

Executive of public\private sector organizations and officers of Central Govt.\State Govt.

COURSE LEADER

D. K. SRIVASTAVA

THINKING STRATEGICALLY; BUSINESS STRATEGIES FOR COMPETITIVE ADVANTAGE

ABOUT THE PROGRAM

Modern business world was confronting a Volatile, Uncertain, Complex and (VUCA) reality. Given this challenging context it becomes important that managers first quickly decipher the change in reality and strategize to steer ahead into the future by reclaiming the lost grounds. Thus, managers had to pause, introspect, reflect, review and design organizational strategic initiatives. At an individual level, the executives have to also eke out personal level action-oriented plans to secure an edge in their respective organization. This would ensure that business strategies are directed towards business initiation, continuance and scaling up of business. Thus, managers would benefit both at individual as well as organizational level from this course.

OBJECTIVE OF THE PROGRAMME

What as a manager you will gain?

- A balanced understanding of the various classical as well as contemporary concepts of strategic management planning like Blue Ocean Strategy
- Learn frameworks for mapping your organizational resources, capabilities, competencies, and core competencies.
- The means and method of analyzing Macro –level environmental and Industry level analysis for comprehending the business landscape
- Understand direct competitive rivalry as well as strategic group based competitive rivalry
- Get to know the knowhow of successful strategy implementation on the process and methods of strategy execution through effective implementation and its control and monitoring through Balanced Scorecard Mechanisms
- Appreciate and comprehend the real-world examples on strategic initiatives for securing Sustainable Competitive Advantage for your organization.

COVERAGE

- Make executives to revisit both the classical concepts in strategic management like Resource Based View (RBV) and Dynamic Capabilities View (DCV) as well as contemporary strategic management concepts like Blue Ocean Strategy (BOS) and Balanced Score Card (BSC) to understand business context.
- Help managers undertake business PESTLEE environment scanning and scoping analysis in the new paradigm of doing business in the VUCA plus COVID-19 world
- Help executive comprehend the tectonic shifts occurring in business world because of the advent of emerging technologies like- Robotics, augmented – Virtual – Mixed (AR-VR-MR) Reality, Additive manufacturing technology, Block chain technology, Cloud based technologies, Machine Learning plus Artificial Intelligence (ML+AI), Big Data Analytics (BDA) and such other. Insights regarding strategic management of emerging technologies would be provided.
- Make executives learn how to evaluate industry landscape with a holistic perspective given the new realities.
- Help managers learn the mechanisms of analyzing organizational resources and capabilities to carry out business activities in the VUCA plus COVID-19 world.
- Help executives comprehend how to analyze the business competition in a comprehensive manner given the VUCA plus COVID-19 realities.
- Aid managers firstly in designing dynamic strategic plans and then managing its implementation in real-time basis for achieving competitive success and business growth.
- Help managers towards better strategic decision making for balancing both short term and long-term organizational goals.
- Help management professionals comprehend the kind of leadership skills required based upon real world examples how managers were executing strategies in their organizations in this challenging era.

FOR WHO MEANT

This program is meant for management professionals working in large, medium, or small enterprises of both public and private sector involved in strategic management planning, strategy implementation and related business functional areas. Executives from both services as well as manufacturing sector would find this program insightful.

UNDERSTANDING ECONOMIC INDICATORS FOR MANAGERIAL OR BUSINESS DECISION MAKING

ABOUT THE PROGRAM

Analyzing, and designing appropriate strategies to enhance the performance of a company is not possible without a proper understanding of the economic environment in which the company operates. It is, therefore, necessary for the managers of a company to acquire proper knowledge of the main coordinators of the economic system. This course is therefore especially designed for executives to make them understand the key economic indicators about the markets; the institutions that support and regulates the market and also touches upon the key transformation through which the market is currently undergoing

OBJECTIVE OF THE PROGRAMME

1.) To understand the main economic indicators about country level market dynamics and the Institution regulating the market

2.) To understand how institution and market influence the behavior of the economic agents and the relationship between them

3.) To understand the importance and role of key behavioral economics concepts and emerging market conditions in decision-making

COVERAGE

1.) The first part covers the Key Country Level Macro Economics Variables; the Institutions supporting and or regulating them.

2.) The Second Part introduces the Key Economic Indicators at Company and Market level in the face of Risk and Uncertainty and the importance of the Networked Market.

3.) The third and the last part synthesizes the Macro and Micro Level Economic Indicators by touching upon the contemporary issues of Geopolitics, Demographic Changes &the importance of Behavioral Economics in designing strategies.

FOR WHO MEANT

Open to all level of managers.

COURSE LEADER

MAINAK MAZUMDAR

BUSINESS STRATEGIES FOR EMERGING MARKETS

ABOUT THE PROGRAM

The marketplaces in emerging markets are witnessing an intense competition among the firms to win over the customers, who are more knowledgeable and demanding than ever. The modern-day business is thus becoming very competitive and complex, and it is important for the managers to have a firm grounding and good understanding of the markets they belong to. The economic environment of business along with government policies regulating production, trade and competition can have profound impact on the company level performance. Therefore, to survive and to grow in such a competitive scenario, the company managers from emerging market economies must acquire special skills to formulate strategies for sustained profitability in volatile and dynamically changing markets.

OBJECTIVE OF THE PROGRAMME

To make participants familiar with the competitive conditions prevailing in emerging markets and formulate suitable business strategies to succeed in such markets.

COVERAGE

Business environment of emerging markets, strategic behaviour of firms, industry analysis, costing strategies and cost leadership, pricing strategies and market segmentation, strategic decision making in VUCA world, diversification and differentiation strategies, R&D and innovation strategies and strategic alliances.

FOR WHO MEANT

Managers and decision makers from all sectors in private and public undertakings.

COURSE LEADER

UTPAL CHATTOPADHYAY / BINILKUMAR A. S.

PROJECT PROCUREMENT AND CONTRACT MANAGEMENT

ABOUT THE PROGRAM

India has huge investment plans in infrastructure projects and other sectors and large number of these projects experience time and cost overruns. These projects are complex, challenging and defining adequately the scope is crucial for project success. Nevertheless, most organizations do not do the complete scope of work themselves with their own resources, instead companies' source major portions of their project scope from other companies for better performance. The procurement of project scope through contracting or subcontracting, will be progressively taking a larger share of business and thus this management process has to be done well, if organizations are to be successful in completing projects.

In many projects, the items which are bought from other companies are typically high-risk portions of the project. More often it is seen that when the management assesses what went wrong with their poor project performance, they often will find that it was the work which was contracted or subcontracted. Thus, for success of project, it is important that project procurement management, the processes work well and managers buy/procure things/scope for the projects within their well-established purchasing policies, appoint technical specialists to manage a critical component and function in an integrated project team environment.

OBJECTIVE OF THE PROGRAMME

Develop an understanding of the principles of Project Procurement & Contract Management. Understand the procurement processes, planning, contract strategy, allocating risks and procurement/contract arrangements along with techniques for successfully delivering projects.

COVERAGE

- Procurement and Contract Management in Project Environment
- Procurement Categories, Planning for the Procurement of Project Scope
- Procurement and Risk Management
- Contract Types, Management of Contracts
- Closing out Project Procurement

FOR WHO MEANT

Project procurement and contract management is for Project executives and managers, planners and procurement professionals involved in the projects.

COURSE LEADER

V. B. KHANAPURI / KANCHAN JOSHI

BUSINESS COMPETITIVENESS THROUGH OPERATIONAL EXCELLENCE

ABOUT THE PROGRAM

Business systems utilize various types of resources such as man, machine, materials, land, capital, energy, knowledge, etc. An efficient business system ensures the smooth coordination of resources for achieving the desired objectives. Business competitiveness is achieved through operational excellence practices in the era of industry 4.0. Agile manufacturing is a term applied to an organization that has created the processes, tools, and training to enable it to respond quickly to customer needs and market changes while still controlling costs and quality. It is mostly related to lean manufacturing.
Production Planning & Control determines the effectiveness of a business. The highest efficiency in production is obtained by manufacturing the required quantity of product, of the required quality, at the required time, by the appropriate and cheapest method. To attain this target, management employs Agile manufacturing, the technology that enables an organization to respond quickly to customer needs.
However, the role of Operational Excellence tools and techniques in business competitiveness is still not well understood by the practitioners.

OBJECTIVE OF THE PROGRAMME

This program aims to understand the tools and techniques of Operational Excellence to business professionals so as to help them in making more effective operational as well as strategic decisions for their supply chains.

COVERAGE

- Fundamentals of Industrial Engineering
- Fundamentals of Business Competitiveness
- Concept of Lean & Agile Manufacturing
- Importance of Lean & Agile Manufacturing
- 5S Concept
- Poka-Yoke
- Value Stream Mapping
- SMED
- Total Productive Maintenance
- Impact of Operational Excellence practices on Business Competitiveness through case studies

FOR WHO MEANT

Junior level, Mid-level business executives from the manufacturing/service industry.

COURSE LEADER

B. E. NARKHEDE / JINIL D. PERSIS

DECISION MAKING UNDER UNCERTAINTY

ABOUT THE PROGRAM

This short course aims to discuss a broader aspect of Decision Making under Uncertainty, participants learn the basics concepts as well as tools and practices of decision making under uncertainty and perfect as well as imperfect information. The participants of the course learn how to structure and improve decision processes to make better decisions. Despite introducing basic concepts to deal with decision problems under uncertainty, participants also learn how to implement statistical as well as fuzzy decision making techniques to solve the problems.

OBJECTIVE OF THE PROGRAMME

The aim of this short course is to provide participants with the most important concepts, tools, and techniques of making decisions under uncertainty and (im)perfect information. The content helps participants to structure complex decision problems under uncertainty and provide recommendation to the participants to apply in their context.

COVERAGE

• Concept of Uncertainty, Type of Uncertainty, Decision under Risk, and (im) Perfect Uncertainty, Analysis of the value of perfect as well as imperfect information

• Statistical Decision Theory: Structuring decision problems under uncertainty using influence diagrams, Analysis, and implementation of decision problems under uncertainty using Bayesian Theory and decision trees

• Analysis of complex decision problems using Monte Carlo simulation

• Decision Making in Fuzzy Environment

• Application of DM in Operations, Finance under Uncertainty.

FOR WHO MEANT

The programme is aimed at Executives, Middle-level Managers, Teachers, and all other Professionals - in Public and Private Sector

COURSE LEADER

RAKESH VERMA / AJAYA KUMAR PANDA

CONSUMER INSIGHTS FOR BUSINESS GROWTH

ABOUT THE PROGRAM

The success of organizations lies in genuine insights into the minds, hearts, and behaviours of consumers. Which product is going to be a hit? Which one is going to "flop"? Which aging brand can be revived? Which one is doomed to die? Which product positioning is going to work? What price will consumers be willing to pay? What is the next big market trend? How does a business become more relevant to consumers? These are just a few of the many questions that businesses constantly face and that require genuine consumer insights. While it is tempting to rely on intuition to answer these questions—aren't we all consumers, after all? —history has taught us that intuitions about consumers are often mistaken.

OBJECTIVE OF THE PROGRAMME

The purpose of this course is therefore to help executives become disciplined and astute discoverers of strategic consumer insights. The course provides a rigorous coverage of a broad range of theories, frameworks, concepts, and tools to truly get into the hearts and minds of consumers and uncover insights that are relevant for business and policy.

COVERAGE

1) Introduction to Consumer Insight

2) Importance of Consumer Insight

3) Traditional methods of consumer insight

4) Contemporary sources of consumer insights

5) Consumer Analytics for Consumer Insights

FOR WHO MEANT

Middle Management and Senior Management Executives

COURSE LEADER

SANJEEV VERMA

NURTURING INDUSTRY TOWARDS EXCELLENCE

STATISTICAL PROCESS CONTROL AND DESIGN OF EXPERIMENTS

ABOUT THE PROGRAM

This program is specially tailored for the engineers of SMEs to deliver quality performance to their downstream organizations.

OBJECTIVE OF THE PROGRAMME

- Provide pinpointed tools for Quality Control and Quality Improvement.
- Focus of the specific problems faced by SMEs to deliver Quality.

COVERAGE

7 QC Tools, Statistical Process Control, Process Capability Analysis, Gage R&R Study, Design of Experiments (Introduction)

FOR WHO MEANT

Engineers working on shop floor and quality executives. Especially focused for SME organizations.

COURSE LEADER

RAKESH RAUT / RAVINDRA GOKHALE