Executive Management Programme on
STRATEGIC INNOVATION,
DIGITAL TRANSFORMATION
& BUSINESS ANALYTICS

Under the continuing Education Programme of IIT Delhi
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Indian Institute of Technology Delhi is one of the Twenty-Three IITs created to be Centres of Excellence for Training, Research and Development in Science, Engineering and Technology in India. Established as College of Engineering in 1961, the Institute was later declared as an Institution of National Importance under the “Institutes of Technology (Amendment) Act, 1963” and was renamed as “Indian Institute of Technology Delhi”. It was then accorded the status of a Deemed University with powers to decide its own academic policy, to conduct its own examinations, and to award its own degrees.

Since its inception, over 48000 have graduated from IIT Delhi in various disciplines including Engineering, Physical Sciences, Management and Humanities & Social Sciences. Of these, nearly 5070 received PhD Degrees. The number of students who graduated with B.Tech Degrees is over 15738. The rest obtained Master’s Degrees in Engineering, Sciences and Business Administration. These alumni today work as Scientists, Technologists, Business Managers and Entrepreneurs. There are several alumni who have moved away from their original disciplines and have taken to Administrative Services, Active Politics or are with NGOs. In doing so, they have contributed significantly to building of this nation and to industrialisation around the world. For more details, please visit: www.iitd.ac.in
Executive education is a vital need for the companies to build a culture that promotes newer technologies, solutions and build a workforce that stays abreast of the rapidly transforming needs to the technological, business and regulatory landscape.

Committed to the cause of making quality education accessible to all, IITD has launched Online Certificate Programmes under eVIDYA@IITD (ई-विद्या@IITD): enabling Virtual & Interactive-learning for Driving Youth Advancement@IITD for Indian as well as International participants. These outreach programmes offered by the Indian Institute of Technology Delhi are designed to cater to the training and development needs of various Organisations, Industries, Society and Individual Participants at National and International level with a vision to empower thousands of young learners by imparting high quality Online Certificate Programmes in cutting edge areas for their career advancement in different domains of Engineering, Technology, Science, Humanities and Management.

For more details, please visit: http://cepqip.iitd.ac.in
WHO IS THIS PROGRAMME FOR?

Working professionals who wish to work in or are currently working in leadership or strategic roles

**ENTREPRENEURS**
who wish to establish a culture of customer-centric and data-driven innovation in their organizations

**PRODUCT MANAGERS**
who wish to leverage information assets of organisations for customer-centric product features

**MARKETING / BRAND MANAGERS**
who wish to improve ROI on their marketing campaigns through strategic and data-driven decisions

**GENERAL MANAGERS/ TEAM LEADS**
preparing for strategic or leadership roles in growth analytics or business management

**BUSINESS OR DATA ANALYSTS**
who wish to understand applications of analytics to marketing specific problems

**CONSULTANTS**
working on digital transformation problems for traditional industries and who wish to take customer centric and data driven approach for innovation

**C-SUITE EXECUTIVES, VPS AND DIRECTORS**
who need to leverage innovative business models to expand business and obtain sustained competitive advantage in digital first companies and for leaders in traditional industries who wish to build competencies in digital
Dr. Sanjay Dhir is an Associate Professor and Area Chair of Strategic Management in the Department of Management Studies, Indian Institute of Technology Delhi, New Delhi, India. He is a Fellow (Ph.D.) from the Indian Institute of Management (IIM) Lucknow.

He received the ‘Teaching Excellence Award’ at IIT Delhi in 2019-20 for his course on Strategic Management at DMS, IIT Delhi. He has also been awarded the “InsideIIM Professor of the Year Award” for two years in a row in 2020 & 2021.

He worked in the Research and Development Department of Mahindra and Mahindra (Automotive) Limited Corporation before joining academia. He has published several research papers in leading international journals (60+ Scopus publications) such as International Business Review, Journal of Business Research, Technological Forecasting & Social Change, and Thunderbird International Business Review. His case studies have been published by Richard Ivey School of Business, University of Western Ontario (Canada) in collaboration with Harvard Business School. He has also presented and published his scholarship in globally renowned conference proceedings of several prestigious academic conferences such as Academy of Management (AoM), Academy of International Business (AIB), Strategic Management Society (SMS), Southern Management Association (SMA) and British Academy of Management (BAM).

He has been involved in several national and international consulting/research projects which include - Bill and Melinda Gates Foundation (COVID 19 Vaccination Roll Out), Ministry of Skills Development (SANKALP), Ministry of Human Resource Development (SPARC project), Ministry of Minority Affairs (Haj Policy, Impact Study of Scholarship Schemes and Waqf Schemes), ICSSR (Visiting Scholar for UNIL, Switzerland and NRCT, Thailand), Bihar Prashashnik Sudhaar Mission (BPSM, Bihar) and Directorate General of Supplies & Disposals (DGS&D, Gol, New Delhi). He was also a core committee member of the Government of India’s project - ‘Unnat Bharat Abhiyaan’.
Arpan K. Kar is an Associate Professor in Information Systems in the Indian Institute of Technology Delhi, India. Within IIT Delhi, he holds a joint appointment in the Department of Management Studies and School of Artificial Intelligence. He chairs Corporate Relations and is a member of Institute of Eminence committee, High Performance Computing and Board of Academic Programmes at IIT Delhi. His research interests are in the domain of data science, machine learning, digital transformation, internet ecosystems, social media and ICT-based public policy. He has authored over 150 peer reviewed articles and edited 7 research books with over 4000 citations. He is the Editor in Chief of International Journal of Information Management Data Insights, published by Elsevier. He is also Associate / Coordinating Editor in Journal of Public Affairs, International Journal of Electronic Government Research, Information Systems Frontiers and Global Journal of Flexible Systems Management. Prior to joining IIT Delhi, he has worked for IIM Rohtak, IBM Research and Cognizant. He has received over 20 sponsored projects from organizations like Department of Science and Technology (GoI), BASF (Germany), Fidelity International (UK), Facebook (CPF), PWC (UK), EY, Digital India (GoI), Ministry of Tribal Affairs (GoI), Ministry of Textiles (GoI), European Union, Ministry of Urban Development (GoI), CIPPEC (Argentina), World Data Science Forum (BitGrit, Japan), etc. He has received numerous awards from reputed organizations like International Federation for Information Processing, Elsevier, Tata Consultancy Services, Project Management Institute, Ivey Cases / Harvard Business Publishing, Association of Indian Management Schools, IIT Delhi, Basant Kumar Birla (BimTech), NITs, University of Lubeck, IIM Rohtak and Clarivate Analytics (Web of Science)
Prof. P. Vigneswara Ilavarasan (PhD - IIT Kanpur) is a Professor of Information Systems at the Dept. of Management Studies, Indian Institute of Technology Delhi. He researches and teaches about interaction of information and communication technologies (ICTs), society & business.

Dr. Ilavarasan has been a Visiting Research Fellow at United Nations University - School of Computing and Society (Macau) and School of Management, Curtin University (Perth). He is a recipient of the Outstanding Young Faculty Fellowship Award at IIT Delhi and Prof. M.N. Srinivas Memorial Prize of the Indian Sociological Society. He is also a Senior Research Fellow at LIRNEasia, a leading regional ICT policy and regulation think tank. He has received large research grants from Dept of Science & Technology (Govt of India), ICSSR (India), IDRC (Canada), Oxford Analytica (UK), IPTS (European Commission), CIPPEC (Argentina) and IdeaCorp (Philippines). His research has appeared in all the leading international journals and conferences of repute.
With the advent of the internet driven era, organizations are transforming their operations to harness the power of the web driven ecosystem and grow sustainably resulting in digitisation of both processes and products. In this context, there is need to leverage upon innovative business models to reach out to new customers and segments. In view of this, an exploration of how various digital capabilities impact industries, customers, stakeholders and the future of companies becomes essential. In addition to this, strategic innovation approaches are needed to optimise the innovation portfolio, to help organisations achieve sustained competitive advantage and transformational growth. These emerging approaches are heavily dependent on leveraging the information assets of the organisations which is possible through the business analytics.
COACHING
- Weekly real-time doubt clearing sessions with IITD faculties
- Live discussion forum for peer to peer doubt resolution monitored by technical experts

FORMAT
- Live weekend classes: weekly live interactive lectures from IITD faculty on concept building, hands on exercises and doubt resolution

MENTORSHIP
- Live interactive sessions with leading faculty covering curriculum + advanced topics

PRACTICAL LEARNING
- Case studies based approach to ensure understanding of concepts through tangible problem statements
- Hands on exercises and assessments at regular intervals to test concept understanding and retention

STUDENT SUPPORT
- Your programme buddy will help personalise your learning experience by periodically engaging with you to ensure you are on track with upcoming deadlines, offer guidance, resolve non-academic queries and lend a helping hand wherever required. However, in case you need to approach us, you can contact our Student Support Team is available 7 days a week from 09 AM to 09 PM IST

Programme offered by Continuing Education Programme (CEP), IIT Delhi
PROGRAMME CURRICULUM

STRATEGIC INNOVATIONS

- **Understanding Innovation**
  To understand the strategic innovations to undertake leadership roles

- **Innovation and Competition**
  Remember and evaluate the key learnings of strategic innovations

- **Delivering Value through Innovation**
  To develop strategic innovations to add on value

- **The Art and Science of innovation**
  To analyse the real world problems inspired by design thinking principles

- **Creativity and Innovation**
  To develop new ideas using the concept of creativity and innovation to add value

- **Open Source Innovation as strategy**
  To create open source innovation strategy to add value to the current business operations/product

- **Disruptive and Sustaining innovation**
  To analyse the strategic innovations model and drawing strategies to sustain the disrupting innovations

- **Corporate Innovation**
  To analyse the core competencies for strategy innovation

- **The Innovation Process**
  To understand and apply the process of innovation

- **Creating Value through Innovation**
  To evaluate the value of customers as innovators

- **Digital Innovation**
  To evaluate digital transformation with real time examples

- **Innovation Potential of Artificial Intelligence**
  To understand the impact of AI based strategies and suggest innovative changes

- **Blockchain and its Applications in Innovation**
  To understand the impact of blockchain strategies and suggest innovative changes

Topics are indicative only, and the suggested time and sequence may be modified to fit the total programme hours.

Programme offered by Continuing Education Programme (CEP), IIT Delhi
- Frugal Innovation and Jugaad  
  To apply the learnings from strategic innovations and Jugaad

**DIGITAL TRANSFORMATION**

- Digital Transformation: Need, Typology & Approaches  
  To understand the footprint of digital transformation and its approaches

- Platforms: Philosophy & Business models  
  To understand business models that create value to interdependent groups

- Infomediaries Models and Management Challenges  
  To understand the informediaries models and correlating them to decode management challenges

- Consumers’ Digital Transformation  
  To evaluate impact of digital transformation on consumerism

- Automation & Future of Work  
  Learn about various web analytics tools and approaches

- Social Media and Business Practices  
  To evaluate the correlation between social media strategies and enhanced business marketing practices

- Digital Influencer Management  
  To understand the influencer marketing and management of digital influencer campaigns

- Economics of Digital Transformation  
  To analyse the socio-economic changes after digital transformation

- Mobile Apps – Architecture, Commerce and Business Models  
  To evaluate business models to drive value from e-commerce business models

- Chatbots – Types, Algorithms and Governance  
  To understand the AI technology of chatbots and framework for governing responsible use of it

- Digital Payments and Multi-party business models  
  To analyse digital payment apps and understanding the multi-party business models

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Programme offered by Continuing Education Programme (CEP), IIT Delhi*
- **Information Security and Risk Management**
  To apply information security and risk management tools

- **Internet of Things and Enterprise Applications**
  To design strategy to enhance business productivity and efficiency using IoT and enterprise application

- **Blockchain and Enterprise Applications**
  To understand blockchain technology and enterprise application to evaluate productivity and efficiency of a business

### BUSINESS ANALYTICS

- **Data for Decisions, Types & Collection methods**
  To understand data types and collection methods and aligning them with data analysis

- **Text analytics**
  To understand the concept of text analysis with real time examples

- **Tools - Weft / Nvivo**
  To recognise the usage of analytical tools like Weft and Nvivo

- **Tools - SPSS / PSPP**
  To understand the usage of tools like SPSS/PSPP with real-time examples/case studies

- **Descriptive Statistics, T Test, ANOVA**
  To examine the concept of descriptive statistics and drawing comparison between T Test and ANOVA

- **MANOVA & MANCOVA, Linear Regression**
  To recall linear regression and understanding the concept of MANOVA and MANCOVA

- **Logistic Regression, Factor Analysis and Cluster Analysis**
  To testify the usage of logistic regression, factor analysis and cluster analysis

- **Predictive Analytics - Classification, Association, Sequence & Outlier algorithms**
  To understand the fundamentals of predictive analytics and its application

- **Prescriptive Analytics / AHP / Mathematical Programming**
  To test the application of predictive analytical tools

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Programme offered by Continuing Education Programme (CEP), IIT Delhi
• **Machine Learning using Artificial Neural Networks, Fuzzy Set Theory**
  To understand ML usage based on the application of neural networks and fuzzy set theory

• **Machine Learning with ANN (Hands on)**
  To apply ML with ANN for supervised learning problems

• **Artificial Intelligence Applications – Managing Chatbots**
  To create AI applications managed by chatbots

• **Tools: Machine Learning using Python UI Platform (Hands on)**
  To understand how to use Python UI platform of ML

• **Big Data Analytics in Social Media and Web 3.0**
  To analyse the concepts of big data analytics in the contemporary times
Evaluation

- There would be 2 individual examinations which would be evaluated by the course coordinators for each vertical.
- There would be a capstone project for each vertical which students would need to deliver in groups.

Tools taught

- Orange
- WordPress
- Google Analytics
- Weft Technologies
- NVIVO
- R Studio
- SPSS
- PSPP
Cases in Strategic Management
CASE STUDIES

Growing the Online Portal of Business Fundas

To gain insights into user-specific trends through the use of data analytics.
www.iveycases.com/ProductView.aspx?id=68908

Tech Talk: Creating a Social Media Strategy

To learn about social media strategy
www.iveycases.com/ProductView.aspx?id=86533

Finding Customers for a Digital Platform Startup: Case of Easy Travel

Secondary data analysis strategy
www.etcases.com/finding-customers-for-a-digital-platform-startup.html
LEARNING OUTCOMES

- Gain the insights of strategic management and innovation and work towards achieving competitive advantage
- Learn proven frameworks and tools for driving digital strategy within your organisation
- Understand the different models of business analytics (e.g. predictive, web, social media, big data, etc).

COMPLETION CERTIFICATE

If you attend 50% of the classes and score more than 50% in all exams

Programme offered by Continuing Education Programme (CEP), IIT Delhi
PARTICIPATION CERTIFICATE

If you attend 50% of the classes and score less than 50% in all exams
**PROGRAMME DETAILS**

**DURATION:** 12 MONTHS

**PROGRAMME START DATE:**
Please refer to the [website](https://www.upgrad.com/management-emp-sidmba-iitd/) for programme start dates.

**PROGRAMME FEES:** ₹175,000 + 18% GST

- **Booking Amount (For EMI Applications):** ₹15,000
- **Instalment 1:** ₹1,03,250
- **Instalment 2:** ₹1,03,250

**ELIGIBILITY:**
- Anyone who has completed graduation in any discipline.
- Anyone enrolled in a 4 year graduation programme could be considered with a minimum score over 60 percent or equivalent CGPA (6/10) till the 3rd year.

**SELECTION PROCESS:**

01 **Complete your application:**
Submit your application form on the website. The admission committee will review your application and shortlisted candidates will be moved to the next round of selection.

02 **Attend the Interview:**
Candidates shortlisted in the first round will be interviewed by Program co-ordinators.

03 **Final Shortlisting and Offer Letter:**
Post the interviews final list of shortlisted candidates will be sent and the offer letter will be confirmed.

04 **Enrollment and Payment:**
Payment details will be shared in your offer letters. Post payment your seat in the program will be confirmed.
IMPORTANT INFORMATION

Last date to apply: 17th December, 2021

Shortlisted candidates will be informed by: 20th December, 2021

Last date to submit the first installment: 22nd December, 2021

Last date to submit booking amount: 22nd December, 2021
   (For EMI Applicants)

Last date to submit the second installment: 30th December, 2021

Program start date: 8th January, 2022

All fees should be submitted in the IIT Delhi CEP account only,
and the receipt will be issued by IIT Delhi CEP account for your records.

Online Certificate Programmes are offered by the Indian Institute of Technology Delhi
under the aegis of Continuing Education Programme (CEP) so that the Institute can
realise its vision of serving as a valuable resource for industry and society, and fulfil its
mission to develop human potential to its fullest extent so that intellectually capable
and imaginatively gifted leaders can emerge in a range of professions.

FOR FURTHER DETAILS, CONTACT:

iitd@upgrad.com  |  1800210202

FOR ANY FEEDBACK, WRITE TO:

hodqipcep@admin.iitd.ac.in  |  Head CEP, IIT Delhi