



भारतीय प्रौद्योगिकी संस्थान दिल्ली
Indian Institute of Technology Delhi



DATA ANALYTICS FOR BUSINESS APPLICATIONS

Starts June 30, 2024 | 7 Months | Live Online Sessions

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

PROGRAMME OVERVIEW

The business world is undergoing a seismic shift. Data has become the driver of the modern enterprise, powering everything from breakthrough insight and informed decisions to exponential growth and future planning. In fact, many top-of-the-shelf brands actively use data to create a difference.

Don't miss the opportunity to revolutionise your career and become a leader in the data-driven business landscape. **IIT Delhi's Data Analytics for Business Applications Programme** is your passport to success. Through hands-on exploration of real-world datasets, interactive live-online sessions, and guidance from top IIT Delhi faculty, you'll master core statistical analysis, advanced techniques in business analytics, and their applications across various business verticals and industries. The program will empower you to succeed in data-driven decision-making, unravel complex business challenges, and unlock strategic innovation powered by analytics.



Business Analytics



Data-driven Decision Making



Hands-on Learning



Contemporary Analytics Methodologies



TRENDS IN DATA ANALYTICS

As a forward-thinking professional, how can you harness this data revolution to propel your career and your organisation to new heights? How can you move past guesswork and intuition and make sound, strategic choices, minimise your risk, optimise your performance, and become a trusted advisor and leader who steers the company towards a data-driven future? The answer lies in bridging the gap between business and analytics. It lies in the art and science of extracting game-changing insights from data.

The world is generating oceans of data. By 2025, global data creation is projected to grow to more than 180 zettabytes.

Source: [Statista](#)

The Indian analytics market size is anticipated to reach US\$182 billion by 2028.

Source: [Analytics Insight](#)

By 2025, an estimated 137,630 data science jobs will open up in India alone, a 45% increase from 2020.

Source: [India Times](#)

By mastering business analytics, you'll become



WHO IS THIS PROGRAMME FOR?

Early Professionals

Ambitious early-career professionals possessing a natural inclination towards analysis, eager to cultivate a profound understanding of data analytics to propel their career trajectory towards becoming adept decision-makers in the realm of business.

Mid-Career Professionals

Experienced professionals across various business domains seeking to fortify their expertise with contemporary analytical methodologies, enabling them to drive impactful business strategies grounded in data-driven insights.

Consultants

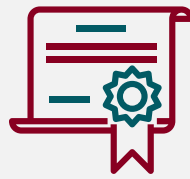
Consultants poised to elevate their consultancy services by harnessing the power of descriptive, predictive, and prescriptive analytics, thereby offering tailored solutions aimed at optimizing their clients' operational efficiency and strategic outcomes.

Entrepreneurs and Small Business Owners

Visionary entrepreneurs seeking to invigorate their enterprises through the strategic alignment of consumer insights, utilizing advanced analytics to refine their product offerings and service delivery, thus fostering sustained growth and competitive advantage in the market.



PROGRAMME HIGHLIGHTS

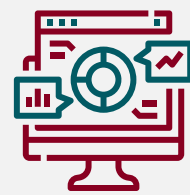


Data Analytics for Business Applications certificate from CEP IIT Delhi

Impactful weekly live online learning sessions led by IITD Faculty



Hands-on experience, real-world data sets, industry-oriented insights



Expanded professional network through peer-to-peer learning



Capstone project under guidance of IITD Faculty



Essential business analytics tools like Python, SPSS, SQL, KNIME, and Orange



PROGRAMME MODULES

Pillar 1: Core Statistical Analysis

- ⊗ Data Formats and Collection
- ⊗ Approaching BA - Summarization, Exploring Difference, Casual Inferences
- ⊗ Secondary Data Analysis
- ⊗ Small Data - Descriptive Statistics: Cross Tabulations, Chi Square, Correlations
- ⊗ Analysis of Variance - T Test, ANOVA, MANOVA, ANCOVA, MANCOVA

Pillar 2: Advanced Statistical Analysis

- ⊗ Regression - Linear, Multivariate
- ⊗ Logistic Regression
- ⊗ Exploratory and Confirmatory Factor Analysis, Principal Component Analysis
- ⊗ Cluster Analysis, Time Series Analysis, Market Basket Analysis
- ⊗ Nonparametric Analysis of Small Sample Data
- ⊗ Qualitative Data Analysis - Content/ Text Analysis

Pillar 3: Prescriptive Decision Science Systems

- ⊗ Data Analysis Systems and Types
- ⊗ Data Visualisation
- ⊗ Linear Programming and Mathematical Programming
- ⊗ Analytic Hierarchy Process

Pillar 4: Artificial Intelligence and Machine Learning

- ⊗ Unsupervised Machine Learning
- ⊗ Supervised Machine Learning
- ⊗ Artificial Neural Networks and Deep Learning
- ⊗ Machine Learning Implementation using Orange/ Anaconda
- ⊗ Web Analytics and Google Analytics
- ⊗ Social Media Analytics using Natural Language Processing
- ⊗ Hands-On Business Applications of Analytics in Marketing, Finance, HRM, Strategy, and Supply Chain

HANDS ON LEARNING

CAPSTONE PROJECT:

The group capstone project would be applicative and collaborative in nature, with participants applying the knowledge gained throughout the program's learning journey. Guided by IITD faculty, the group project would offer multiple touchpoints for discussion, learning, and collaboration. These touchpoints would include the evaluation of proposals, progress updates, and a final presentation before faculty and peers. The final submission would take the form of a concise project report.

INDIVIDUAL ASSIGNMENTS:

The programme's experiential learning journey would be highly hands-on. Alongside the capstone project, it would include multiple hands-on assignments. These assignments would be case-based, with participants working on real-world datasets to address practical challenges using structured analytical techniques and strategies. Participants would engage in assignments related to various industries and applications across different business functions.

TOOLS



PROGRAMME FACULTY

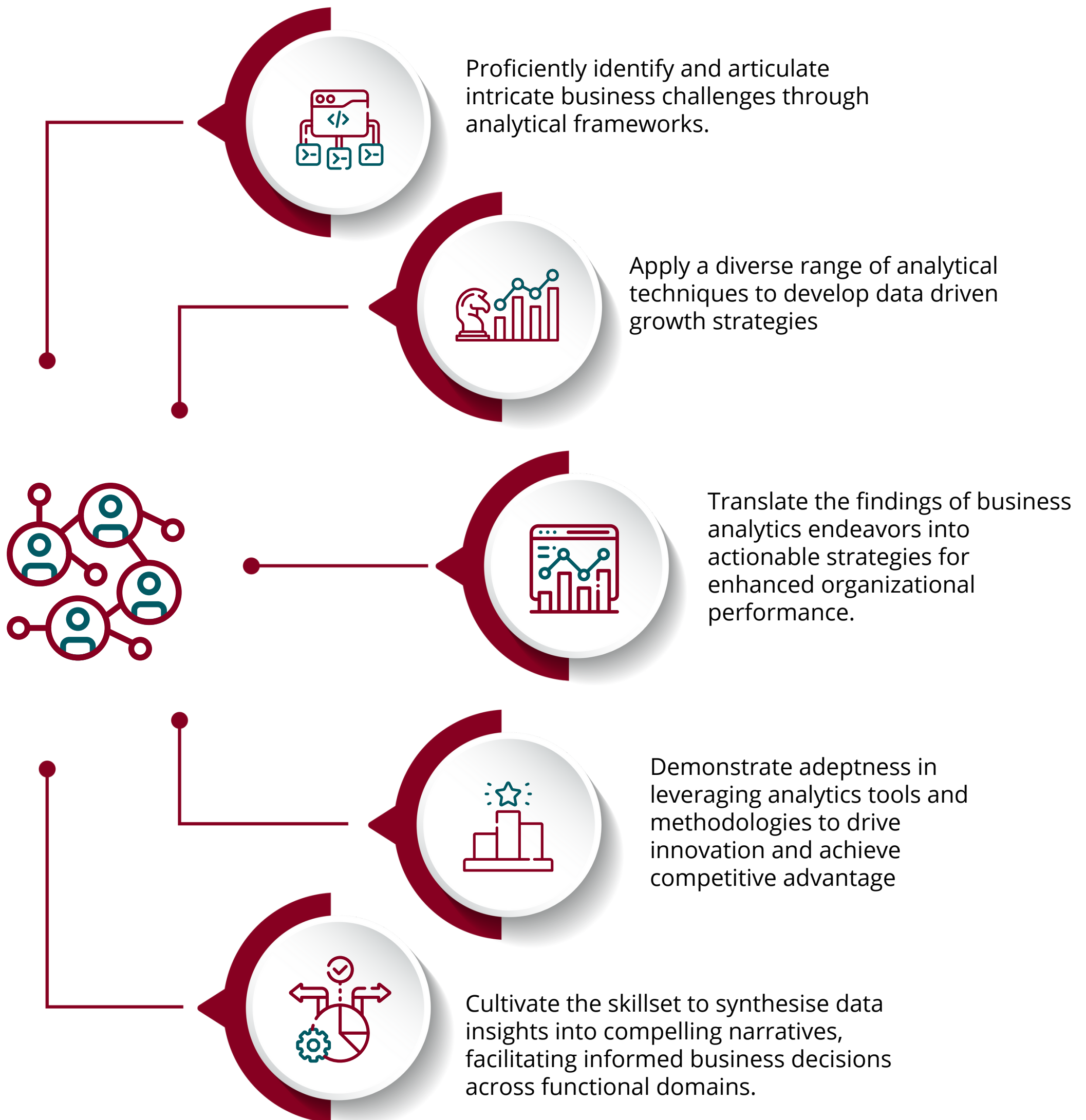


Prof. P. Vigneswara Ilavarasan

(Dept. of Management Studies) IIT Delhi, India

P. Vigneswara Ilavarasan (PhD - IIT Kanpur) is Abdulaziz Alsagar Chair Professor at the Dept. of Management Studies, Indian Institute of Technology Delhi. He is Professor-in-Charge of University of Queensland & IIT Delhi Research Academy which has more than 100 PhD students. Prof Ilavarasan researches and teaches about the interaction of information and communication technologies (ICTs), society & and business. He is one of the top 2% cited scholars in the world in 2022, 2023 as per the Elsevier & Stanford study. He has been a Visiting Research Fellow at the United Nations University (Macau), Curtin University, and the University of Queensland. 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), Ford Foundation, and others. He is currently a Section Editor of Society & Politics, Heliyon (Elsevier & Cell Press). His research has appeared in all the leading international journals and conferences of repute.

LEARNING OUTCOMES



With IIT Delhi' Data Analytics for Business Programme build competencies in world of analytics and data-driven decisioning:

01

CLARIFY and articulate intricate business challenges through analytical frameworks

UNEARTH hidden connections between seemingly unrelated areas in order to discover new strategic levers

02

03

LEVERAGE new-age analytics approaches and tools to accelerate and scale up insights, craft new data-and customer-driven growth strategies, and strengthen competitive advantage

PREDICT the next wave of market opportunity, employee behavior or customer needs that can set the stage for future-scenario planning in the 3- and 5-year term

04

As per Nasscom, Data Analytics and Visualisation lead the top trending skills in organisations, the rest being Cloud Computing, IOT, Big Data, Blockchain and Cybersecurity.

Source: nasscom.in

PROGRAMME CERTIFICATE

Participants who score at least 50% in the evaluation components and maintain a minimum of 60% attendance in both lectures and tutorials will be awarded a completion certificate.

Participants who are unable to score 50% in the evaluation components will be eligible for a participation certificate if their attendance is above 60% in both lectures and tutorials.

We encourage you to attend all the live sessions and make the best out of these interactive learning experiences. Post session video recordings may or may not be made available, as per discretion of respective faculty members.



Note: :

- All certificate images are for illustrative purposes only and may be subject to change at the discretion of IIT Delhi.
- Only e-certificate will be issued by CEP IIT Delhi.
- The organising department for this programme is the Department of Management Studies.

PROGRAMME DETAILS

Programme Schedule

Duration	7 Months
Technical Orientation	Sunday June 30, 2024
Academic Session Start	Saturday, July 13, 2024
Live Online Sessions	3 hours*/ Saturday 9:00 AM to 12:00 PM

Eligibility

Graduates (10+2+3) from a recognized university (UGC/AICTE/DEC/AIU/State Government/recognised international universities) in any discipline (mandatory background of 12th-grade Mathematics).

Note:

- The above criteria should be as on the programme start date i.e., June 30, 2024.
- Minimum eligibility criteria is not a guarantee for offer letter.

Evaluation

The evaluation will be at faculty's discretion. It will include quizzes, projects, case studies, problems, etc.

Selection Process:

Screening and selection will be done by IIT Delhi

PAYMENT SCHEDULE

Programme Fee INR 98,000 + GST

	Instalment 1	Instalment 2	Instalment 3
Remarks	Within 5 days post selection	July 02, 2024	Sept 02, 2024
Amount	INR 19,600 + GST	INR 39,200 + GST	INR 39,200 + GST

- Note:
- The actual programme schedule will be announced closer to the programme start
 - In case a programme session corresponds with a public holiday, the session would be held on the following weekend.
 - GST (currently @ 18%) will be charged extra on these components.
 - Loan and EMI services are provided by Eruditus Learning Solutions Pte Ltd, and IIT Delhi is not responsible for the same.

Last Date to Apply	May 16, 2024
Shortlisted Candidates Will Be Informed by	May 22, 2024
Last Date to Submit the Fee	Within 5 days post selection

Note: Applications will be reviewed based on eligibility and subsequent shortlisting process as laid down by the Programme Coordinators.

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

* 7 month duration is counted from first academic session i.e. (July 13, 2024) and the same date will also be mentioned on the certificate as the starting date of the programme. The mentioned minimum eligibility criteria is not a guaranteed for selection. Selection cut-off for this programme can be altered on the discretion of IIT Delhi.

APPLICATION REQUIREMENTS

Graduation and Post-Graduation Education:

ID Proof:

Consolidated Graduation Marksheet (All Semester) Final year students may submit the marksheets up to the previous semester

This programme includes online learning classes conducted on Zoom. To attend a online learning class you will need to have a PC/ Laptop/ Mac with:

We use the Zoom software application to conduct online learning classes. Zoom works on a variety of PCs/ Laptops/ Mac systems and also on phones and tablets. You can join your online learning class from a phone or tablet if it supports the Zoom client. We recommend that you attend classes from a PCs/ Laptops/ Mac.

Any Government-issued photo ID like PAN Card/ Driving License/ Passport, etc. Submission of passport-size photo during application is mandatory

Speakers and microphone: built-in or a USB plug-in or wireless Bluetooth Webcam: built-in or USB plug-in Processor: with Dual Core 2Ghz or higher (i3/ i5/ i7 or AMD equivalent) RAM: 4 GB or higher OS: Either MacOS 10.7 or higher OR Windows 8 or higher An internet connection: Minimum bandwidth of 3.0 Mbps (up/ down) Browser: IE 11+, Edge 12+, Firefox 27+, Chrome 30+ Zoom software client installed on your PC/ Laptop/ Mac

WITHDRAWAL AND REFUND FROM PROGRAMME

Candidates can withdraw within 15 days from the Programme Start Date. A total of 80% of the total fee received will be refunded. However, the applicable tax amount paid will not be refunded on the amount paid. If you wish to withdraw from the programme, you must email

cepaccounts@admin.iitd.in and iitd.execed@emeritus.org, stating your intent to withdraw.

The refund, if applicable, will be processed within 30 working days from the date of receiving the withdrawal request.

ABOUT IIT DELHI

The Indian Institute of Technology Delhi (IIT Delhi) is one of the 5 initial IITs established 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 rest obtained a Master’s Degree 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 the building of this nation, and to industrialisation around the world. For more details, please visit: www.iitd.ac.in

ABOUT CONTINUING EDUCATION PROGRAMME (CEP)

Executive Education is a vital need for the organisations to build a culture that promotes newer technologies and solutions and builds 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, IIT Delhi 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 (IIT 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://cepqjp.iitd.ac.in>



APPLY NOW

For registration and any other information,
[please get in touch with us at iitd.execed@emeritus.org](mailto:iitd.execed@emeritus.org)

For any feedback, please write to CEP IIT Delhi
at contactcep@admin.iitd.ac.in

 [WhatsApp an Advisor On +91 86570 38243*](https://wa.me/918657038243)

*This number does not accept any calls. Please message your queries.



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.

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