ANALYTICS FOR DECISION-MAKERS

Module 1:
Analytics Fundamentals
September 28 – October 9, 2020

Module 2:
Advanced Analytics
October 12 – 23, 2020

Module 3:
Decision Trees and Risk Analysis
October 26 – November 6, 2020

Module 4:
Machine Learning and Artificial Intelligence
November 9 – 20, 2020

MULTI-MODULAR VIRTUAL OPEN PROGRAM

Each module can be booked individually
Have you sometimes looked at your data and wondered how you can use it to add value to your business? Have you read over a report from your data science team and wished for the confidence to turn its insights into optimal decisions? Do you want to leverage data analytics to optimize processes for your department and to spearhead evidence-based decision-making in your company? If so, this program is for you. In the age of digitalization and with progressively larger amounts of available data, managerial decision-making is increasingly data-driven. The aim of this program is to help you leverage analytics for optimal decisions. While this is not a technical quantitative course, its focus is on building the thinking skills necessary for an informed and empowered user of analytics, so that you can convert data insights into business value.

The program is delivered online and consists of up to 4 modules à 6–8 hours, with one introductory module and three further in-depth modules:

- **Module 1: Analytics Fundamentals**
  - Risk, uncertainty, and errors
  - Data as a guide to the unknown
  - Descriptive analytics: Key indicators
  - Predictive analytics: Model building

- **Module 2: Advanced Analytics**
  - Knowing your customers: segmentation models
  - Keeping your customers (happy): churn models
  - From predictive to prescriptive analytics

- **Module 3: Decision Trees and Risk Analysis**
  - Decision trees and decision-making under uncertainty
  - Sensitivity analysis and risk profile
  - Basics of Monte Carlo simulation
  - Entropy and information gains

- **Module 4: Machine Learning and Artificial Intelligence**
  - Fundamentals of machine learning
  - Random forests and neural networks
  - Preparing high-quality data and optimizing models

**WHO SHOULD ATTEND**
Senior managers and executives who aim to implement data-driven decision processes in their teams, and who wish to understand the principles of analytics or to acquire the knowledge and communication skills needed to steer their analysts. The course is also tailored for managers confronted with a specific analytics challenge who are expected to come up with concrete proposals on how to distill and extract value from data.

**KEY BENEFITS**
The multi-modular structure of the program allows you to cherry-pick the tools and techniques that are most relevant for your daily business practice. You can choose frameworks and skills that empower you to make sense of analytics and to deploy it for managerial decisions. In guided, hands-on exercises during each module, you will get acquainted with standard software packages that allow you to prepare and manage data inputs, generate and interpret results, and draw the right conclusions. Peer-group discussions, practitioners’ keynotes and individual coaching sessions with our specialists enable you to obtain a better understanding of how your analytics challenges can be operationalized and resolved.

**METHODS**
Each of the modules has a synchronous online kick-off event and is further complemented by optional and individual synchronous online meetings with the lecturers. In these coaching sessions you are invited to present your own data-set or business challenge, and get expert advice from our lecturers. You will also be able to attend synchronous online keynotes with startup entrepreneurs and practitioners from large corporations, which present best practices and current challenges in the implementation of analytics tools in specific corporate contexts. Each of the four modules consists of e-learning sessions, including individual exercises, case studies, video tutorials, moderated discussions in peer groups, synchronous webinars, and individual coaching sessions with our data experts.
CATALINA STEFANESCU-CUNTZE (PROGRAM DIRECTOR)
is a professor of Management Science and the first holder of the Deutsche Post DHL Chair. She joined ESMT Berlin in November 2009 as associate professor, served as director of research between 2010 and 2012, and as dean of faculty between 2012-2019. Catalina’s research focuses on the design, analysis, and application of statistical models and methods for managerial decision making. She has worked on three different areas: demand modeling and forecasting for revenue management, statistical models for credit risk, and methodologies for correlated binary and survival data with biostatistical applications.

JENS WEINMANN (PROGRAM DIRECTOR)
is a program director at ESMT Berlin. Previously he was a project manager of Market Model Electric Mobility, a research project financed by the German environmental ministry (BMU). From 2007 to 2009, he worked as a manager at the economic consultancy ESMT Competition Analysis. Jens’ research focus lies in the analysis of decision making in regulation, competition policy, and innovation, with a special interest in energy and transport. His academic experience includes fellowships at the Kennedy School of Government at Harvard University and the Florence School of Regulation at the European University Institute.

CHRISTOPH BURGER
is a senior lecturer at ESMT Berlin. Before joining in 2003, he worked five years in industry at Otto Versand and as vice president at the Bertelsmann Buch AG, five years at consulting practice Arthur D. Little, and five years as independent consultant focusing on private equity financing of SMEs. His research focus is on innovation / blockchain, decision-making and energy markets. Christoph studied business administration at the University of Saarbrücken (Germany) and the University of St. Gallen (Switzerland) and economics at the University of Michigan, Ann Arbor (USA).

JAN NIMCZIK
joined ESMT Berlin in 2019 as an assistant professor of economics. Previously he worked as a PostDoc at the Humboldt University, Berlin. Jan obtained his PhD in Economics at the University of Mannheim. During his studies, he visited the University of California, Berkeley and the University of Wisconsin Madison. In his research, Jan investigates the structure and functioning of labor markets. His recent papers cover the scope of local labor markets, the role of worker mobility in knowledge diffusion, and the effects of network structures on labor markets.
The Postgraduate Diploma in Management is a university-level certificate offered by ESMT Berlin. To acquire this diploma, candidates have to enroll for a minimum of 18 program days spread over a period of 30 months. The postgraduate syllabus covers all major topics on leadership and general management.

We have further divided the course of study into three tracks: Leadership and Social Responsibility, Managing Technology, and General Management. The tracks allow participants to customize their course of study to suit their personal needs.

The programs have been designed – and will be led – by ESMT faculty members and ESMT visiting faculty, who will advise participants throughout their studies. Programs are offered in both German and English.

Tuition fees vary, depending on the number of programs participants choose.

Analytics for Decision-Makers is part of the cluster Managing Technology and Strategy. Each module counts towards 1 of the 18 days necessary to receive the diploma.

Tuition: 1 module €750*, 2 modules €1400*, 3 modules €2000*, 4 modules €2400*

Tuition fee includes program attendance, all materials (usually in electronic form), any online access and the certificate of attendance.

*Program prices are net prices. Value-added tax will be added where it is legally required. Deductions for items such as banking fees, withholding taxes, or cash discounts for prompt payment are not possible. According to Art. 132 (1) i of the Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax, this service is exempt from VAT.

For general terms and conditions, and details on the application process please go to: execed.esmt.berlin/gtc

CONTACT US
Our admissions team office will be glad to answer any questions you might have regarding this program.

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For more information go to: execed.esmt.berlin/diploma

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