MOOC Courses

MOC001

Course: [Artificial Intelligence: Implications for Business Strategy](https://executive-education.mit.edu)

Institution: MIT Sloan School of Management, MIT Computer Science and Artificial Intelligence Laboratory

Website: https://executive-education.mit.edu

Credit Value: 5 cu[1]

Duration: 6 weeks (excluding orientation), 6 to 8 hours per week

Total Learning Hours: Minimum 36 hours

Cost: USD3,200

Synopsis:

Focusing on key AI technologies, such as machine learning, natural language processing, and robotics, the course will help you understand the implications of these new technologies for business strategy, as well as the economic and societal issues they raise. MIT expert instructors examine how artificial intelligence will complement and strengthen our workforce rather than just eliminate jobs. Additionally, the program will emphasize how the collective intelligence of people and computers together can solve business problems that not long ago were considered impossible.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Gain a practical introduction to the key AI technologies and their business implications
- Transform their organisation by converting uncertainties regarding AI into impactful opportunities for business growth
- Understand the organisational and managerial implications of AI technologies and how they can be applied in the workplace
- Develop a plan for how AI could be used in their own organisation of some other business context of their choice
- Apply their knowledge to support informed strategic decision making around the use of key AI technologies in their business

Topics:

1. An Introduction to Artificial Intelligence
2. Machine Learning in Business
3. Natural Language Processing in Business
4. Robotics in Business
5. Artificial Intelligence in Business and Society
6. The Future of Artificial Intelligence

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[1] Includes collaborative learning through discussion forums with a subject matter expert who will guide students through the course content and an individual project where students need to develop a plan for how AI could be used in their own organisations or some other business context of their choice.

MOC002

Course: Blockchain in Business

Institution: Columbia Business School Executive Education

Website: https://emeritus.gsb.columbia.edu

Credit Value: 5 cu[2]

Duration: 8 weeks, 4 to 6 hours per week

Total Learning Hours: Minimum 32 hours

Cost: USD1,950

Synopsis:

Blockchain and cryptocurrencies claim the headlines in the media, leaving business leaders with the challenge of distinguishing between what's hype versus what has the power to transform an entire industry. The Blockchain in Business: Beyond the Hype program allows you to break through the mystery, offering a practical understanding of blockchain by examining both its opportunities and challenges. Over the course of this program, you will learn how cryptocurrencies work and how the underlying blockchain technology could impact your organization and industry. You'll delve into the history, evolution, and real-world applications of blockchain with an eye towards how these technologies influence executive decision making.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Understand the fundamental concepts and history of the burgeoning blockchain and cryptocurrency technologies in business
- Identify real-world opportunities and limitations of blockchain technology and practical applications in business
- Ask the right questions and make more informed decisions about the role that blockchain technology may play in business
- Explore the complex issues surrounding the governance of blockchains
- Take a "big-picture" view of blockchain and cryptocurrencies tailored for the executive decision-maker

Topics:

1. Technical Foundations: Distributed Consensus, Hash Functions, and Cryptography
2. What is Money? Introduction to Bitcoin
3. How Bitcoin Uses Blockchain: Intro to Blockchain and Transaction Fees
4. Ethereum, Smart Contracts, and Tokens
5. Applications of Blockchain: Governance Challenges, Opportunities, and Incentives & Permissioned Enterprise Blockchains (IBM)
6. Blockchain for the Executive Decision Maker and the Future of Blockchain

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[2] Includes live faculty teaching sessions, guest speakers of inventors of blockchain, collaborative learning through discussion forums, quizzes, assignments and case studies.

MOC003

Course: Strategic Change Management

Institution: Northwestern Kellogg School of Management Executive Education

Website: https://www.kellogg.northwestern.edu/executive-education

Credit Value: 5 cu[3]

Duration: 8 weeks, 4 to 6 hours per week

Total Learning Hours: Minimum 32 hours

Cost: USD2,800

Synopsis:

Organisational change is inevitable in the modern business world and, for those who want to remain competitive, the ability to manage change is critical. In this online program, you'll learn to develop a strategy for sustainable change and gain the knowledge required to implement and oversee change initiatives while managing resistance from stakeholders. You'll also develop the insight to maintain agility, effectively manage aversion to change, and ensure that change is sustainable through building and leading a learning-ready organisation. Most participants can expect to dedicate 4-6 hours per week to watching the lectures, participating in discussions and completing exercises.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Develop a strategic approach to change management that aligns with organisational strategy and design
- Gain the practical tools for implementing sustainable change in their business, while managing resistance from stakeholders
- Understand how to build a learning-ready organisation in order to remain agile and gain a strategic competitive edge
- Learn from expert Kellogg School of Management faculty
- Engage with an international network of like-minded professionals

Topics:

1. Formulating a Strategy for Change
2. Organising for Change
3. Metrics and Motivating for Change
4. Organising for Execution and Innovation
5. Building and Leading Learning-Ready Organisations
6. Becoming and Remaining Agile
7. Managing Resistance to Change
8. Making Change Sustainable

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[3] The student is expected to watch the video lectures, participate in the live faculty webinars, complete the exercises, discussion activities, assignments and take the mastery quiz at the end of each week to progress to the subsequent week's topic.

MOC004

Course: [High Impact Leadership](#)

Institution: University of Cambridge, Cambridge Institute for Sustainability Leadership

Website: https://www.cisl.cam.ac.uk/education/learn-online

Credit Value: 5 cu[4]

Duration: 8 weeks (excluding orientation), 8 to 10 hours per week

Total Learning Hours: Minimum 64 hours

Cost: £2,000

Synopsis:

High Impact Leadership addresses the need for future-focused leadership training and development, by exposing you to new perspectives, knowledge and tools to maximise your personal leadership skills. You'll learn an approach to leadership that underpins its value in delivering meaningful outcomes across any business and industry.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Understand the importance of leadership at a personal, team, and organisational level
- Analyse the values, thinking, and practices that need to be developed to be a high impact leader
- Create an effective approach to communications
- Propose strategic approaches to stakeholder engagement that drive high impact change
- Validate their high impact leadership knowledge and skills
- Propose strategies to maximise high impact leadership in their current and future contexts

Topics:

1. High Impact Leadership and its Importance
2. Exploring the Context for Leadership
3. What Does High Impact Leadership Look Like?
4. The Future We Want, the Leadership We Need
5. High Impact Leadership Capabilities
6. Communicating for Influence
7. Developing the Mindset and Skills for Innovation
8. Rewiring Your Leadership to Achieve Your Goal

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[4] Includes individual activities, quizzes, group discussions, project submissions as well as a subject matter expert who will guide students through their learning journey.

MOC005

Course: [Enabling Technologies for Data Science and Analytics: The Internet of Things](#)

Institution: Columbia University, New York City

Website: https://www.edx.org

Credit Value: 1 cu

Duration: 5 weeks, 7 to 10 hours per week

Total Learning Hours: Minimum 35 hours

Cost: Verified Certificate USD149

Synopsis:

The Internet of Things is rapidly growing. It is predicted that more than 25 billion devices will be connected by 2020. In this data science course, you will learn about the major components of the Internet of Things and how data is acquired from sensors. You will also examine ways of analysing event data, sentiment analysis, facial recognition software and how data generated from devices can be used to make decisions.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Understand networks, protocols and basic software for the Internet of Things (IoT) and how automated decision and control can be done with IoT technologies
- Discuss devices including sensors, low power processors, hubs/gateways and cloud computing platforms
- Learn about the relationship between data science and natural language and audio-visual content processing
- Study research projects drawn from scientific journals, online media, and novels
- Review fundamental techniques for visual feature extraction, content classification and high-dimensional indexing
- Review techniques that can be applied to solve problems in web-scale image search engines, face recognition, copy detection, mobile product search, and security surveillance
- Examine data collection, processing and analysis

Topics:
1. Internet of Things 1 (Wireless Communications and Standard)
2. Internet of Things 2 (Networks)
3. Internet of Things 3 (Embedded Systems and Interface, Energy Harvesting, Machine Learning, Cloud Robotics, IoT Economics)
4. Natural Language Processing
5. Audio, Video and Image Processing

MOC006

Course: [Knowledge Management and Big Data in Business](#)

Institution: The Hong Kong Polytechnic University, Knowledge Management and Innovation Research Center, KMIRC

Website: https://www.edx.org

Credit Value: 1 cu

Duration: 8 weeks, 6 to 8 hours per week

Total Learning Hours: Minimum 48 hours

Cost: Verified Certificate USD50

Synopsis:

The business landscape is changing so rapidly that traditional management, business and computing courses do not meet the needs for the next generation of workers in the business world. Most traditional methods are of a repetitive, rule-based nature and will be gradually replaced by Artificial Intelligence. In the knowledge era, the most value-added job will be to manage knowledge, which includes how knowledge is created, mined, processed, shared and reused in different trades and industry. At the same time, the amount of data and information (prerequisites of knowledge) is exploding exponentially. By 2020, IDC projects that the size of the digital universe will reach 40 zetabytes from all sources including, websites, weblog, sensors, and social media. Digitalisation, Cloud Computing, Big Data will transform how we live, work and even think in a Networked Economy. These trends and more will have a profound effect on how we see the world and create policies.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Understand the role of Knowledge Management (KM) practitioners in creating business value
- Become familiar with the techniques and tools for capturing, processing, classifying and organizing knowledge
- How to analyze large quantities of data and information through analytics
- How to use Cloud Services to derive new values and business models
- Understand the role of social media and technologies in innovating new business services
- Apply the principles you have learnt to company-based business projects

Topics:

1. What is Knowledge Management?
2. Knowledge Management Tools, Applications and Case Studies
3. Knowledge Management for SMEs
4. How to Leverage the Cloud for Collaboration and Innovation?
5. New Developments and Strategic Issues in Knowledge Management
6. What is Open, Structured and Unstructured Information?
7. From Data Warehousing to Data Science and Big Data

MOC007

Course: Sustainable Innovation for Subsistence Marketplaces

Institution: University of Illinois at Urbana-Champaign, Department of Business Administration

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 4 weeks, 10 to 12 hours per week

Total Learning Hours: Minimum 40 hours

Cost: Self-paced, USD49 per month

Synopsis:

This course focuses on understanding subsistence marketplaces and designing business solutions for the billions of people living in poverty in the global marketplace. To develop understanding of subsistence marketplaces, we use exercises to enable participants to view the world from the eyes of subsistence consumers and entrepreneurs, facilitate bottom-up understanding generated by participants, and provide insights from extensive research. More broadly, the course uses the context of extreme resource constrained contexts to learn about the bottom-up approach pioneered through the Subsistence Marketplaces Initiative and apply it in any context. The course will involve virtual immersion in subsistence contexts, emersion of unique insights, bottom-up design, innovation and enterprise. A parallel project will focus on understanding a specific need in a subsistence marketplace and designing a solution and an enterprise plan.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Develop an understanding of subsistence marketplaces
- Design solutions for subsistence marketplaces
- Develop enterprise plans to implement solutions for subsistence marketplaces
- Apply the bottom-up approach for subsistence marketplaces as well as other contexts

Topics:

1. Introduction to Subsistence Marketplaces and Bottom-Up Immersion
2. Bottom-Up Immersion and Emersion
3. Bottom-Up Design
4. Bottom-Up Enterprise

MOC008

Course: [Introduction to Negotiation: A Strategic Playbook for Becoming a Principled and Persuasive Negotiator](#)

Institution: Yale School of Management

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 9 weeks, 3 to 4 hours per week

Total Learning Hours: Minimum 27 hours

Cost: Self-paced, USD49 per month

Synopsis:

This course will help you be a better negotiator. Unlike many negotiation courses, we develop a framework for analysing and shaping negotiations. This framework will allow you to make principled arguments that persuade others. It will allow you to see beneath the surface of apparent conflicts to uncover the underlying interests. You will leave the course better able to predict, interpret, and shape the behavior of those you face in competitive situations.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Negotiate with other students using case studies based on common situations in business and in life
- Receive feedback on their performance and compare what they did to how others approached the same scenario
- Discuss a wide-ranging set of topics including preparing for a negotiation, making ultimatums, avoiding regret, expanding the pie, and dealing with someone who has a very different perspective on the world
- Understand negotiating when they have no power, negotiating over email, and the role of gender differences in negotiation

Topics:

1. What is the Pie?
2. Negotiation Caselets: Zincit Case and Outpsider Case
3. Advanced Topics
4. Ask for It
5. You Can Negotiate Anything
6. The Consummate Dealmaker

MOC009

Course: People Analytics

Institution: The Wharton School, University of Pennsylvania

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 4 weeks, 2 hours per week

Total Learning Hours: Minimum 8 hours

Cost: Self-paced, USD49 per month

Synopsis:

People analytics is a data-driven approach to managing people at work. For the first time in history, business leaders can make decisions about their people based on deep analysis of data rather than the traditional methods of personal relationships, decision making based on experience, and risk avoidance. In this course, three of Wharton's top professors, all pioneers in the field of people analytics, will explore the state-of-the-art techniques used to recruit and retain great people, and demonstrate how these techniques are used at cutting-edge companies. They'll explain how data and sophisticated analysis is brought to bear on people-related issues, such as recruiting, performance evaluation, leadership, hiring and promotion, job design, compensation, and collaboration. This course is an introduction to the theory of people analytics and is not intended to prepare learners to perform complex talent management data analysis.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Understand how and when hard data is used to make soft-skill decisions about hiring and talent development
- Position themselves as a strategic partner in their company's talent management decisions

Topics:

1. Introduction to People Analytic and Performance Evaluation
2. Staffing
3. Collaboration
4. Talent Management and Future Directions

MOC010

Course: Operations Analytics

Institution: The Wharton School, University of Pennsylvania

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 4 weeks, 2 to 3 hours per week

Total Learning Hours: Minimum 10 hours

Cost: Self-paced, USD49 per month

Synopsis:

This course is designed to impact the way you think about transforming data into better decisions. Recent extraordinary improvements in data-collecting technologies have changed the way firms make informed and effective business decisions. The course on operations analytics, taught by three of Wharton's leading experts, focuses on how the data can be used to profitably match supply with demand in various business settings. The course will introduce frameworks and ideas that provide insights into a spectrum of real-world business challenges and teach you methods and software available for tackling these challenges quantitatively as well as the issues involved in gathering the relevant data. This course is appropriate for beginners and business professionals with no prior analytics experience.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Model future demand uncertainties
- Predict the outcomes of competing policy choices
- Choose the best course of action in the face of risk

Topics:

1. Introduction to Descriptive and Predictive Analytics
2. Prescriptive Analytics and Low Uncertainty
3. Predictive Analytics and Risk
4. Predictive Analytics and High Uncertainty

MOC011

Course: Global Financial Markets and Instruments

Institution: Jones Graduate School of Business, Rice University

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 4 weeks, 4 to 5 hours per week

Total Learning Hours: Minimum 16 hours

Cost: Self-paced, USD49 per month

Synopsis:

This first course is designed to help you become an informed investor by providing you with the essential concepts for long-term success in managing money. You'll start by learning the role of financial markets and financial assets in a well-functioning economy. From there, you'll learn about the wide range of financial instruments available in major asset classes, their features and valuations. You'll explore how financial markets actually operate in the real world, focusing on how and where securities are traded and how various market types differ from one another in practice. You will also learn the basics of algorithmic trading, dark pools, buying on margin and short selling.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- List and distinguish the different financial instruments available to an investor
- Compare global financial markets
- Explain the features of equity, debt, and derivative instruments
- Define traditional and alternative asset classes
- Discuss different trading venues and mechanics of securities trading
- Discuss the current trends affecting today's financial markets

Topics:

1. Introduction and Review of Elementary Finance Tools
2. Financial System and Financial Assets: Fixed Income Securities
3. Financial System and Financial Assets: Equity Securities and Derivatives
4. Organization of Financial Markets and Securities Trading

MOC012

Course: Innovation Through Design: Think, Make, Break, Repeat

Institution: The University of Sydney

Website: https://www.coursera.org

Credit Value: 1 cu

Duration: 5 weeks, 3 hours per week

Total Learning Hours: Minimum 15 hours

Cost: Self-paced, USD49 per month

Synopsis:

The evolution of design has seen it become a discipline no longer limited to the concerns of a singular, specific domain and develop to become a pathway for solving complex, nonlinear problems. Design is becoming a capability-enhancing skill, equipping people with the ability to deal with uncertainty, complexity and failure. In this course, we demonstrate how you can use design as a way of thinking to provide strategic and innovative advantage within your profession. Suitable for anyone who is curious about design and translating the processes and tools of design thinking into innovative opportunities, over 5 weeks we explore, apply and practice the design process: think, make, break and repeat.

Through introducing theoretical concepts and examining industry case studies with leading Australian design firms, we investigate design as learning about the context (the thinking part), building prototypes as tangible representations (the making part) and testing potential solutions (the breaking part). We build on this by showing the productive value of moving through the process quickly and often (the repeating part), to improve ideas and develop new insights. Throughout the course, you will follow us through three of Australia's most exciting design offices and learn from practicing designers and leaders in design. This insight into industry will enable you to develop a comprehensive understanding of design and the role it can and does play within the innovation landscape.

Course Learning Outcomes:

At the end of this course, it is expected that the students will be able to:

- Use a set of practical tools and techniques to apply to situations within their own professional context
- Apply and practice the design process: think, make, break and repeat
- Translate problems into opportunities and solutions
- Innovate through design

Topics:

1. Introduction to Design
2. Design Thinking
3. Design Making
4. Design Breaking
5. Repeating Design