



**Swiss School of Business and Management Geneva
(SSBM Geneva)**

SSBM Geneva Program Outline

MBA in Artificial Intelligence

Method: Online

Duration of Program: 12 months/2 semesters

Total number of ECTS: min. 60

Avenue des Morgines 12, 1213 Genève
Switzerland

www.ssbm.ch

1. Enrollment criteria

Admission to MBA studies is granted to people who fulfil the following requirements:

- Hold a Bachelor's degree in the related field or an equivalent university degree.

- Applicants who do not have a Bachelor's degree in the related field will have to complete at least 2 online management courses prior to being enrolled into master program and subject to the Recognition of Prior Learning policy. The Admissions Committee decides on the final number of the courses that have to be taken by the student.

- English requirements:

- TOEFL, IELTS or Cambridge
- Intensive English Program certificate
- Previous education in English speaking or Bilingual school with an official certificate
- Test/Interview with SSBM member staff (75 EUR cost which will be deducted from tuition fees upon enrolment).
- If a candidate is not from a majority English-speaking country, then an evidence of English language competency is required.

2. Credit Transfer and Recognition of Prior Learning

Credit Transfer and Recognition of Prior Learning are described in the "Recognition of Prior Learning (RPL) Policy" of SSBM Geneva.

3. Graduation Requirements

Upon successful completion of the MBA program in Artificial Intelligence students will be awarded with an "MBA in Artificial Intelligence" delivered by SSBM Geneva. To successfully complete the program, students must:

- Complete all program courses with a passing grade
- Have no outstanding financial obligations towards SSBM

Award of MBA with Distinction

MBA with Distinction, is awarded to students who meet the following terms:

- Complete their studies with an average grade score of minimum 90%:
 - For 6.0 grade scale minimum average grade of 5.5
 - For 4.0 grade scale minimum average grade of 4.0 (letter grade A)

4. Teaching Method and Learning Materials

This program is delivered entirely online through the SSBM Online Learning Portal used by Harvard and MIT. Modules can be completed in student's own time and pace.

Online learning is delivered through **asynchronous** and **synchronous** methods.

Asynchronous learning takes form of:

- prerecorded lectures supplemented by a variety of engaging activities such as quizzes, readings, assignments, capstone projects, knowledge checks, etc.

Synchronous learning takes form of:

- live lectures in form of Live Q&A Sessions, live seminars and webinars, guest lectures, live lectures on specific topics, one to one sessions with the lecturers, etc.

All learning materials for this program are made accessible through the SSBM Online Learning Portal.

Access to SSBM Connect is provided to all SSBM students. SSBM Connect is an online platform to socialize / exchange / engage and communicate with current students, alumni, professors and industry partners.

Access to SSBM e-Library and ESBCO (largest provider of research databases, e-journals, magazine subscriptions, e-books and discovery service) is provided to all students. SSBM Librarian is available to all students to further advance their access to literature.

5. Grading system

Grade elements are described in the course syllabus and consist of formative and summative assessments.

The numerical assessment at a module level is expressed in the following whole grade points and half-grade points in between:

- 6 = very good
- 5 = good
- 4 = sufficient
- 3 = insufficient (fail)
- 2 = weak (fail)
- 1 = very weak (fail)

A grade of 4.0 is equivalent to 60% of the minimum possible performance:

Percent Grade	6.0 Scale
95-100	6.0
90-94	5.5

85-89	5.0
80-84	4.5
60-79	4.0
50-59	3.5
40-49	3.0
30-39	2.5

Additional conversion table for 4.0 and letter grade scales (for international students):

Letter Grade	Percent Grade	4.0 Scale
A	90-100	4.0
B	80-89	3.0
C	70-79	2.0
D	60-69	1.0
F	< 60	0.0

The exam is passed if the total number of points equals to or is above 60.

6. Regular exam deadlines

If the student fails the 1st exam deadlines, he/she can attend regular examinations.

- Students who do not pass the exam in the 1st deadline take the next regular exam.
- Number of times the student can take the exam is 3+1, where the last one is considered as a commission exam. If the student fails, the commission exam he/she has to enroll in the course one more time.
- Commissions exam is held through the commission.
- Commission exam cannot be cancelled.
- Grade achieved on the exam is considered to be the final grade of the student.

If the student decides to refuse the grade achieved on the exam, he/she is obligated to communicate his/her decision to the head of the course and take another exam.

7. Program Outcomes

Master's core Learning Outcomes applicable to all Masters:

- Graduating students will demonstrate fundamental knowledge of the functional areas of business
- Master students will be able to demonstrate proficiency in technical and digital literacy.
- Master students will demonstrate effective teamwork and leadership roles
- Master students will demonstrate good written and oral communications skills
- Master students will be able to communicate effectively and efficiently
- Master students will acquire analytical skills

Program-specific Learning Outcomes:

- **Advanced AI Proficiency:** Graduates will demonstrate mastery of advanced artificial intelligence concepts and techniques, including machine learning algorithms, deep learning architectures, and natural language processing systems.
- **Data-Driven Decision Making:** Graduates will be adept at leveraging AI-driven data analysis to inform strategic decision-making processes, optimize business operations, and drive organizational performance improvements.
- **Ethical AI Implementation:** Graduates will possess the knowledge and skills to ethically design, develop, and deploy AI solutions, ensuring compliance with legal and regulatory frameworks and mitigating potential risks associated with AI technologies.
- **Innovation Leadership:** Graduates will be equipped to lead innovation initiatives leveraging AI technologies, driving organizational growth and competitive advantage through the development of cutting-edge AI-driven products, services, and business models.

8. Program Curriculum

Course ID	Course	Lecturer	ECTS
37079	Business IT (BIT02)	Minja Bolesnikov	6
26909	Introduction to Artificial Intelligence for Managers (ITAI01)	Aco Momcilovic	5
37064	Artificial Intelligence in HRM	Angelina Njegus	7
37065	Artificial Intelligence in Marketing (AIM01)	Angelina Njegus	6
26657	Data Analytics and Decision Making (DADM01)	Mario Silic	6
	Applied Artificial Intelligence in Business	TBD	6
	Generative AI	TBD	6
26908	Big Data and Data Science (BBD01)	Sabrina Suman	6
36984	Innovative technology-driven value creation (ITDVC01)	Xavier de Leymarie	7
26813	Data Visualization and Storytelling with Data (DVSD01)	Mario Silic	5
TOTAL:			60

Course Descriptors

BUSINESS IT

Course Description

The Business IT course is designed to provide MBA students with a comprehensive understanding of the role of Information Technology (IT) in modern businesses. This course explores the fundamental concepts, strategies, and practices that enable businesses to effectively leverage IT for competitive advantage, operational efficiency, and innovation. Through a combination of theoretical knowledge, practical applications, and case studies, students will gain insights into IT governance, project management, business process optimization, enterprise systems, risk management, cybersecurity, and emerging technologies

Course objectives

This course aims to equip students with the skills and knowledge necessary to navigate the complex intersection of business and IT, enabling them to make informed decisions and drive technological advancements within organizations. Students will learn to develop and implement planning and goal frameworks for IT strategy, IT projects, business processes, enterprise systems, IT risk management, and emerging technology projects.

Course Learning Outcomes

By the end of the module students will be able to:

- Explain Organizational Behaviour model and how various aspects of organization work together and create human output
- Understand what part of inner aspect is responsible for individual's behaviour
- Know how to detect a problem and find the best solution
- Develop interpersonal and team skills
- Evaluate the benefits and challenges of alternatives to achieve high performance at the individual, team, and organizational level
- Find the right person for specific team or organization
- Evaluate ethical issues as related to organizational behaviour.
- Examine challenges of effective organizational communication
- Assess the impact that a company's structure and design can have on its organizational behaviour

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Lectures – Video material	3.0	0.1
• Readings – literature, reading assignment and literature	75	3.0
• Video tutorials	2	0.1

• Individual study	20	0.8
• Learning for final assignment + time for solving	50	2.0

Course materials and textbooks

Main literature:

"Corporate Culture and Performance" by John P. Kotter and James L. Heskett

"Good to Great: Why Some Companies Make the Leap... and Others Don't" by Jim Collins

Additional literature

"Built to Last: Successful Habits of Visionary Companies" by Jim Collins and Jerry Porras

"Drive: The Surprising Truth About What Motivates Us" by Daniel H. Pink

"Delivering Happiness: A Path to Profits, Passion, and Purpose"

"The Advantage: Why Organizational Health Trumps Everything Else In Business" by Patrick Lencioni

"Corporate Culture and Performance" by John P. Kotter and James L. Heskett

INTRODUCTION TO AI FOR MANAGERS

Course Description

Artificial Intelligence has become a buzzword many years ago. In the recent decade we are witnessing rapid rise in AI research, development and application. AI as a field has become much more than just software development – engineering and technical issue. Many more fields are getting included in this area, and making significant contribution from economic, philosophical, ethical, or social side. Ways to get included are growing, as are the concerns about mismanagement of future AI projects and services. We believe that is a good time to learn and expand knowledge of people in business about different aspects of AI. Aim of this course is to combine scientific research on different AI related topics, with different business analytics and predictions, and to maximize understanding by use of different sources.

We are always open for questions, discussions and suggestions of our students through especially e-mail communication.

Course objectives

Explore different definitions of AI as a basis for exploration of different aspects and approaches. Get familiar with the widely used AI connected terminology. Position AI development in the broader context of digitalization and tech

development that is progressing in the last few decades. Get an overview of the main technologies that are used in the AI projects. Get familiar with already existing best practices and areas of implementation of AI. Discuss economic and social consequences for different countries and be able to compare them. Put the development of AI technologies in the broader geopolitical framework. Identify most common ethical questions about AI development. Raise awareness about already existing international regulations or recommendations that are applied to AI. Discuss different career paths for non-engineering positions that are required in the AI projects.

Course Learning Outcomes

After this course, the students will be able to:

- Compare different definitions and choose most suitable for your business.
- Understand interconnectedness of different technologies and areas of implementation.
- Create new ideas about AI products and services.
- Create broader framework about consequences of AI and its development on the geopolitical and economic level.
- Get inspired to explore AI field further.
- Gather number of sources for additional AI education.
- Think about impact of AI and new technologies in the broader global context, and on the different levels: from individual to company to country level

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Video material	4	0.2
• Preparations for the practical work	10	0.4
• Readings (presentation and literature)	60	2.4
• Learning for final assignment + time for solving	50	2.0

Course materials and textbooks

Main literature:

1. Artificial Intelligence – A Modern Approach (3rd Edition)
2. Machine Learning for Dummies
3. Make Your Own Neural Network
4. Machine Learning: The New AI
5. Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies

ARTIFICIAL INTELLIGENCE IN HRM

Course Description

The course "Artificial Intelligence in Human Resource Management" provides students with a comprehensive understanding of how Artificial Intelligence (AI) intersects with Human Resource Management (HRM). The introductory section covers the main areas affecting the transformation of human resources (HR), such as the historical and technological context of industrial revolutions, including the impact of the Fifth Industrial Revolution (5IR) and Society 5.0; the transformational dynamics of the digital economy, which includes the shared, gig and platform economy; as well as the evolution of computing technologies, from the Internet and Cloud computing to IoT and Big Data computing to Cognitive computing. Further, the levels of AI applications in HRM are explored, from traditional to intelligent HR systems.

Course objectives

The core part of the course focuses on artificial intelligence and machine learning, examining algorithms such as supervised, unsupervised, and reinforcement learning, and their application to HRM through case studies. This course gives students insight into using artificial intelligence for strategic human resource management practices.

Course Learning Outcomes

The course has the following learning outcomes and goals:

1. Understand the historical context and technological advancements driving the evolution of industrial revolutions, with a specific focus on the implications of the Fifth Industrial Revolution (5IR) and Society 5.0 for human resource management (HRM).
2. Explore the transformative dynamics of the digital economy, including shared, gig, and platform economies, and analyze their impact on contemporary organizational structures and workforce dynamics within HRM contexts.
3. Examine the evolution of computing technologies, ranging from Internet and IoT computing to cloud, Big Data and cognitive computing, and understand their role in shaping the infrastructure of AI-driven HRM systems.
4. Identify and analyze the levels of AI applications in HRM systems, transitioning from traditional HR management systems to intelligent platforms.
5. Gain insight into the fundamentals of artificial intelligence and machine learning, including supervised, unsupervised, and reinforcement learning algorithms, and explore their practical applications in HRM through case studies and examples.
6. Develop the ability to critically evaluate and select appropriate AI technologies and applications for enhancing strategic HRM practices,

enabling students to effectively leverage AI to address contemporary HRM challenges and opportunities.

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Lectures – PowerPoint	15	0.6
• Lectures – Video material	5	0.2
• Lectures – Reading part	40	1.6
• Preparations for the lectures	15	0.6
• Individual study for additional activities (presentations, seminars, projects, debating, reporting etc.)	10	0.4
• Learning for final assignment + time for solving	40	1.6

Course materials and textbooks

Main literature:

1. Eubanks, B. (2022) Artificial Intelligence for HR: Use AI to support and develop a successful workforce. 2nd Edition. New York: Kogan Page Limited.
2. Ghosh, S., Majumder, S., and Kumar Das, S. (Eds.). (2024). Artificial Intelligence Techniques in Human Resource Management. CRC Press Taylor&Frances Group.
3. Strohmeier, S. (2022) Handbook of Research on Artificial Intelligence in Human Resource Management. Cheltenham (UK): Edward Elgar Publishing Limited.

Additional readings:

1. Tyagi, P., Chilamkurti, N., Grima, S., Sood, K. Balusamy, B. (2023) Emerald Publishing Limited.

(Students must register to SSBM Connect to access EBSCO materials.)

SSBM web platform

Presentations, seminars, and additional materials for class participation (case studies, additional readings, etc.)

ARTIFICIAL INTELLIGENCE IN MARKETING

Course Description

The course "Artificial Intelligence in Marketing" provides students with a comprehensive understanding of how to apply advanced artificial intelligence techniques in marketing strategies and practices. Through this course, students explore the historical evolution of marketing from traditional to intelligent approaches, examining the pivotal role of computing advancements and the Internet. Through a detailed exploration of AI concepts and machine learning algorithms, students learn to utilize data-driven insights to enhance marketing campaigns, customize user experiences, and forecast consumer behaviours. Moreover, the course aims to acquaint students with intelligent marketing applications such as Marketing Intelligence Systems, Neuromarketing, and the integration of robotics in marketing. By analyzing case studies and practical implementations, students cultivate critical thinking skills essential for innovation and adaptation in the dynamic field of AI-driven marketing. Ultimately, the course empowers students to excel in the rapidly evolving domain of digital marketing by leveraging the capabilities of artificial intelligence and cutting-edge technologies.

Course objectives and Learning Outcomes

The course has the following learning outcomes and goals:

- **Understanding the Evolution of Marketing:** Students will gain a comprehensive understanding of the historical progression of marketing from traditional methodologies to intelligent approaches, tracing the impact of computing advancements and the Internet on marketing strategies.
- **Mastery of Artificial Intelligence Concepts:** Through detailed exploration and study, students will develop a strong grasp of artificial intelligence concepts, including its various fields, levels, and applications in marketing contexts.
- **Proficiency in Machine Learning Algorithms:** Students will become proficient in various machine learning algorithms used in marketing, including but not limited to association, Naive Bayes, clustering, decision trees, time series analysis, neural networks, linear regression, and text mining.
- **Application of AI in Marketing Strategies:** By analyzing case studies and practical examples, students will learn to effectively apply artificial intelligence techniques to optimize marketing campaigns, personalize user experiences, predict consumer behaviours, and enhance overall marketing performance.
- **Exploration of Intelligent Marketing Applications:** Students will explore the diverse applications of artificial intelligence in marketing, including Marketing Intelligence Systems, Neuromarketing, and the integration of robotics in marketing practices.

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Lectures – Powerpoint	15	0.6
• Lectures – Video material	6	0.2
• Lectures – reading part	60	2.4
• Preparations for the lectures	15	0.6
• Individual study for additional activities (presentations, seminars, projects, debating, reporting etc.)	15	0.6
• Learning for final assignment + time for solving	40	1.6

Course materials and textbooks

Main literature:

Kumar, V. (2021) Intelligent Marketing: Employing New-Age Technologies. SAGE Publications Pvt. Ltd.

Sterne, J. (2017) Artificial intelligence for Marketing: Practical

Gentsch, P. (2019) AI in Marketing, Sales and Service. Cham: Palgrave Macmillan, Springer.

Additional readings:

Akerkar, R. (2019) Artificial Intelligence for Business. Cham (Switzerland): Springer.

DATA ANALYTICS AND DECISION MAKING

Course Description

This course provides a conceptual and practical overview of analytical tools, techniques, and practices used to support data driven decision making in an organization. It places an emphasis on working with data, databases, and performing and interpreting descriptive analytics and visualization techniques in the context of contemporary, data- rich decision-making environments including various business and management applications and contexts.

Course objectives

The goal of this course is to help you develop your skills as a data-savvy manager who are managers that are not necessarily data-science experts, but understand

what analytics can and cannot do, how to ask the right questions, and, most importantly, how to interpret data to make better decisions. To that end, we will study several basic analytics techniques, focusing on how you, yourself, can apply them in practice, interpret their output, build intuition, and leverage them in decision-making. Specifically, we will focus on Data Exploration, Data Aggregation, Data Visualization, various analytics and software tools such as Excel, Power Query, Power BI, Python, SQL, Azure ML, Machine Learning, etc. From various data sets you will be able to give sense to data and convert data into a manageable insight for decision-making.

Course Learning Outcomes

At the end of this course, you will be able to:

- Explain the key ideas behind fundamental techniques in data analytics, including dashboarding, visualization, classification, aggregation of data
- Identify new opportunities to use these techniques across business domains to guide decision-making
- Apply these techniques to novel problems using a combination of Excel, Power Query, Power BI, SQL, Python or machine learning
- Formulate and communicate actionable business recommendations based upon your analysis, including its limitations
- Critically assess the validity of analytics-based recommendations in the context of specific business decisions

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
Lectures – videos	5.5	0.2
• Problem Solving Exercises – Excel	30	1.2
• Preparations for the lectures	20	0.8
Preparations for the practical work	20	0.8
• Readings (presentations/lectures and literature)	35	1.4
• Learning for final assignment + time for solving	40	1.6

Course materials and textbooks

A First Course in Database Systems (3rd Edition), Jeffrey D. Ullman, Jennifer Widom, Pearson (2007). ISBN-10: 013600637X

[\[Companion page\]](#)

Business Analytics (2nd Edition), James R. Evans, Pearson (2015). ISBN-10: 0321997824. [\[Pearson web site\]](#)

Data Analysis Using SQL and Excel, Gordon S. Linoff, second edition, Wiley Publishing (2015). ISBN-10: 111902143X [\[Companion page\]](#)

Additional learning resources:

[SQLite page](#) (with documentation and tutorials)

[SQLite Tutorial](#) (Tutorials point)

[Using SQLite in Python](#)

[Using SQLite in R](#)

[SQL Tutorial](#) (Tutorials point)

[Database Systems: The Complete Book](#) by Hector Garcia-Molina, Jeff Ullman, and Jennifer Widom. [Companion web site.](#)

[Database Management Lecture](#) by Jennifer Widom

[7 Steps to Mastering SQL for Data Science](#) (KDnuggets)

BIG DATA AND DATA SCIENCE

Course Description

The main problem in today's business world is the management and use of new forms of huge amounts of data. Big Data, Big Data Analytics as well as Data Science in general are very topical in terms of business value, human resources and skills management. Managers should know what resources are required to gain a competitive advantage with information derived from Big Data analytics. There is also a shortage of data science experts and it is important to focus on producing a workforce with the appropriate skills.

Course objectives

This course will introduce many aspects of the Big Data era and the importance of data science, as well as many practical methods with examples.

Course Learning Outcomes

	Learning objectives	Learning outcomes
1	To understand the context, role and implications of Big data.	Explain the characteristics and context of Big Data era and its implications on all industries and living
2	To discuss various data types and methods of analyze them	Discuss data types and the main analytical challenges today
3	To provide knowledge about potential of exploiting Big data	Identify possible areas and fields where Big data and Big data analysis has major influence
4	To develop some specific knowledge and skills in Big data management and Big data strategy creation	Explain a set of key functions, roles and competences in organizations to benefit from Big Data.
5	To provide knowledge how to gain competitive advantage using Big data analytics	Discuss importance of a Big Data strategy for capturing the value of massive quantities of data
	To gain knowledge and skills related to various analytics methods	Explain the design of contemporary Big Data architectures and discuss their benefits.
	To understand and create a machine learning model	Explain fundamental Big Data algorithms and processing techniques
		Apply the appropriate techniques to discover valuable information from Big data.
		Understand the main machine learning methods in relation to Big Data and apply it on given dataset

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Lectures – PowerPoint	5	0.2
• Lectures – Video material	15	0.6
• Lectures – Reading part	20	0.8
• Preparations for the lectures	10	0.4
• Individual study for additional activities (presentations, seminars, projects, debating, reporting etc.)	50	2
• Learning for final assignment + time for solving	50	2

Course materials and textbooks

Main literature:

1. Bernard Marr, Data strategy - how to profit from a world of big data, analytics and artificial intelligence, Kogan Page; 2nd edition (2022)
2. Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results, Wiley, 2016

Additional literature:

1. Peter Bruce and Andrew Bruce , Practical Statistics for Data Scientists, O'Reilly Media,2017

SSBM web platform

Presentations, seminars and additional materials for class participation

Web

<https://bernardmarr.com/> <https://journalofbigdata.springeropen.com/>
<https://www.analyticsvidhya.com/> <https://www.guru99.com/what-is-big-data.html> <https://towardsdatascience.com/> <https://hadoop.apache.org/>

INNOVATIVE TECHNOLOGY DRIVEN VALUE CREATION

Course Description

This class will explore the different forms of technologies available for the Hospitality Industry and their evolution through time, with a particular emphasis on the creation of value for a company. Case studies will be analysed based on adapted strategic models in order to reflect on the creation of value such as the traditional Michael Porter's 5 forces (1979) and the value chain (cited in Murders, 2019) , but also the technology acceptance model (Venkatesh and Davies, 1986-2000), and the Business Technology Standards (Huovinen et al., 2021). With this class, students will acquire contemporary knowledge on how to use best the latest technologies to drive value for businesses.

Students are required to follow online lectures and case studies and be prepared for the course by reading the given reading materials. Students are expected to actively watch all online lectures and case studies and are recommended to consult with the listed literature.

Lecturers are available for clarifying students' queries, are open for discussion and reachable via e-mail or online meeting tools (Teams, Zoom...)

Course objectives

- Students will acquire extensive knowledge about types of technologies

- Students will acquire knowledge about the different forms of value creation.
- Students will get a knowledge on technology value creation application in real-life business scenario.

Course Learning Outcomes

The aim of the course is to provide to students an extensive definition of the types of technologies available for companies. A specific focus will be done on concrete applications of technologies and their definition will be based on the potential business opportunity.

The aim of the course is also to link each type of technology previously defined according to the relevant business opportunity, with the concrete measure of value created. Different forms of value will be covered with specific case studies, such as external values (brand image, customer loyalty) and internal values (cost leadership, process efficiency). Relevant Key performance indicators will be associated to the type of value created through innovative technology.

Knowing what innovative technology can create the best value of our business is key to success. The students will learn to identify key opportunities, to evaluate them from different angles and will learn how to apply a suitable value creation strategy, based case studies and best industry practices.

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
• Lectures – video part	5	0.2
• Lectures -practical part repeating and reading	75	3.0
• Preparations for the lectures	45	1.8
• Learning for final assignment + time for solving	50	2.0

Course materials and textbooks

Main literature:

Bergeron P. (2019) Making the Scale: The Relationship Builder vs. The Challenger, National Apartment Association [blog] available at <https://www.naahq.org/making-sale-relationship-builder-vs-challenger#:~:text=The%20difference%20is%20best%20described,when%20the%20buyer%20is%20uncomfortable>, last accessed on August 23rd, 2023.

Bossen K. (2020) Emotion AI - the artificial emotional intelligence, Dmexco [online article] last assessed the 21st of May, 2021, available at [<https://dmexco.com/stories/emotion-ai-the-artificial-emotional-intelligence/#:~:text=Emotion%20AI%2C%20also%20known%20as,emotive%20channels%20of%20human%20communication.>]

Burns, P. (2022) Entrepreneurship and small business: Start-up, growth and maturity. London: Red Globe Press an imprint of Macmillan Education Limited.

Caniëls, M.C.J. and Rietzschel, E.F. (2015) Organizing creativity: Creativity and innovation under constraints, *Creativity and Innovation Management*, 24(2), pp. 184–196. doi:10.1111/caim.12123.

Clegg, S, Carter, C, Kornberger, M and Schweitzer, J (2011) *Strategy: Theory and Practice*. London: Sage.

Chourasia S., Tyagi A., Pandey S.M., Walia R.S., Murtaza Q. (2022) Sustainability of Industry 6.0 in Global Perspective: Benefits and Challenges, *Mapan-Journal of Metrology Society of India* (June 2022) 37(2):443-452, available at <https://doi.org/10.1007/s12647-022-00541-w>

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Dana, L.-P., Salamzadeh, A. and Davis, C. (2023) Blue Ocean versus Red Ocean Strategy [Preprint]. doi:10.4135/9781071905173.

De Bruin L. (2021) Porter's Generic Strategies: Differentiation, Cost Leadership and Focus, B2U, [blog entry] available at <https://www.business-to-you.com/porter-generic-strategies-differentiation-cost-leadership-focus/>, last accessed August 19th 2023.

Gillis, M. (2023) Amazon AI, TechTarget [blog] available at [<https://www.techtarget.com/searchaws/definition/Amazon-AI>], March 2023.

Gupta S. (2023) Business Models: Inside Amazon's Growth Strategy, [podcast] by M. Brian Kenny, *Harvard Business Review*, Episode 13, July 5th 2023, available at <https://hbr.org/podcast/2023/07/inside-amazons-growth-strategy>

Grant, (1991), The Resource- Based Theory of Competitive Advantage: Implications for Strategy Formulation, *California Management Review*, 33(3):114-35

Grundy, T. (2006) Rethinking and reinventing Michael Porter's five forces model, *Strategic Change* 15 (5) pp.213-229, Chichester: Wile

Harvard Business Review (2019) *On AI, Analytics, and the New Machine Age*, Harvard Business Publishing Corporation.

Herrmann, N. and Herrmann-Nehdi, A. (2015) *The Whole brain business book: Unlocking the power of whole brain thinking in organizations, teams and individuals*. New York u.a.: McGraw-Hill.

Herrmann, N. (1995) *The creative brain*. Lake Lure, NC: Ned Herrmann Group.

Hertzfeld E. (2021) Japan's Henn na Hotel fires half its robot workforce, *Hotel Management* [blog] available at <https://www.hotelmanagement.net/tech/japan-s-henn-na-hotel-fires-half-its-robot-workforce>, last accessed on August 21st, 2023

HIS (2023) Experience efficiency and convenience at the Henn na Hotel [blog] available at https://top.his-usa.com/destination-japan/henna_hotel/, last accessed on August 20th, 2023

Hopkin, P. (2015) *Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk management*. 3rd Ed. London, KoganPage

Huovinen, J., Kolesnik K., Eckstein T., Russel N., Maijala S., Savolainen T., Pitkänen P. (2021) *Business Technology Standard: Version 4.5.1*, *Business Technology* forum [ebook], available at [<https://www.managebt.org/content/uploads/Business-Technology-Standard-20210421.pdf>]

Isabelle, D. et al. (2020) Is Porter's five forces framework still relevant? A study of the capital/labour intensity continuum via mining and IT industries, *Technology Innovation Management Review*, 10(6), pp. 28–41. doi:10.22215/timreview/1366.

Kalchbrenner N. (2016) *Grid Long Short-Term Memory*. Google Deepmind, UK. [conference paper] ICLR 2016.

Kim, W. and Mauborgne, R. (2005). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*. 1st ed. New York: Hachette Book.

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DATA VISUALIZATION AND STORYTELLING WITH DATA

Course Description

This course will cover the fundamentals of effective data-driven storytelling. Students will learn how to detect and articulate the stories behind data sets and communicate data findings in visual, oral, and written contexts for various audiences and publics. Students will become familiar with associated tools.

Students are required to follow online lectures and case studies and be prepared by reading the given reading materials. Students are expected to actively watch all online lectures and case studies.

We are always open for questions, discussions and suggestions of our students through especially e-mail communication or if necessary by telephone.

Course objectives

This course teaches students the skills necessary to be effective Data Storytellers. They will learn how to locate and download datasets, extract insights from that data and present their findings in a variety of different formats. Students will learn how to “connect the dots” in a dataset through visual data analysis and find the narrative thread that both explains what’s going on and engages their audience in a story about the data. Moreover, students will learn how to tell data stories in different ways for different audiences and stakeholders.

Course Learning Outcomes

By the end of this course, students will be able to:

- Detect and understand the stories within datasets and extract insights from that data.
- Effectively present data visually to enhance audience comprehension of findings and insights.
- Apply data visualization best practices to their work, including choosing the right chart type for the situation and avoiding visualization techniques that can mislead an audience.
- Act as a data-driven visual storyteller for optimal presentation of trends, patterns and insights
- Effectively communicate insights about data in various formats, including oral presentations, written reports and interactive visualizations
- Prepare professional business reports and make effective client presentations of their work
- Explain the importance of communication skills and competencies for individuals who serve as data analysts

Overview of student workload

Learning activities	Number of Hours	ECTS Allocation
Lectures – videos	3	0.1
Lectures – reading part	30	1.2
Preparations for the lectures	20	0.9
Reading part (literature and pre- reading links)	50	2.0
Learning for final assignment + time for solving	25	1.0

Course materials and textbooks

Main literature:

1. Storytelling with Data: A Data Visualization Guide for Business Professionals by Cole Nussbaumer Knaflic
2. J. C. Van Horne, J. M. Wachowicz, Jr. Fundamentals of Corporate finance (Prentice Hall),.
3. J. Berk, P. DeMarzo : Corporate finance. Pearson Education.

Additional literature:

1. Asquith, P., & Weiss, L. A. Lessons in corporate finance: A case studies approach to financial tools, financial policies, and valuation. John Wiley & Sons.
2. Wahlen, J., Baginski, S., & Bradshaw, M. Financial reporting, financial statement analysis and valuation. Nelson Education.
3. Corporate finance Raymond Am. Brooks, pearson
4. Corporate finance Sheridan Titman, Arthur aj. Keown and John d. Martin, Pearson

SSBM web platform

Presentations, seminars and additional materials for class participation (case studies, excel cases etc)