Advanced Master's Degree

MBA in Artificial Intelligence

Accreditation/Membership

BUSINESS GRADUATES ASSOCIATION
MEMBER

tech global university

tech global university

Advanced Master's Degree
MBA in Artificial Intelligence

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Accreditation: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/artificial-intelligence/advanced-master-degree/advanced-master-degree-mba-in-artificial-intelligence**

Index

01

Introduction to the Program

Artificial Intelligence has significantly transformed the business landscape over recent decades. Therefore, innovative digital tools and data-driven solutions have revolutionized the way companies operate, enabling greater efficiency and personalization. Although the development of AI has progressed at a rapid pace, innovation remains the key to maintaining competitiveness in this field. Therefore, the need for highly qualified business leaders who understand and apply these technologies is essential to maximize their potential across different sectors. In this regard, this postgraduate program from TECH has been designed to equip professionals with the skills and strategies necessary to lead in this constantly evolving environment.

A comprehensive and 100% online program, exclusive to TECH, with an international perspective backed by our membership in the Business Graduates Association"

AI has become an essential pillar for innovation in areas such as healthcare, commerce, education, and industry. Therefore, its ability to automate processes, analyze large volumes of data, and predict trends positions it as a strategic element in informed decision-making. Consequently, this university program not only addresses the technical concepts behind AI, but also delves into its practical application to develop solutions that generate a positive impact on businesses and society.

In this context, the content of this Advanced Master's Degree MBA in Artificial Intelligence covers both the fundamentals and advanced applications of AI, including machine learning, natural language processing, and computer vision. Likewise, it integrates topics related to leadership, Strategic Management, and business development to provide specialists with a comprehensive perspective. In this way, this approach ensures that graduates are prepared to address complex challenges and lead digital transformation projects within their organizations. In addition, the program includes business management techniques aimed at optimizing operations and improving professionals' competitiveness in the labor market.

On the other hand, this university qualification features a 100% online methodology, allowing professionals to manage their time independently and combine ongoing learning with their daily responsibilities. As a distinctive conclusion to this exclusive study plan, graduates will gain access to Masterclasses delivered by International Guest Directors, who will share their experience, strategic vision, and real-world cases from a global and inspiring perspective.

Furthermore, thanks to TECH's membership in the **Business Graduates Association (BGA)**, students will have access to exclusive and up-to-date resources that will strengthen their continuous learning and professional development, as well as discounts on professional events that will facilitate networking with industry experts. Additionally, they will be able to expand their professional network by connecting with specialists from different regions, fostering the exchange of knowledge and new job opportunities.

This **Advanced Master's Degree MBA in Artificial Intelligence** contains the most complete and up-to-date university program on the market. Its most notable features are:

- Development of practical cases presented by experts in Artificial Intelligence
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Artificial Intelligence management
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

The keynote Masterclasses offer an exceptional opportunity to learn directly from key figures on the international stage, leaders who are at the forefront of technology"

The wide variety of practical resources in this Advanced Master's Degree MBA in Artificial Intelligence will allow you to apply theoretical concepts effectively in real-world environments"

TECH offers an innovative and up-to-date methodology designed to maximize your learning and professional development.

A fully online program that provides the flexibility to study from anywhere and at the time that best suits your needs.

Its faculty includes professionals from the field of Artificial Intelligence, who contribute their professional experience to the program, as well as renowned specialists from leading professional associations and prestigious universities.

Its multimedia content, developed using the latest educational technology, will enable professionals to engage in situated and contextualized learning; that is, a simulated environment that provides an immersive learning experience designed to train for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

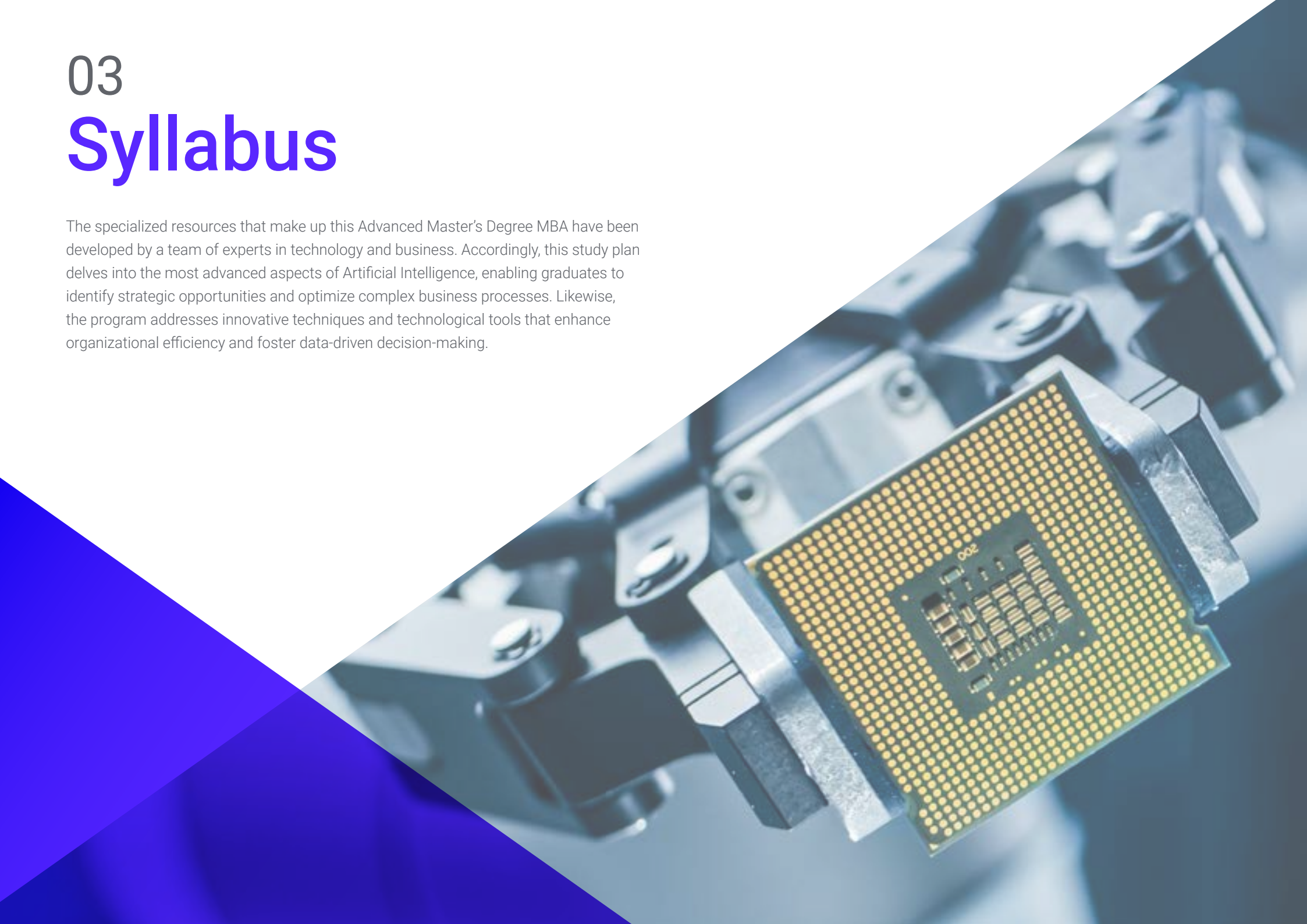
The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

03

Syllabus

The specialized resources that make up this Advanced Master's Degree MBA have been developed by a team of experts in technology and business. Accordingly, this study plan delves into the most advanced aspects of Artificial Intelligence, enabling graduates to identify strategic opportunities and optimize complex business processes. Likewise, the program addresses innovative techniques and technological tools that enhance organizational efficiency and foster data-driven decision-making.



You will apply AI solutions to maximize business performance and achieve outstanding results”

Module 1. Leadership, Ethics, and Corporate Social Responsibility

1.1. Globalization and Governance
- 1.1.1. Globalization and Trends: Market Internationalization
- 1.1.2. Economic Environment and Corporate Governance
- 1.1.3. Accountability

1.2. Leadership
- 1.2.1. Intercultural Environment
- 1.2.2. Leadership and Business Management
- 1.2.3. Management Roles and Responsibilities

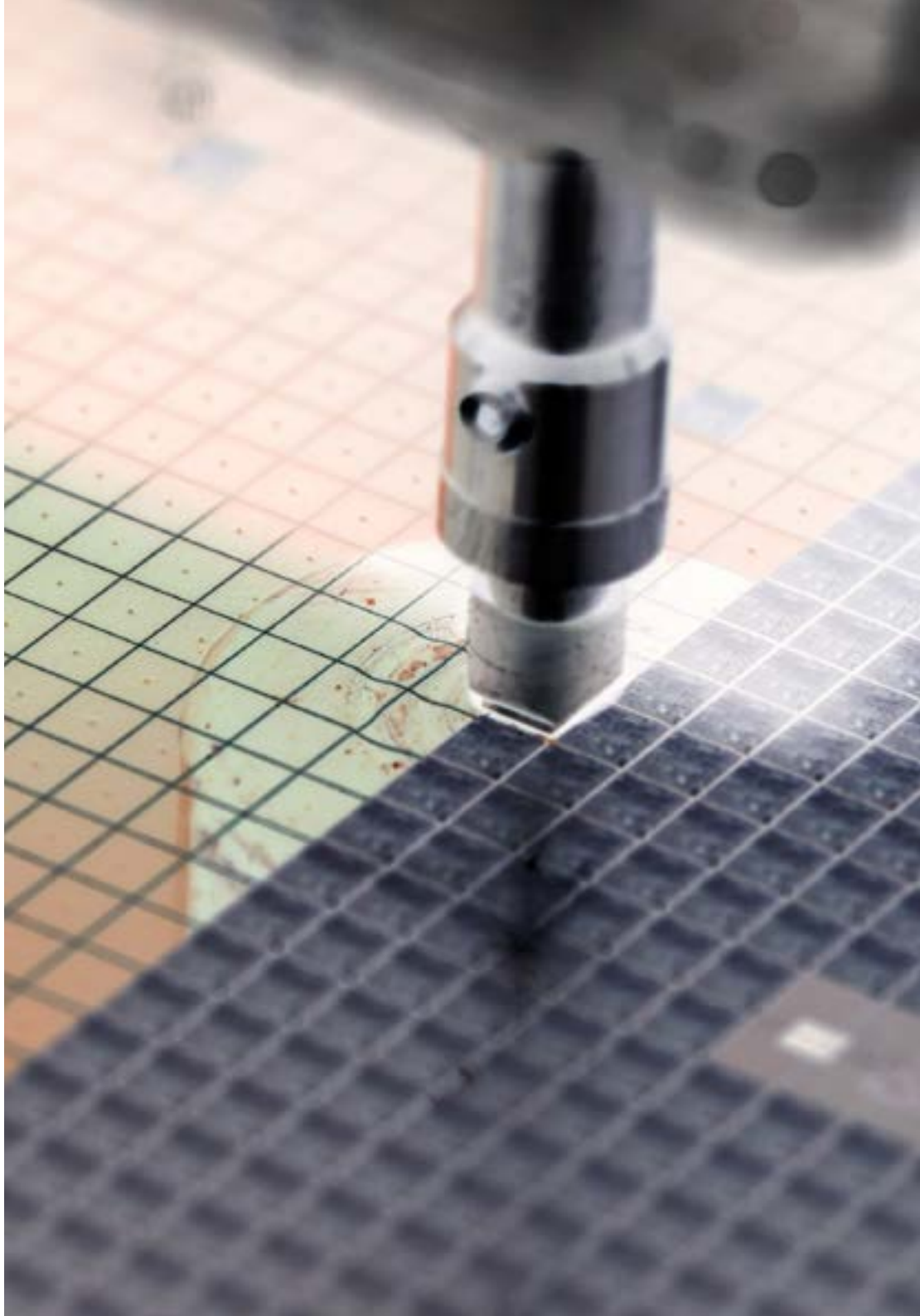
1.3. *Cross-Cultural Management*
- 1.3.1. Cultural Dimension of International Management
- 1.3.2. Globalization in Business Management
- 1.3.3. Inter-Cultural Leadership

1.4. Management and Leadership
- 1.4.1. Integrating Functional Strategies into the Global Business Strategies
- 1.4.2. Management Policy and Processes
- 1.4.3. *Society and Enterprise*

1.5. Business Ethics
- 1.5.1. Ethics and Integrity
- 1.5.2. Ethical Behavior in Companies
- 1.5.3. Deontology, Codes of Ethics and Codes of Conduct
- 1.5.4. Fraud and Corruption Prevention
- 1.5.5. Responsible Finance and Investment

1.6. Sustainability
- 1.6.1. Business and Sustainable Development
- 1.6.2. Social, Environmental, and Economic Impact
- 1.6.3. The 2030 Agenda and the SDGs

1.7. Corporate Social Responsibility
- 1.7.1. Corporate Social Responsibility
- 1.7.2. Roles and Responsibilities
- 1.7.3. Implementing Corporate Social Responsibility



1.8. Systems and Tools for Responsible Management
- 1.8.1. Social Responsibility Management Systems
- 1.8.2. Integration Systems
- 1.8.3. Quality Management Systems, the Environment and Occupational Health and Safety
- 1.8.4. Audits

1.9. Multinationals and Human Rights
- 1.9.1. Globalization, Human Rights and Multinational Companies
- 1.9.2. Multinational Companies and International Law
- 1.9.3. Specific Legal Instruments

1.10. Legal Environment and Corporate Governance
- 1.10.1. International Rules on Importation and Exportation
- 1.10.2. Intellectual and Industrial Property
- 1.10.3. International Labor Law

Module 2. Strategic Management and Executive Management

2.1. Organizational Analysis and Design
- 2.1.1. Organizational Culture
- 2.1.2. Organizational Analysis
- 2.1.3. Designing the Organizational Structure

2.2. Corporate Strategy
- 2.2.1. Corporate-Level Strategy
- 2.2.2. Types of Corporate-Level Strategies
- 2.2.3. Determining the Corporate Strategy
- 2.2.4. Corporate Strategy and Reputational Image

2.3. Strategic Planning and Strategy Formulation
- 2.3.1. Strategic Thinking
- 2.3.2. Strategic Planning and Formulation
- 2.3.3. Sustainability and Corporate Strategy

2.4. Implementation of Corporate Strategies
- 2.4.1. *Driving Corporate Strategy*
- 2.4.2. *Pacing Corporate Strategy*
- 2.4.3. *Framing Corporate Strategy*

2.5. New Business Development and Business Consolidation
- 2.5.1. Developing New Businesses
- 2.5.2. Growing and Consolidating Companies

2.6. Planning and Strategy
- 2.6.1. The Relevance of Strategic Direction in the Management Control Process
- 2.6.2. Analysis of the Environment and the Organization
- 2.6.3. Lean Management

2.7. Strategy Models and Patterns
- 2.7.1. Wealth, Value, and Return on Investments
- 2.7.2. Corporate Strategy: Methods
- 2.7.3. Growing and Consolidating the Corporate Strategy

2.8. Competitive Strategy
- 2.8.1. Market Analysis
- 2.8.2. Sustainable Competitive Advantage
- 2.8.3. Return on Investment

2.9. Strategic Management
- 2.9.1. Strategic Mission, Vision, and Values
- 2.9.2. The *Balanced Scorecard*
- 2.9.3. Analyzing, Monitoring, and Evaluating the Corporate Strategy
- 2.9.4. Strategic Management and Reporting

2.10. Strategy Implementation
- 2.10.1. Implementing the Strategy: Objectives, Actions, and Impacts
- 2.10.2. Supervision and Strategic Alignment
- 2.10.3. Continuous Improvement Approach

2.11. Strategy Execution
- 2.11.1. Indicator Systems and Process Approach
- 2.11.2. Strategic Map
- 2.11.3. Differentiation and Alignment

2.12. Strategic Communication
- 2.12.1. Interpersonal Communication
- 2.12.2. Communication Skills and Influence
- 2.12.3. Internal Communication and Comprehensive Communication Plan
- 2.12.4. Barriers to Business Communication

Module 3. People and Talent Management

3.1. Organizational Behavior
- 3.1.1. Organizational Theory
- 3.1.2. Key Factors for Change in Organizations
- 3.1.3. Corporate Strategies, Types, and Knowledge Management
- 3.1.4. Organizational Culture
- 3.1.5. Behavior and Organizational Changes
- 3.1.6. People in Organizations
- 3.1.7. Strategic Thinking and Systems
- 3.1.8. Planning and Management of Human Resources Department
- 3.1.9. Strategic Organizational Design
- 3.1.10 Financial and Accounting Basis for HR

3.2. People in Organizations
- 3.2.1. Quality of Work Life and Psychological Well-Being
- 3.2.2. Work Teams and Meeting Management
- 3.2.3. Coaching and Team Management
- 3.2.4. Managing Equality and Diversity

3.3. Strategic People Management
- 3.3.1. Job Design, Recruitment, and Selection
- 3.3.2. Human Resources Strategic Plan: Design and Implementation
- 3.3.3. Job Analysis: Design and Selection of People
- 3.3.4. Training and Professional Development

3.4. Job Analysis

3.5. Selection, Group Dynamics, and Human Resources Recruitment

3.6. Competency-Based Human Resources Management

3.7. Performance Evaluation and Performance Management

3.8. Training Management

3.9. Talent Management

3.10. Innovation in Talent and People Management

3.11. Motivation

3.12. *Employer Branding*

3.13. Development of High-Performance Teams

3.14. Management and Leadership Development
- 3.14.1. Management Skills: 21st Century Skills and Abilities
- 3.14.2. Non-Managerial Skills
- 3.14.3. Map of Skills and Abilities
- 3.14.4. Leadership and People Management

3.15. Time Management
- 3.15.1. Planning, Organization and Control
- 3.15.2. The Methodology of Time Management
- 3.15.3. Action Plans
- 3.15.4. Tools for Efficient Time Management

3.16. Change Management
- 3.16.1. Performance Analysis
- 3.16.2. Strategic Approach
- 3.16.3. Change Management: Key Factors, Process Design and Management
- 3.16.4. Continuous Improvement Approach

3.17. Negotiation and Conflict Management
- 3.17.1. Negotiation Objectives: Differentiating Elements
- 3.17.2. Effective Negotiation Techniques
- 3.17.3. Conflicts: Factors and Types
- 3.17.4. Efficient Conflict Management: Negotiation and Communication
- 3.17.5. Interpersonal Communication
- 3.17.6. Effective Negotiation Techniques
- 3.17.7. Interpersonal Conflicts
- 3.17.8. Intercultural Negotiation

3.18. Executive Communication
- 3.18.1. Performance Analysis
- 3.18.2. Leading Change. Resistance to Change
- 3.18.3. Managing Change Processes
- 3.18.4. Multicultural Team Management

3.19. Human Resources Management and Occupational Risk Prevention Teams
- 3.19.1. Human Resources Management
- 3.19.2. Team Management
- 3.19.3. Occupational Risk Prevention Plan

3.20. Productivity, Attraction, Retention and Activation of Talent
- 3.20.1. Productivity
- 3.20.2. Levers for Productivity
- 3.20.3. Talent Attraction, Retention and Attraction Levers

3.21. Monetary Compensation vs. Non-Cash
- 3.21.1. Wage Band Models
- 3.21.2. Non-Cash Compensation Models
- 3.21.3. Monetary Compensation vs. Non-Cash

3.22. Team Management and People Performance
- 3.22.1. Multicultural and Multidisciplinary Environment
- 3.22.2. Team and People Management
- 3.22.3. Coaching and People Performance
- 3.22.4. Executive Meetings: Planning and Time Management

3.23. Knowledge and Talent Management
- 3.23.1. Identifying Knowledge and Talent in Organizations
- 3.23.2. Corporate Knowledge and Talent Management Models
- 3.23.3. Creativity and Innovation

3.24. Transforming Human Resources in the Digital Era
- 3.24.1. New Forms of Organization and New Work Methodologies
- 3.24.2. Digital Skills and *Professional Brand*
- 3.24.3. HR and Data Analysis
- 3.24.4. Managing People in the Digital Age

Module 4. Economic and Financial Management

4.1. Economic Environment
- 4.1.1. Organizational Theory
- 4.1.2. Key Factors for Change in Organizations
- 4.1.3. Corporate Strategies, Types, and Knowledge Management

4.2. Company Financing
- 4.2.1. Sources of Financing
- 4.2.2. Types of Financing Costs
  - 4.2.2.1. Equity Cost of Capital
  - 4.2.2.2. Cost of Debt
  - 4.2.2.3. The Weighted Average Cost of Capital (WACC) in the Valuation of Investment Projects

4.3. Managerial Accounting
- 4.3.1. International Accounting Framework
- 4.3.2. Introduction to the Accounting Cycle
- 4.3.3. Company Financial Statements

4.4. From General Accounting to Cost Accounting
- 4.4.1. Elements of Cost Calculation
- 4.4.2. Stock in General Accounting and Cost Accounting
- 4.4.3. Expense in General Accounting and Cost Accounting
- 4.4.4. Costs Classification

4.5. Information Systems and Business Intelligence
- 4.5.1. Fundamentals and Classification
- 4.5.2. Cost Allocation Phases and Methods
- 4.5.3. Choice of Cost Center and Impact

4.6. Budget and Management Control
- 4.6.1. Budgetary Planning
- 4.6.2. Management Control: Design and Objectives
- 4.6.3. Supervision and Reporting

4.7. Treasury Management
- 4.7.1. Accounting Working Capital and Necessary Working Capital
- 4.7.2. Calculation of Operating Cash Requirements
- 4.7.3. Credit Management
- 4.7.4. Management of Funds, Wealth and Family Offices

4.8. Corporate Tax Liability
- 4.8.1. Corporate Tax Responsibility
- 4.8.2. Tax Procedure: A Case-Country Approach

4.9. Corporate Control Systems
- 4.9.1. Types of Control
- 4.9.2. Regulatory *Compliance*
- 4.9.3. Internal Auditing
- 4.9.4. External Auditing

4.10. Financial Management
- 4.10.1. Introduction to Financial Management
- 4.10.2. Financial Management and Corporate Strategy
- 4.10.3. Chief Financial Officer (CFO): Executive Competencies

4.11. Financial Planning
- 4.11.1. Business Models and Financing Needs
- 4.11.2. Financial Analysis Tools
- 4.11.3. Short-Term Financial Planning
- 4.11.4. Long-Term Financial Planning

4.12. Corporate Financial Strategy
- 4.12.1. Corporate Financial Investments
- 4.12.2. Strategic Growth: Types

4.13. Macroeconomic Context
- 4.13.1. Macroeconomic Analysis
- 4.13.2. Economic Indicators
- 4.13.3. Economic Cycle

4.14. Strategic Financing
- 4.14.1. Banking Business: Current Environment
- 4.14.2. Risk Analysis and Management

4.15. Money and Capital Markets
- 4.15.1. Fixed Income Market
- 4.15.2. Variable Income Market
- 4.15.3. Company Valuation

4.16. Financial Analysis and Planning
- 4.16.1. Analysis of the Balance Sheet
- 4.16.2. Income Statement Analysis
- 4.16.3. Profitability Analysis

4.17. Analyzing and Solving Cases/Problems
- 4.17.1. Problem-Solving Methodology
- 4.17.2. Case Method

Module 5. Operations and Logistics Management

5.1. Operations Direction and Management
- 5.1.1. Define the Operations Strategy
- 5.1.2. Supply Chain Planning and Control
- 5.1.3. Indicator Systems

5.2. Industrial Organization and Logistics
- 5.2.1. Industrial Organization Department
- 5.2.2. Internal Logistics Department
- 5.2.3. External Logistics Department

5.3. Structure and Types of Production (MTS, MTO, ATO, ETO etc.)
- 5.3.1. Production Systems and Strategies
- 5.3.2. Inventory Management System
- 5.3.3. Production Indicators

5.4. Structure and Types of Procurement
- 5.4.1. Function of Procurement
- 5.4.2. Procurement Management
- 5.4.3. The Buying Decision Process

5.5. Economic Control of Purchasing
- 5.5.1. Advanced Warehouse Design
- 5.5.2. *Picking* and *Sorting*
- 5.5.3. Material Flow Control

5.6. Warehouse Operations Control
- 5.6.1. Warehouse Operations
- 5.6.2. Inventory Control and Location Systems
- 5.6.3. Stock Management Techniques

5.7. Purchasing Management
- 5.7.1. Inventory Management
- 5.7.2. Warehouse Management
- 5.5.3. Purchasing and Procurement Management

5.8. Typologies of the Supply Chain (SCM)
- 5.8.1. Supply Chain
- 5.8.2. Benefits of Supply Chain Management
- 5.8.3. Logistical Management in the Supply Chain

5.9. Supply Chain Management
- 5.9.1. Costs and Efficiency of the Operations Chain
- 5.9.2. Change in Demand Patterns
- 5.9.3. Change in Operations Strategy

5.10. Interactions Between the SCM and All Other Departments
- 5.10.1. Areas to Consider in the Interaction
- 5.10.2. SCM Interrelations
- 5.10.3. Integration Problems in the SCM

5.11. Logistics Costs
- 5.11.1. Costs to Consider According to Each Area
- 5.11.2. Problems with Logistics Costs
- 5.11.3. Optimizing Logistic Costs

5.12. Profitability and Efficiency of Logistics Chains: KPIs
- 5.12.1. Profitability and Efficiency of Mediations
- 5.12.2. General Indicators of Logistic Chains
- 5.12.3. Specific Indicators

5.13. Logistics Processes
- 5.13.1. Organization and Management by Processes
- 5.13.2. Procurement, Production, Distribution
- 5.13.3. Quality, Quality Costs and Tools
- 5.13.4. After-Sales Service

5.14. Transportation Logistics and Customer Distribution
- 5.14.1. Demand Analysis and Forecasting
- 5.14.2. Sales Forecasting and Planning
- 5.14.3. *Collaborative Planning, Forecasting, and Replenishment*

5.15. Logistics and Customers
- 5.15.1. Demand Analysis and Forecasting
- 5.15.2. Sales Forecasting and Planning
- 5.15.3. *Collaborative Planning, Forecasting, and Replenishment*

5.16. International Logistics
- 5.16.1. Customs, Export and Import Processes
- 5.16.2. Forms and Methods of International Payment
- 5.16.3. International Logistics Platforms

5.17. Outsourcing of Operations
- 5.17.1. Customs, Export and Import Processes
- 5.17.2. Forms and Methods of International Payment
- 5.17.3. International Logistics Platforms

5.18. Competitiveness in Operations
- 5.18.1. Innovation in Operations as a Competitive Advantage in the Company
- 5.18.2. Emerging Technologies and Sciences
- 5.18.3. Information Systems in Operations

5.19. Quality Management
- 5.19.1. Total Quality
- 5.19.2. ISO 9001:15 Quality Management System
- 5.19.3. Integrated Management System
- 5.19.4. Excellence in Management: EFQM Model
- 5.19.5. Quality Tools

Module 6. Information Systems Management

6.1. Technological Environment
- 6.1.1. Business Information Systems
- 6.1.2. Strategic Decisions
- 6.1.3. The Role of the CIO

6.2. Information Systems and Technologies in the Company
- 6.2.1. The Evolution of the IT Model
- 6.2.2. Organization and IT Departments
- 6.2.3. Information Technology and Economic Environment

6.3. Corporate Strategy and Technological Strategy
- 6.3.1. Creating Value for Customers and Shareholders
- 6.3.2. Strategic IS/IT Decisions
- 6.3.3. Corporate Strategy vs. Technology and Digital Strategy

6.4. Information Systems Management
- 6.4.1. Company and Industry Sector Analysis
- 6.4.2. Internet-Based Business Models
- 6.4.3. The Value of IT in a Company

6.5. Information Technology Strategic Planning
- 6.5.1. The Process of Strategic Planning
- 6.5.2. Formulating the IS Strategy
- 6.5.3. Strategy Implementation Plan

6.6. Information Systems for Decision-Making
- 6.6.1. *Business Intelligence*
- 6.6.2. *Data Warehouse*
- 6.6.3. Balanced Scorecard (BSC)

6.7. Information Systems and Business Intelligence
- 6.7.1. CRM and Business Intelligence
- 6.7.2. Business Intelligence Project Management
- 6.7.3. Business Intelligence Architecture

6.8. Corporate Business Intelligence
- 6.8.1. The World of Data
- 6.8.2. Relevant Concepts
- 6.8.3. Main Characteristics
- 6.8.4. Solutions in Today's Market
- 6.8.5. Overall Architecture of a BI Solution
- 6.8.6. Cybersecurity in BI and Data Science

6.9. New Business Concept
- 6.9.1. Why BI
- 6.9.2. Obtaining Information
- 6.9.3. BI in the Different Departments of the Company
- 6.9.4. Reasons to Invest in BI

6.10. BI Tools and Solutions
- 6.10.1. Choosing the Best Tool
- 6.10.2. Microsoft Power BI, MicroStrategy and Tableau
- 6.10.3. SAP BI, SAS BI and Qlikview
- 6.10.4. Prometheus

6.11. BI Project Planning and Management
- 6.11.1. First Steps to Define a BI Project
- 6.11.2. BI Solution for Your Company
- 6.11.3. Requirements and Objectives

6.12. Corporate Management Applications
- 6.12.1. Technology-Based Business Models
- 6.12.2. Innovation Abilities
- 6.12.3. Redesigning the Value Chain Processes

6.13. Digital Transformation
- 6.13.1. E-Commerce Strategic Plan
- 6.13.2. Logistics Management and Customer Service in E-Commerce
- 6.13.3. E-Commerce as an Opportunity for Internationalization

6.14. Technology and Trends
- 6.14.1. Social Media Strategies
- 6.14.2. Optimizing Service Channels and Customer Support
- 6.14.3. Digital Regulation

6.15. IT Outsourcing
- 6.15.1. Mobile E-Commerce
- 6.15.2. Design and Usability
- 6.15.3. E-Commerce Operations

Module 7. Commercial Management, Strategic Marketing, and Corporate Communication

7.1. Commercial Management
- 7.1.1. Macro Concept of Innovation
- 7.1.2. Types of Innovation
- 7.1.3. Continuous and Discontinuous Innovation
- 7.1.4. Training and Innovation

7.2. Marketing
- 7.2.1. Innovation and Corporate Strategy
- 7.2.2. Global Innovation Project: Design and Management
- 7.2.3. Innovation Workshops

7.3. Strategic Marketing Management
- 7.3.1. The Methodology Lean Startup
- 7.3.2. Innovative Business Initiative: Stages
- 7.3.3. Financing Arrangements
- 7.3.4. Model Tools: Empathy Map, Canvas Model, and Metrics
- 7.3.5. Growth and Loyalty

7.4. Digital Marketing and E-Commerce

7.5. *Managing Digital Business*

7.6. Digital Marketing to Reinforce a Brand

7.7. Digital Marketing Strategy
- 7.7.1. Innovation Opportunities
- 7.7.2. Feasibility Study and Proposal Specification
- 7.7.3. Project Definition and Design
- 7.7.4. Project Implementation
- 7.7.5. Project Closure

7.8. Digital Marketing for Customer Acquisition and Retention
7.9. Managing Digital Campaigns
7.10. Online Marketing Plan
7.11. Blended Marketing
7.12. Sales and Communication Strategy
7.13. Corporate Communication in Human Resources
7.14. Corporate Communication Strategy
7.15. Digital Communication and Reputation
- 7.15.1. Crisis Management and Online Corporate Reputation
- 7.15.2. Online Reputation Report
- 7.15.3. Netiquette and Good Practices on Social Media
- 7.15.4. Branding and Networking 2.0

Module 8. Market Research, Advertising and Commercial Management

8.1. Market Research (Commercial Management)
- 8.1.1. Sales Management
- 8.1.2. Commercial Strategy
- 8.1.3. Sales and Negotiation Techniques
- 8.1.4. Management of Sales Teams

8.2. Quantitative Research Methods and Techniques
- 8.2.1. Variables and Measurement Scales
- 8.2.2. Information Sources
- 8.2.3. Sampling Techniques
- 8.2.4. The Treatment and Analysis of Data

8.3. Qualitative Research Methods and Techniques
- 8.3.1. Direct Techniques: *Focus Group*
- 8.3.2. Anthropological Techniques
- 8.3.3. Indirect Techniques
- 8.3.4. The Two Face Mirror and the Delphi Method

8.4. Market Segmentation
- 8.4.1. Market Segmentation Concept
- 8.4.2. Utility and Segmentation Requirements
- 8.4.3. Market Typologies
- 8.4.4. Concept and Analysis of the Demand
- 8.4.5. Segmentation and Criteria
- 8.4.6. Defining the Target Audience

8.5. Research Project Management
- 8.5.1. Information Analysis Tools
- 8.5.2. Developing an Expectation Management Plan
- 8.5.3. Assessing the Feasibility of Projects

8.6. International Market Research
- 8.6.1. Introduction to International Market Research
- 8.6.2. International Market Research Process
- 8.6.3. The Importance of Secondary Sources in International Research

8.7. Feasibility Studies
- 8.7.1. Obtaining Information on Purchasing Behavior and Motives
- 8.7.2. Analysis and Evaluation of the Competitive Offer
- 8.7.3. Market Structure and Potential
- 8.7.4. Purchase Intention
- 8.7.5. Feasibility Results

8.8. Advertising
- 8.8.1. Marketing and the Impact on the Company
- 8.8.2. Basic Variables of Marketing
- 8.8.3. Marketing Plan

8.9. Development of the Marketing Plan
- 8.9.1. Analysis and Diagnosis
- 8.9.2. Strategic Decisions
- 8.9.3. Operational Decisions

8.10. Promotion and Merchandising Strategies
- 8.10.1. Advertising Management
- 8.10.2. Communication and Media Plan
- 8.10.3. Merchandising as a Marketing Technique
- 8.10.4. *Visual Merchandising*

8.11. Media Planning
- 8.11.1. Sources of Innovation
- 8.11.2. Current Trends in Marketing
- 8.11.3. Marketing Tools
- 8.11.4. Marketing Strategy and Communication with Customers

8.12. Fundamentals of Commercial Management
- 8.12.1. Internal and External Analysis. SWOT Analysis
- 8.12.2. Sector and Competitive Analysis
- 8.12.3. The Canvas Model

8.13. Commercial Negotiation
8.14. Decision-Making in Commercial Management
8.15. Sales Network Management
8.16. Implementation of the Commercial Function
8.17. Key Account Management
8.18. Financial and Budgetary Management

Module 9. Innovation and Project Management

9.1. Innovation
- 9.1.1. Macro Concept of Innovation
- 9.1.2. Types of Innovation
- 9.1.3. Continuous and Discontinuous Innovation
- 9.1.4. Training and Innovation

9.2. Innovation Strategy
- 9.2.1. Innovation and Corporate Strategy
- 9.2.2. Global Innovation Project: Design and Management
- 9.2.3. Innovation Workshops

9.3. Creation of a Startup
- 9.3.1. From the Idea to the Business Model
- 9.3.2. Partners
- 9.3.3. Legal Considerations
- 9.3.4. Organization and Culture
- 9.3.5. Venture Capital and Entrepreneurial Management

9.4. Business Model Design and Validation
- 9.4.1. The Methodology Lean Startup
- 9.4.2. Innovative Business Initiative: Stages
- 9.4.3. Financing Arrangements
- 9.4.4. Model Tools: Empathy Map, Canvas Model, and Metrics
- 9.4.5. Growth and Loyalty

9.5. Project Management
- 9.5.1. Innovation Opportunities
- 9.5.2. Feasibility Study and Proposal Specification
- 9.5.3. Project Definition and Design
- 9.5.4. Project Implementation
- 9.5.5. Project Closure

9.6. Project Change Management: Training Management
9.7. Project Communication Management
9.8. Traditional and Innovative Methodologies
9.9. Project Management for Startups
9.10. Project Risk Management Planning

Module 10. Executive Management

10.1. *General Management*
- 10.1.1. The Concept of General Management
- 10.1.2. The General Manager's Action
- 10.1.3. The Chief Executive Officer and Their Functions
- 10.1.4. Transforming the Work of Management

10.2. Executive Management
- 10.2.1. Integrating Functional Strategies into the Global Business Strategies
- 10.2.2. Executive Management and Process Development
- 10.2.3. Management Policy and Processes
- 10.2.4. *Society and Enterprise*
- 10.2.5. Knowledge Management

10.3. People in Organizations
- 10.3.1. Quality of Work Life and Psychological Well-Being
- 10.3.2. Work Teams and Meeting Management
- 10.3.3. Coaching and Team Management
- 10.3.4. Managing Equality and Diversity

10.4. Public Speaking and Spokesperson Education
- 10.4.1. Interpersonal Communication
- 10.4.2. Communication Skills and Influence
- 10.4.3. Communication Barriers

10.5. Personal and Organizational Communication
- 10.5.1. Communication and Objectives
- 10.5.2. Applying Communication Skills
- 10.5.3. Communication in Organizations
- 10.5.4. Personal and Organizational Communication Tools
- 10.5.5. Development of a Corporate Communication Plan
- 10.5.6. Communication Department within the Organization
- 10.5.7. Advantages of Internal Communication
- 10.5.8. External Communication Strategies
- 10.5.9. Corporate Communication 2.0
- 10.5.10. Crisis Communication Management

10.6. Management and Leadership Development
- 10.6.1. Concept of Management Development
- 10.6.2. Concept of Leadership
- 10.6.3. Leadership Theories
- 10.6.4. Leadership Styles
- 10.6.5. Intelligence in Leadership
- 10.6.6. The Challenges of Today's Leader

10.7. Leadership 2.0
- 10.7.1. Leadership and Leadership Styles
- 10.7.2. Motivation
- 10.7.3. Emotional Intelligence
- 10.7.4. Skills and Abilities of the Leader 2.0
- 10.7.5. Efficient Meetings

10.8. Analyzing and Solving Cases/Problems
- 10.8.1. Problem-Solving Methodology
- 10.8.2. Case Method
- 10.8.3. Positioning and Decision Making

10.9. Negotiation and Conflict Resolution
- 10.9.1. Effective Negotiation Techniques
- 10.9.2. Interpersonal Conflicts
- 10.9.3. Intercultural Negotiation

10.10. Time Management
- 10.10.1. Planning, Organization and Control
- 10.10.2. The Methodology of Time Management
- 10.10.3. Action Plans
- 10.10.4. Tools for Efficient Time Management

Module 11. Fundamentals of Artificial Intelligence

11.1. History of Artificial Intelligence
- 11.1.1. When Do We Start Talking About Artificial Intelligence?
- 11.1.2. References in Film
- 11.1.3. Importance of Artificial Intelligence
- 11.1.4. Technologies that Enable and Support Artificial Intelligence

11.2. Artificial Intelligence in Games
- 11.2.1. Game Theory
- 11.2.2. Minimax and Alpha-Beta Pruning
- 11.2.3. Simulation: Monte Carlo

11.3. Neural Networks
- 11.3.1. Biological Foundations
- 11.3.2. Computational Model
- 11.3.3. Supervised and Unsupervised Neural Networks
- 11.3.4. Simple Perceptron
- 11.3.5. Multilayer Perceptron

11.4. Genetic Algorithms
- 11.4.1. History
- 11.4.2. Biological Basis
- 11.4.3. Problem Encoding
- 11.4.4. Generation of the Initial Population
- 11.4.5. Main Algorithm and Genetic Operators
- 11.4.6. Evaluation of Individuals: *Fitness*

11.5. Thesauri, Vocabularies, Taxonomies
- 11.5.1. Vocabularies
- 11.5.2. Taxonomies
- 11.5.3. Thesauri
- 11.5.4. Ontologies
- 11.5.5. Knowledge Representation: Semantic Web

11.6. Semantic Web
- 11.6.1. Specifications: RDF, RDFS and OWL
- 11.6.2. Inference/ Reasoning
- 11.6.3. *Linked Data*

11.7. Expert Systems and DSS
- 11.7.1. Expert Systems
- 11.7.2. Decision Support Systems

11.8. Chatbots and Virtual Assistants
- 11.8.1. Types of Assistants: Voice and Text Assistants
- 11.8.2. Fundamental Parts for the Development of an Assistant: Intents, Entities and Dialog Flow
- 11.8.3. Integrations: Web, Slack, WhatsApp, Facebook
- 11.8.4. Assistant Development Tools: *Dialog Flow, Watson Assistant*

11.9. AI Implementation Strategy

11.10. Future of Artificial Intelligence
- 11.10.1. Understand How to Detect Emotions Using Algorithms
- 11.10.2. Creating a Personality: Language, Expressions and Content
- 11.10.3. Trends of Artificial Intelligence
- 11.10.4. Reflections

Module 12. Types and Data Life Cycle

12.1. Statistics
- 12.1.1. Statistics: Descriptive Statistics, Statistical inferential
- 12.1.2. Population, Sample, Individual
- 12.1.3. Variables: Definition, Measurement Scales

12.2. Types of Statistical Data
- 12.2.1. By Type
  - 12.2.1.1. Quantitative: Continuous Data and Discrete Data
  - 12.2.1.2. Qualitative. Binomial Data, Nominal Data and Ordinal Data
- 12.2.2. By Form
  - 12.2.2.1. Numerical
  - 12.2.2.2. Text
  - 12.2.2.3. Logical
- 12.2.3. By Source
  - 12.2.3.1. Primary
  - 12.2.3.2. Secondary

12.3. Data Life Cycle
- 12.3.1. Life Cycle Stages
- 12.3.2. Life Cycle Milestones
- 12.3.3. FAIR Principles

12.4. Initial Stages of the Cycle
- 12.4.1. Goal Definition
- 12.4.2. Determination of Required Resources
- 12.4.3. Gantt Chart
- 12.4.4. Data Structure

12.5. Data Collection
- 12.5.1. Data Collection Methodology
- 12.5.2. Data Collection Tools
- 12.5.3. Data Collection Channels

12.6. Data Cleaning
- 12.6.1. Data Cleaning Phases
- 12.6.2. Data Quality
- 12.6.3. Data Manipulation (using R)

12.7. Data Analysis, Interpretation and Evaluation of Results
- 12.7.1. Statistical Measures
- 12.7.2. Relationship Indices
- 12.7.3. Data Mining

12.8. Datawarehouse
- 12.8.1. Components of a Data Warehouse
- 12.8.2. Design
- 12.8.3. Aspects to Consider

12.9. Data Availability
- 12.9.1. Access
- 12.9.2. Usefulness
- 12.9.3. Safety

12.10. Regulatory Aspects
- 12.10.1. Data Protection Law
- 12.10.2. Best Practices
- 12.10.3. Other Regulatory Aspects

Module 13. Data in Artificial Intelligence

13.1. Data Science
- 13.1.1. Data Science
- 13.1.2. Advanced Tools for Data Scientists

13.2. Data, Information and Knowledge
- 13.2.1. Data, Information and Knowledge
- 13.2.2. Types of Data
- 13.2.3. Data Sources

13.3. From Data to Information
- 13.3.1. Data Analysis
- 13.3.2. Types of Analysis
- 13.3.3. Extraction of Information from a Dataset

13.4. Extraction of Information Through Visualization
- 13.4.1. Visualization as an Analysis Tool
- 13.4.2. Visualization Methods
- 13.4.3. Visualization of a Data Set

13.5. Data Quality
- 13.5.1. Quality Data
- 13.5.2. Data Cleaning
- 13.5.3. Basic Data Preprocessing

13.6. *Dataset*
- 13.6.1. Dataset Enrichment
- 13.6.2. The Curse of Dimensionality
- 13.6.3. Modification of Our Data Set

13.7. Unbalance
- 13.7.1. Classes of Unbalance
- 13.7.2. Unbalance Mitigation Techniques
- 13.7.3. Balancing a Dataset

13.8. Unsupervised Models
- 13.8.1. Unsupervised Model
- 13.8.2. Methods
- 13.8.3. Classification with Unsupervised Models

13.9. Supervised Models
- 13.9.1. Supervised Model
- 13.9.2. Methods
- 13.9.3. Classification with Supervised Models

13.10. Tools and Good Practices
- 13.10.1. Good Practices for Data Scientists
- 13.10.2. The Best Model
- 13.10.3. Useful Tools

Module 14. Data Mining. Selection, Preprocessing and Transformation

14.1. Statistical Inference
- 14.1.1. Descriptive Statistics vs. Statistical Inference
- 14.1.2. Parametric Procedures
- 14.1.3. Non-Parametric Procedures

14.2. Exploratory Analysis
- 14.2.1. Descriptive Analysis
- 14.2.2. Visualization
- 14.2.3. Data Preparation

14.3. Data Preparation
- 14.3.1. Integration and Data Cleaning
- 14.3.2. Normalization of Data
- 14.3.3. Transforming Attributes

14.4. Missing Values
- 14.4.1. Treatment of Missing Values
- 14.4.2. Maximum Likelihood Imputation Methods
- 14.4.3. Missing Value Imputation Using Machine Learning

14.5. Noise in the Data
- 14.5.1. Noise Classes and Attributes
- 14.5.2. Noise Filtering
- 14.5.3. The Effect of Noise

14.6. The Curse of Dimensionality
- 14.6.1. *Oversampling*
- 14.6.2. *Undersampling*
- 14.6.3. Multidimensional Data Reduction

14.7. From Continuous to Discrete Attributes
- 14.7.1. Continuous Data vs. Discreet Data
- 14.7.2. Discretization Process

14.8. The Data
- 14.8.1. Data Selection
- 14.8.2. Prospects and Selection Criteria
- 14.8.3. Selection Methods

14.9. Instance Selection
- 14.9.1. Methods for Instance Selection
- 14.9.2. Prototype Selection
- 14.9.3. Advanced Methods for Instance Selection

14.10. Data Preprocessing in Big Data Environments

Module 15. Algorithms and Complexity in Artificial Intelligence

15.1. Introduction to Algorithm Design Strategies
- 15.1.1. Recursion
- 15.1.2. Divide and Conquer
- 15.1.3. Other Strategies

15.2. Efficiency and Analysis of Algorithms
- 15.2.1. Efficiency Measures
- 15.2.2. Measuring the Size of the Input
- 15.2.3. Measuring Execution Time
- 15.2.4. Worst, Best and Average Case
- 15.2.5. Asymptotic Notation
- 15.2.6. Criteria for Mathematical Analysis of Non-Recursive Algorithms
- 15.2.7. Mathematical Analysis of Recursive Algorithms
- 15.2.8. Empirical Analysis of Algorithms

15.3. Sorting Algorithms
- 15.3.1. Concept of Sorting
- 15.3.2. Bubble Sorting
- 15.3.3. Sorting by Selection
- 15.3.4. Sorting by Insertion
- 15.3.5. Sorting by Merge (Merge_Sort)
- 15.3.6. Sorting Quickly (Quick_Sort)

15.4. Algorithms with Trees
- 15.4.1. Tree Concept
- 15.4.2. Binary Trees
- 15.4.3. Tree Paths
- 15.4.4. Representing Expressions
- 15.4.5. Ordered Binary Trees
- 15.4.6. Balanced Binary Trees

15.5. Algorithms Using Heaps
- 15.5.1. Heaps
- 15.5.2. The Heapsort Algorithm
- 15.5.3. Priority Queues

15.6. Graph Algorithms
- 15.6.1. Representation
- 15.6.2. Traversal in Width
- 15.6.3. Depth Travel
- 15.6.4. Topological Sorting

15.7. Greedy Algorithms
- 15.7.1. Greedy Strategy
- 15.7.2. Elements of the Greedy Strategy
- 15.7.3. Currency Exchange
- 15.7.4. Traveler's Problem
- 15.7.5. Backpack Problem

15.8. Minimal Path Finding
- 15.8.1. The Minimum Path Problem
- 15.8.2. Negative Arcs and Cycles
- 15.8.3. Dijkstra's Algorithm

15.9. Greedy Algorithms on Graphs
- 15.9.1. Minimum Spanning Tree
- 15.9.2. Prim's Algorithm
- 15.9.3. Kruskal's Algorithm
- 15.9.4. Complexity Analysis

15.10. *Backtracking*
- 15.10.1. Backtracking
- 15.10.2. Alternative Techniques

Module 16. Intelligent Systems

16.1. Agent Theory
- 16.1.1. Concept History
- 16.1.2. Agent Definition
- 16.1.3. Agents in Artificial Intelligence
- 16.1.4. Agents in Software Engineering

16.2. Agent Architectures
- 16.2.1. The Reasoning Process of an Agent
- 16.2.2. Reactive Agents
- 16.2.3. Deductive Agents
- 16.2.4. Hybrid Agents
- 16.2.5. Comparison

16.3. Information and Knowledge
- 16.3.1. Difference between Data, Information and Knowledge
- 16.3.2. Data Quality Assessment
- 16.3.3. Data Collection Methods
- 16.3.4. Information Acquisition Methods
- 16.3.5. Knowledge Acquisition Methods

16.4. Knowledge Representation
- 16.4.1. The Importance of Knowledge Representation
- 16.4.2. Definition of Knowledge Representation According to Roles
- 16.4.3. Knowledge Representation Features

16.5. Ontologies
- 16.5.1. Introduction to Metadata
- 16.5.2. Philosophical Concept of Ontology
- 16.5.3. Computing Concept of Ontology
- 16.5.4. Domain Ontologies and Higher-Level Ontologies
- 16.5.5. How to Build an Ontology

16.6. Ontology Languages and Ontology Creation Software
- 16.6.1. Triple RDF, *Turtle* and N
- 16.6.2. RDF Schema
- 16.6.3. OWL
- 16.6.4. SPARQL
- 16.6.5. Introduction to Ontology Creation Tools
- 16.6.6. Installing and Using Protégé

16.7. Semantic Web
- 16.7.1. Current and Future Status of the Semantic Web
- 16.7.2. Semantic Web Applications

16.8. Other Knowledge Representation Models
- 16.8.1. Vocabularies
- 16.8.2. Global Vision
- 16.8.3. Taxonomies
- 16.8.4. Thesauri
- 16.8.5. Folksonomy
- 16.8.6. Comparison
- 16.8.7. Mind Maps

16.9. Knowledge Representation Assessment and Integration
- 16.9.1. Zero-Order Logic
- 16.9.2. First-Order Logic
- 16.9.3. Descriptive Logic
- 16.9.4. Relationship between Different Types of Logic
- 16.9.5. Prolog: Programming Based on First-Order Logic

16.10. Semantic Reasoners, Knowledge-Based Systems and Expert Systems
- 16.10.1. Concept of Reasoner
- 16.10.2. Reasoner Applications
- 16.10.3. Knowledge-Based Systems
- 16.10.4. MYCIN: History of Expert Systems
- 16.10.5. Expert Systems Elements and Architecture
- 16.10.6. Creating Expert Systems

Module 17. Machine Learning and Data Mining

17.1. Introduction to Knowledge Discovery Processes and Basic Concepts of Machine Learning
- 17.1.1. Key Concepts of Knowledge Discovery Processes
- 17.1.2. Historical Perspective of Knowledge Discovery Processes
- 17.1.3. Stages of the Knowledge Discovery Processes
- 17.1.4. Techniques Used in Knowledge Discovery Processes
- 17.1.5. Characteristics of Good Machine Learning Models
- 17.1.6. Types of Machine Learning Information
- 17.1.7. Basic Learning Concepts
- 17.1.8. Basic Concepts of Unsupervised Learning

17.2. Data Exploration and Preprocessing
- 17.2.1. Data Processing
- 17.2.2. Data Processing in the Data Analysis Flow
- 17.2.3. Types of Data
- 17.2.4. Data Transformations
- 17.2.5. Visualization and Exploration of Continuous Variables
- 17.2.6. Visualization and Exploration of Categorical Variables
- 17.2.7. Correlation Measures
- 17.2.8. Most Common Graphic Representations
- 17.2.9. Introduction to Multivariate Analysis and Dimensionality Reduction

17.3. Decision Trees
- 17.3.1. ID Algorithm
- 17.3.2. Algorithm C
- 17.3.3. Overtraining and Pruning
- 17.3.4. Result Analysis

17.4. Evaluation of Classifiers
- 17.4.1. Confusion Matrices
- 17.4.2. Numerical Evaluation Matrices
- 17.4.3. Kappa Statistic
- 17.4.4. ROC Curves

17.5. Classification Rules
- 17.5.1. Rule Evaluation Measures
- 17.5.2. Introduction to Graphic Representation
- 17.5.3. Sequential Overlay Algorithm

17.6. Neural Networks
- 17.6.1. Basic Concepts
- 17.6.2. Simple Neural Networks
- 17.6.3. Backpropagation Algorithm
- 17.6.4. Introduction to Recurrent Neural Networks

17.7. Bayesian Methods
- 17.7.1. Basic Probability Concepts
- 17.7.2. Bayes' Theorem
- 17.7.3. Naive Bayes
- 17.7.4. Introduction to Bayesian Networks

17.8. Regression and Continuous Response Models

17.8.1. Simple Linear Regression
17.8.2. Multiple Linear Regression
17.8.3. Logistic Regression
17.8.4. Regression Trees
17.8.5. Introduction to Support Vector Machines (SVM)
17.8.6. Goodness-of-Fit Measures
17.9. *Clustering*
17.9.1. Basic Concepts
17.9.2. Hierarchical Clustering
17.9.3. Probabilistic Methods
17.9.4. EM Algorithm
17.9.5. B-Cubed Method
17.9.6. Implicit Methods
17.10. Text Mining and Natural Language Processing (NLP)
17.10.1. Basic Concepts
17.10.2. Corpus Creation
17.10.3. Descriptive Analysis
17.10.4. Introduction to Feelings Analysis

Module 18. Neural Networks, the Basis of Deep Learning

18.1. Deep Learning
18.1.1. Types of Deep Learning
18.1.2. Applications of Deep Learning
18.1.3. Advantages and Disadvantages of Deep Learning
18.2. Operations
18.2.1. Sum
18.2.2. Product
18.2.3. Transfer
18.3. Layers
18.3.1. Input Layer
18.3.2. Hidden Layer
18.3.3. Output Layer
18.4. Layer Bonding and Operations
18.4.1. Architecture Design
18.4.2. Connection between Layers
18.4.3. Forward Propagation
18.5. Construction of the First Neural Network
18.5.1. Network Design
18.5.2. Establish the Weights
18.5.3. Network Training
18.6. Trainer and Optimizer
18.6.1. Optimizer Selection
18.6.2. Establishment of a Loss Function
18.6.3. Establishing a Metric
18.7. Application of the Principles of Neural Networks
18.7.1. Activation Functions
18.7.2. Backward Propagation
18.7.3. Parameter Adjustment
18.8. From Biological to Artificial Neurons
18.8.1. Functioning of a Biological Neuron
18.8.2. Transfer of Knowledge to Artificial Neurons
18.8.3. Establish Relations Between the Two
18.9. Implementation of MLP (Multilayer Perceptron) with Keras
18.9.1. Definition of the Network Structure
18.9.2. Model Compilation
18.9.3. Model Training
18.10. Fine Tuning Hyperparameters of Neural Networks
18.10.1. Selection of the Activation Function
18.10.2. Set the Learning Rate
18.10.3. Adjustment of Weights

Module 19. Deep Neural Networks Training

19.1. Gradient Problems
19.1.1. Gradient Optimization Techniques
19.1.2. Stochastic Gradients
19.1.3. Weight Initialization Techniques

19.2. Reuse of Pre-Trained Layers
- 19.2.1. Transfer Learning Training
- 19.2.2. Feature Extraction
- 19.2.3. Deep Learning

19.3. Optimizers
- 19.3.1. Stochastic Gradient Descent Optimizers
- 19.3.2. Optimizers Adam and RMSprop
- 19.3.3. Moment Optimizers

19.4. Learning Rate Programming
- 19.4.1. Automatic Learning Rate Control
- 19.4.2. Learning Cycles
- 19.4.3. Smoothing Terms

19.5. Overfitting
- 19.5.1. Cross-Validation
- 19.5.2. Regularization
- 19.5.3. Evaluation Metrics

19.6. Practical Guidelines
- 19.6.1. Model Design
- 19.6.2. Selection of Metrics and Evaluation Parameters
- 19.6.3. Hypothesis Testing

19.7. *Transfer Learning*
- 19.7.1. Transfer Learning Training
- 19.7.2. Feature Extraction
- 19.7.3. Deep Learning

19.8. *Data Augmentation*
- 19.8.1. Image Transformations
- 19.8.2. Synthetic Data Generation
- 19.8.3. Text Transformation

19.9. Practical Application of Transfer Learning
- 19.9.1. Transfer Learning Training
- 19.9.2. Feature Extraction
- 19.9.3. Deep Learning

19.10. Regularization
- 19.10.1. L and L
- 19.10.2. Regularization by Maximum Entropy
- 19.10.3. *Dropout*

Module 20. Model Customization and Training with TensorFlow

20.1. TensorFlow
- 20.1.1. Using the TensorFlow Library
- 20.1.2. Model Education with TensorFlow
- 20.1.3. Operations with Graphs in TensorFlow

20.2. TensorFlow and NumPy
- 20.2.1. NumPy Computational Environment for TensorFlow
- 20.2.2. Using NumPy Arrays with TensorFlow
- 20.2.3. NumPy Operations for TensorFlow Graphs

20.3. Model Customization and Training Algorithms
- 20.3.1. Building Custom Models with TensorFlow
- 20.3.2. Management of Training Parameters
- 20.3.3. Use of Optimization Techniques for Training

20.4. TensorFlow Functions and Graphs
- 20.4.1. Functions with TensorFlow
- 20.4.2. Use of Graphs for Model Training
- 20.4.3. Optimization of Graphs with TensorFlow Operations

20.5. Data Loading and Preprocessing with TensorFlow
- 20.5.1. Loading Datasets with TensorFlow
- 20.5.2. Data Preprocessing with TensorFlow
- 20.5.3. Using TensorFlow Tools for Data Manipulation

20.6. The tf.data API
- 20.6.1. Using the tf.data API for Data Processing
- 20.6.2. Construction of Data Streams with tf.data
- 20.6.3. Using the tf.data API for Model Training

20.7. The TFRecord Format
- 20.7.1. Using the TFRecord API for Data Serialization
- 20.7.2. Loading TFRecord Files with TensorFlow
- 20.7.3. Using TFRecord Files for Model Training

20.8. Keras Preprocessing Layers
- 20.8.1. Using the Keras Preprocessing API
- 20.8.2. Preprocessing Pipelined Construction with Keras
- 20.8.3. Using the Keras Preprocessing API for Model Training

20.9. The TensorFlow Datasets Project
- 20.9.1. Using TensorFlow Datasets for Data Loading
- 20.9.2. Data Pre-Processing with TensorFlow Datasets
- 20.9.3. Using TensorFlow Datasets for Model Training

20.10. Building a Deep Learning Application with TensorFlow
- 20.10.1. Practical Application
- 20.10.2. Building a Deep Learning Application with TensorFlow
- 20.10.3. Training a Model with TensorFlow
- 20.10.4. Using the Application for the Prediction of Results

Module 21. Deep Computer Vision with Convolutional Neural Networks

21.1. The Visual Cortex Architecture
- 21.1.1. Functions of the Visual Cortex
- 21.1.2. Theories of Computational Vision
- 21.1.3. Models of Image Processing

21.2. Convolutional Layers
- 21.2.1. Reuse of Weights in Convolution
- 21.2.2. Convolution D
- 21.2.3. Activation Functions

21.3. Grouping Layers and Implementation of Grouping Layers with Keras
- 21.3.1. Pooling and Striding
- 21.3.2. *Flattening*
- 21.3.3. Types of Pooling

21.4. CNN Architecture
- 21.4.1. VGG Architecture
- 21.4.2. AlexNet Architecture
- 21.4.3. ResNet Architecture

21.5. Implementing a CNN ResNet - Using Keras
- 21.5.1. Weight Initialization
- 21.5.2. Input Layer Definition
- 21.5.3. Output Definition

21.6. Use of Pre-Trained Keras Models
- 21.6.1. Characteristics of Pre-Trained Models
- 21.6.2. Uses of Pre-Trained Models
- 21.6.3. Advantages of Pre-Trained Models

21.7. Pre-Trained Models for Transfer Learning
- 21.7.1. Transfer Learning
- 21.7.2. Transfer Learning Process
- 21.7.3. Advantages of Transfer Learning

21.8. Deep Computer Vision Classification and Localization
- 21.8.1. Image Classification
- 21.8.2. Localization of Objects in Images
- 21.8.3. Object Detection

21.9. Object Detection and Object Tracking
- 21.9.1. Object Detection Methods
- 21.9.2. Object Tracking Algorithms
- 21.9.3. Tracking and Localization Techniques

21.10. Semantic Segmentation
- 21.10.1. Deep Learning for Semantic Segmentation
- 21.10.2. Edge Detection
- 21.10.3. Rule-Based Segmentation Methods

Module 22. Natural Language Processing (NLP) with Recurrent Neural Networks (RNN) and Attention

22.1. Text Generation Using RNN
- 22.1.1. Training an RNN for Text Generation
- 22.1.2. Natural Language Generation with RNN
- 22.1.3. Text Generation Applications with RNN

22.2. Training Data Set Creation
- 22.2.1. Preparation of the Data for Training an RNN
- 22.2.2. Storage of the Training Dataset
- 22.2.3. Data Cleaning and Transformation
- 22.2.4. Sentiment Analysis

22.3. Classification of Opinions with RNN
- 22.3.1. Detection of Themes in Comments
- 22.3.2. Sentiment Analysis with Deep Learning Algorithms

22.4. Encoder-Decoder Network for Neural Machine Translation
- 22.4.1. Training an RNN for Machine Translation
- 22.4.2. Use of an Encoder-Decoder Network for Machine Translation
- 22.4.3. Improving the Accuracy of Machine Translation with RNNs

22.5. Attention Mechanisms
- 22.5.1. Application of Care Mechanisms in RNN
- 22.5.2. Use of Care Mechanisms to Improve the Accuracy of the Models
- 22.5.3. Advantages of Attention Mechanisms in Neural Networks

22.6. Transformer Models
- 22.6.1. Using Transformers Models for Natural Language Processing
- 22.6.2. Application of Transformers Models for Vision
- 22.6.3. Advantages of Transformers Models

22.7. Transformers for Vision
- 22.7.1. Use of Transformers Models for Vision
- 22.7.2. Image Data Preprocessing
- 22.7.3. Training a Transformers Model for Vision

22.8. Hugging Face's Transformers Library
- 22.8.1. Using Hugging Face's Transformers Library
- 22.8.2. Hugging Face's Transformers Library Application
- 22.8.3. Advantages of Hugging Face's Transformers Library

22.9. Other Transformers Libraries. Comparison
- 22.9.1. Comparison Between Different Transformers Libraries
- 22.9.2. Use of the Other Transformers Libraries
- 22.9.3. Advantages of the Other Transformers Libraries

22.10. Development of an NLP Application with RNN and Attention. Practical Application
- 22.10.1. Development of a Natural Language Processing Application with RNN and Attention.
- 22.10.2. Use of RNN, Attention Mechanisms and Transformers Models in the Application
- 22.10.3. Evaluation of the Practical Application

Module 23. Autoencoders, GANs and Diffusion Models

23.1. Representation of Efficient Data
- 23.1.1. Dimensionality Reduction
- 23.1.2. Deep Learning
- 23.1.3. Compact Representations

23.2. PCA Realization with an Incomplete Linear Automatic Encoder
- 23.2.1. Training Process
- 23.2.2. Implementation in Python
- 23.2.3. Use of Test Data

23.3. Stacked Automatic Encoders
- 23.3.1. Deep Neural Networks
- 23.3.2. Construction of Coding Architectures
- 23.3.3. Use of Regularization

23.4. Convolutional Autoencoders
- 23.4.1. Design of Convolutional Models
- 23.4.2. Convolutional Model Training
- 23.4.3. Results Evaluation

23.5. Noise Suppression of Automatic Encoders
- 23.5.1. Filter Application
- 23.5.2. Design of Coding Models
- 23.5.3. Use of Regularization Techniques

23.6. Sparse Automatic Encoders
- 23.6.1. Increasing Coding Efficiency
- 23.6.2. Minimizing the Number of Parameters
- 23.6.3. Using Regularization Techniques

23.7. Variational Automatic Encoders
- 23.7.1. Use of Variational Optimization
- 23.7.2. Unsupervised Deep Learning
- 23.7.3. Deep Latent Representations

23.8. Generation of Fashion MNIST Images
- 23.8.1. Pattern Recognition
- 23.8.2. Image Generation
- 23.8.3. Deep Neural Networks Training

23.9. Generative Adversarial Networks and Diffusion Models
- 23.9.1. Content Generation from Images
- 23.9.2. Modeling of Data Distributions
- 23.9.3. Use of Adversarial Networks

23.10. Implementation of the Models
- 23.10.1. Practical Application
- 23.10.2. Implementation of the Models
- 23.10.3. Use of Real Data
- 23.10.4. Results Evaluation

Module 24. Bio-Inspired Computing

24.1. Introduction to Bio-Inspired Computing
- 24.1.1. Introduction to Bio-Inspired Computing

24.2. Social Adaptation Algorithms
- 24.2.1. Bio-Inspired Computation Based on Ant Colonies
- 24.2.2. Variants of Ant Colony Algorithms
- 24.2.3. Particle Cloud Computing

24.3. Genetic Algorithms
- 24.3.1. General Structure
- 24.3.2. Implementations of the Major Operators

24.4. Space Exploration-Exploitation Strategies for Genetic Algorithms
- 24.4.1. CHC Algorithm
- 24.4.2. Multimodal Problems

24.5. Evolutionary Computing Models (I)
- 24.5.1. Evolutionary Strategies
- 24.5.2. Evolutionary Programming
- 24.5.3. Algorithms Based on Differential Evolution

24.6. Evolutionary Computation Models (II)
- 24.6.1. Evolutionary Models Based on Estimation of Distributions (EDA)
- 24.6.2. Genetic Programming

24.7. Evolutionary Programming Applied to Learning Problems
- 24.7.1. Rules-Based Learning
- 24.7.2. Evolutionary Methods in Instance Selection Problems

24.8. Multi-Objective Problems
- 24.8.1. Concept of Dominance
- 24.8.2. Application of Evolutionary Algorithms to Multi-Objective Problems

24.9. Neural Networks (I)
- 24.9.1. Introduction to Neural Networks
- 24.9.2. Practical Example with Neural Networks

24.10. Neural Networks (II)
- 24.10.1. Use Cases of Neural Networks in Medical Research
- 24.10.2. Use Cases of Neural Networks in Economics
- 24.10.3. Use Cases of Neural Networks in Artificial Vision

Module 25. Artificial Intelligence: Strategies and Applications

25.1. Financial Services
- 25.1.1. The Implications of Artificial Intelligence (AI) in Financial Services. Opportunities and Challenges
- 25.1.2. Use Cases
- 25.1.3. Potential Risks Related to the Use of AI
- 25.1.4. Potential Future Developments/Uses of AI

25.2. Implications of Artificial Intelligence in Healthcare Service
- 25.2.1. Implications of AI in the Healthcare Sector. Opportunities and Challenges
- 25.2.2. Use Cases

25.3. Risks Related to the Use of AI in Healthcare Service
- 25.3.1. Potential Risks Related to the Use of AI
- 25.3.2. Potential Future Developments/Uses of AI

25.4. *Retail*
- 25.4.1. Implications of AI in Retail. Opportunities and Challenges
- 25.4.2. Use Cases
- 25.4.3. Potential Risks Related to the Use of AI
- 25.4.4. Potential Future Developments/Uses of AI

25.5. Industry
- 25.5.1. Implications of AI in Industry. Opportunities and Challenges
- 25.5.2. Use Cases

25.6. Potential Risks Related to the Use of AI in Industry
- 25.6.1. Use Cases
- 25.6.2. Potential Risks Related to the Use of AI
- 25.6.3. Potential Future Developments/Uses of AI

25.7. Public Administration
- 25.7.1. AI Implications for Public Administration. Opportunities and Challenges
- 25.7.2. Use Cases
- 25.7.3. Potential Risks Related to the Use of AI
- 25.7.4. Potential Future Developments/Uses of AI

25.8. Education
- 25.8.1. AI Implications for Education. Opportunities and Challenges
- 25.8.2. Use Cases
- 25.8.3. Potential Risks Related to the Use of AI
- 25.8.4. Potential Future Developments/Uses of AI

25.9. Forestry and Agriculture
- 25.9.1. Implications of AI in Forestry and Agriculture. Opportunities and Challenges
- 25.9.2. Use Cases
- 25.9.3. Potential Risks Related to the Use of AI
- 25.9.4. Potential Future Developments/Uses of AI

25.10. Human Resources
- 25.10.1. Implications of AI in Human Resources. Opportunities and Challenges
- 25.10.2. Use Cases
- 25.10.3. Potential Risks Related to the Use of AI
- 25.10.4. Potential Future Developments/Uses of AI

The comprehensive approach of this postgraduate program will ensure thorough preparation to face the challenges of today's business world, successfully leading in a globalized and digitalized market"

04

Teaching Objectives

This Advanced Master's Degree has been designed to provide professionals with the tools and skills necessary to apply Artificial Intelligence in their daily practice, driving professional development and significantly enhancing their business impact. Undoubtedly, a unique opportunity that will transform your career, expanding your prospects for growth and leadership in the competitive and globalized world of Artificial Intelligence.

An innovative Advanced Master's Degree that will transform your professional trajectory"

General Objectives

- Develop skills to integrate Artificial Intelligence into key business processes
- Apply machine learning techniques to optimize strategic decision-making
- Implement AI solutions to improve operational efficiency and reduce costs in companies
- Develop predictive models using AI to anticipate market trends and behaviors
- Manage AI projects from conceptualization through implementation within the company
- Develop competencies in the use of AI to optimize the company's commercial strategy
- Manage compliance with ethical and legal regulations in the implementation of AI within the organization
- Implement AI technologies to optimize quality and control of products and services
- Develop skills to manage interdisciplinary work teams in AI projects
- Apply AI to predict risks and opportunities in international markets

Specific Objectives

Module 1. Leadership, Ethics, and Corporate Social Responsibility

- Develop a critical understanding of corporate governance and its impact on business management
- Explore various leadership theories and approaches, highlighting their relevance to team leadership in business

Module 2. Strategic Management and Executive Management

- Apply the fundamental concepts of organizational analysis and design to improve company structure and efficiency
- Develop competencies in formulating and implementing corporate strategies aligned with organizational goals

Module 3. People and Talent Management

- Develop a deep understanding of organizational behavior principles and their application in managing people
- Promote the integration of talent management strategies to optimize employee performance and motivation in the organization

Module 4. Economic and Financial Management

- Acquire key knowledge of the macroeconomic environment and its influence on corporate financial decision-making
- Develop skills in financial planning, risk analysis, and treasury management to improve the company's financial sustainability

Module 5. Operations and Logistics Management

- Understand the impact of operations management and supply chain management strategies on organizational competitiveness
- Develop competencies to efficiently manage procurement, production, inventory, and distribution processes in a global environment

Module 6. Information Systems Management

- Understand the impact of technology on economic, organizational, and business environments
- Analyze the evolution of information systems and their relationship with companies' technological and digital strategies

Module 7. Commercial Management, Strategic Marketing, and Corporate Communication

- Understand the fundamental principles of marketing and their strategic application in business
- Develop the ability to design and implement digital marketing and e-commerce strategies

Module 8. Market Research, Advertising and Commercial Management

- Acquire knowledge of both qualitative and quantitative market research techniques and methods
- Develop skills to segment markets and apply research strategies to obtain relevant data

Module 9. Innovation and Project Management

- Foster creativity and innovation as key drivers of business strategy and the corporate ecosystem
- Develop skills in innovation project management, applying agile methodologies such as Scrum
- Understand and apply the concepts and phases of the startup life cycle in the context of innovative projects
- Develop competencies to manage organizational change and effectively lead innovation projects

Module 10. Executive Management

- Understand the role and functions of senior management in organizational leadership
- Develop skills in strategic decision-making, both operational and commercial

Module 11. Fundamentals of Artificial Intelligence

- Understand the historical evolution of Artificial Intelligence and its applications across different sectors, highlighting key milestones and the influence of popular culture
- Analyze the fundamental algorithms and techniques used in AI, such as games, neural networks, and genetic algorithms, understanding their biological and computational foundations

Module 12. Types and Data Life Cycle

- Understand key statistical concepts and data types, and how they are used for decision-making in data analysis
- Establish a clear understanding of the data life cycle, from collection to analysis and storage, ensuring quality and security

Module 13. Data in Artificial Intelligence

- Understand the crucial role of data in the Artificial Intelligence process, differentiating between data, information, and knowledge
- Explore data analysis techniques and how to extract meaningful information from large data sets

Module 14. Data Mining. Selection, Preprocessing and Transformation

- Acquire solid knowledge of statistical inference techniques and exploratory analysis, and how to apply them to transform and select relevant data
- Learn to manage missing values, data noise, and the curse of dimensionality, ensuring dataset integrity and quality

Module 15. Algorithms and Complexity in Artificial Intelligence

- Develop skills in designing efficient algorithms, exploring strategies such as recursion, divide and conquer, and other optimization techniques
- Understand the fundamental principles of algorithmic complexity and efficiency

Module 16. Intelligent Systems

- Address the history, definition, and application of intelligent agents in both Artificial Intelligence and software engineering
- Explore reasoning processes and the classification of agents into reactive, deliberative, and hybrid types

Module 17. Machine Learning and Data Mining

- Introduce the stages of the knowledge discovery process and the techniques used
- Teach how to process, transform, and visualize data for machine learning models

Module 18. Neural Networks, the Basis of Deep Learning

- Introduce the types and applications of deep learning and its advantages over other AI methods
- Explain the layers of neural networks (input, hidden, output) and fundamental operations such as summation and multiplication

Module 19. Deep Neural Networks Training

- Introduce techniques to address gradient-related problems in deep neural networks, including stochastic gradients
- Explain how to leverage pretrained networks and transfer learning to new tasks

Module 20. Model Customization and Training with TensorFlow

- Introduce the TensorFlow library for training and managing machine learning models
- Explain how TensorFlow works in conjunction with NumPy to handle arrays and computational graphs

Module 21. Deep Computer Vision with Convolutional Neural Networks

- Study how the human brain processes vision, with emphasis on the visual cortex and its role in image perception
- Explain the concept of convolution in neural networks, including weight sharing and activation functions
- Analyze popular convolutional network architectures such as VGG, AlexNet, and ResNet, and their applicability in computer vision
- Explore the use of pretrained models in computer vision tasks, improving performance through transfer learning

Module 22. Natural Language Processing (NLP) with Recurrent Neural Networks (RNN) and Attention

- Introduce how recurrent neural networks (RNNs) can be used for natural language text generation
- Address the use of RNNs for sentiment analysis and opinion classification in comments

Module 23. Autoencoders, GANs and Diffusion Models

- Explain dimensionality reduction techniques and deep learning methods to obtain compact data representations
- Analyze the use of variational autoencoders for unsupervised learning and the generation of deep latent representations
- Study the concept of GANs, used for content generation such as images from data distributions
- Teach how to implement and evaluate generative models, such as autoencoders and GANs, using real data

Module 24. Bio-Inspired Computing

- Study algorithms inspired by natural systems, such as ant colonies and particle swarms, to solve complex problems
- Address the principles of genetic algorithms, their structure, and the implementation of basic genetic operators

Module 25. Artificial Intelligence: Strategies and Applications

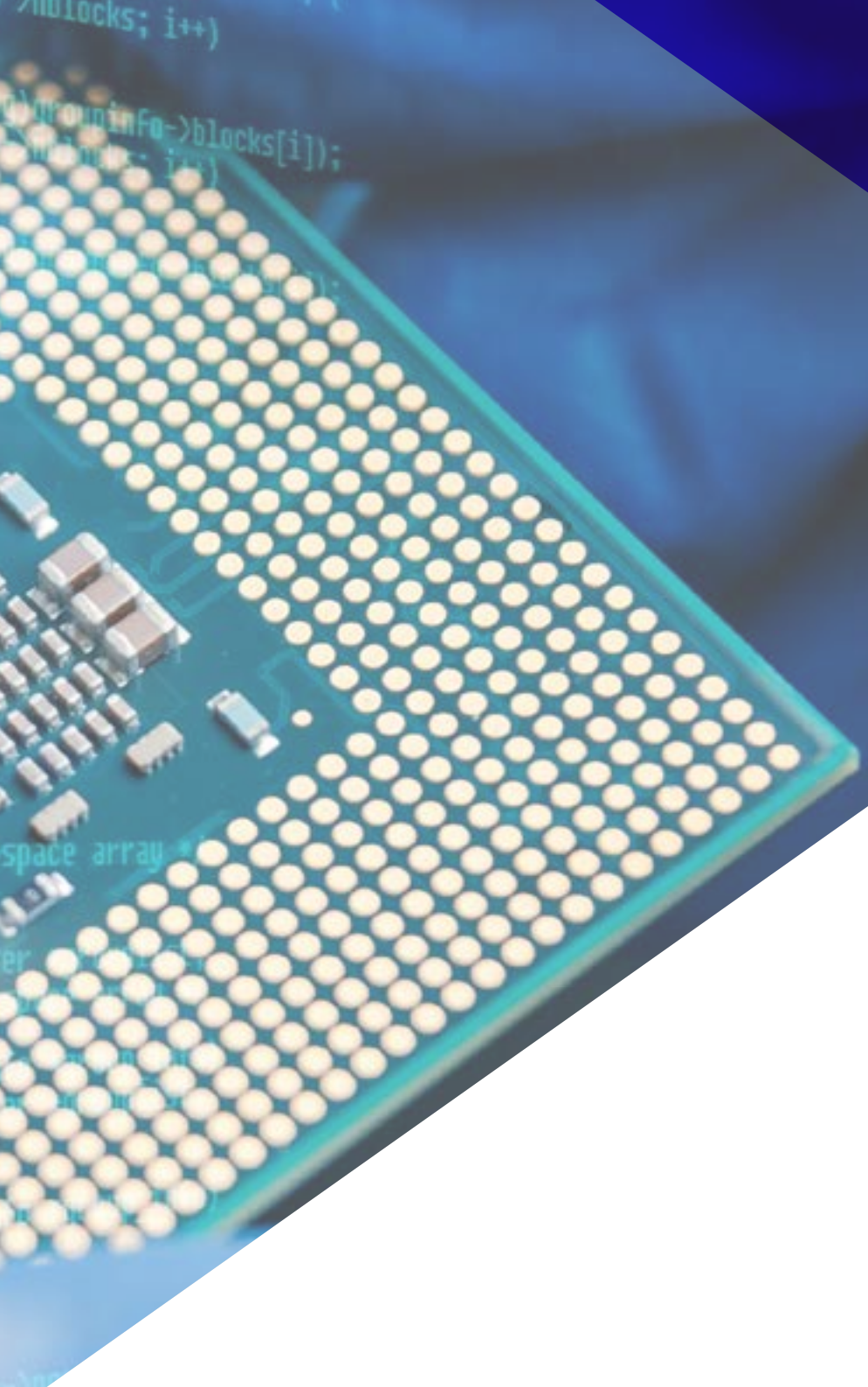
- Analyze the implications of AI in sectors such as finance and healthcare, exploring associated opportunities, challenges, and risks
- Examine the impact of AI on retail and industry, with emphasis on use cases and future risks

Master Artificial Intelligence to increase productivity, solve challenges, and improve quality of life"

05

Career Opportunities

Upon completion of this Advanced Master's Degree MBA in Artificial Intelligence, professionals will acquire a comprehensive understanding of advanced business strategies and the practical application of Artificial Intelligence across various sectors. Therefore, graduates will be prepared to design innovative technological solutions that optimize business management and performance, opening new professional opportunities in a globalized and highly competitive market.



You will apply data-driven approaches to optimize business results through Artificial Intelligence"

Graduate Profile

Graduates of this university program will be professionals with the technical and strategic competencies required to implement AI-based solutions in the business environment. Accordingly, they will be qualified to lead technological and innovation projects, perform complex data analyses, and manage human and financial resources effectively. In addition, they will possess the skills to integrate technological tools into business processes, develop effective marketing strategies, and lead multidisciplinary teams toward organizational success.

You will apply advanced knowledge and practical skills to design innovative technological strategies and solutions that optimize processes.

- **Mastery of Theoretical and Practical Knowledge:** combine in-depth theoretical knowledge with practical skills in the application of Artificial Intelligence (AI) to transform business processes, optimize operations, and enhance complex data analysis
- **Effective Communication Skills:** develop the ability to communicate complex ideas clearly and effectively, adapting language and concepts to different levels of understanding within multidisciplinary teams or when working with clients
- **Time and Resource Management:** Manage business projects effectively, optimizing resources and organizing activities to maximize performance and achieve objectives
- **Critical Thinking and Problem-Solving:** apply critical thinking to analyze complex scenarios, identify opportunities for improvement, and generate innovative AI-based solutions

After completing the university program, you will be able to apply your knowledge and skills in the following positions:

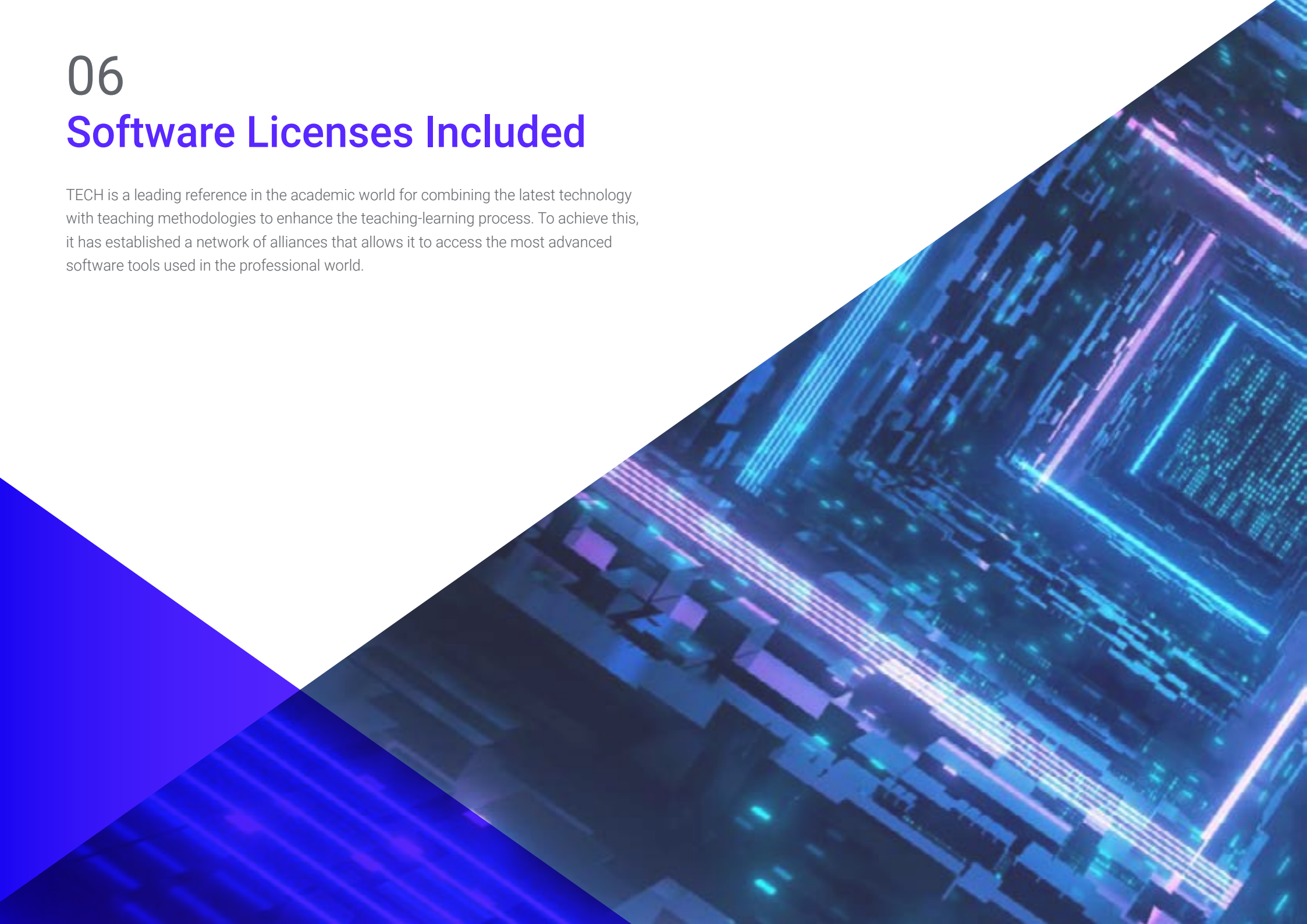
1. **Technological Innovation Director:** leader of companies' digital transformation through the implementation of Artificial Intelligence.
2. **Data Analyst:** responsible for the extraction and analysis of information to support decision-making.
3. **Artificial Intelligence Consultant:** designer of customized solutions tailored to organizational needs.
4. **Technology Project Manager:** responsible for planning and executing complex AI-based technological projects.
5. **AI Model Developer:** responsible for building advanced applications and algorithms to solve business problems.
6. **AI-Driven Digital Marketing Specialist:** developer of data-based personalized strategies to optimize customer experience and conversion.
7. **Natural Language Processing (NLP) Specialist:** expert in the development and implementation of natural language–based solutions to automate text understanding and generation.
8. **Generative Model Engineer:** responsible for designing, training, and applying Artificial Intelligence models such as autoencoders, GANs, and diffusion models for synthetic content generation, dimensionality reduction, and advanced data representation.

Complete this MBA in Artificial Intelligence and strengthen your professional profile to access strategic roles in management and innovation"

06

Software Licenses Included

TECH is a leading reference in the academic world for combining the latest technology with teaching methodologies to enhance the teaching-learning process. To achieve this, it has established a network of alliances that allows it to access the most advanced software tools used in the professional world.



Upon enrolling, you will receive, completely free of charge, academic credentials for the following professional software applications"

TECH has established a network of professional alliances with the leading providers of software applied to various professional fields. These alliances allow TECH to access hundreds of software applications and licenses, making them available to its students.

The software licenses for academic use will allow students to utilize the most advanced applications in their professional field, enabling them to become familiar with and master these tools without incurring any costs. TECH will manage the licensing process so that students can use them unlimitedly during the time they are enrolled in the Advanced Master's Degree MBA in Artificial Intelligence, and they will be able to do so completely free of charge.

TECH will provide free access to the following software applications:

Google Career Launchpad

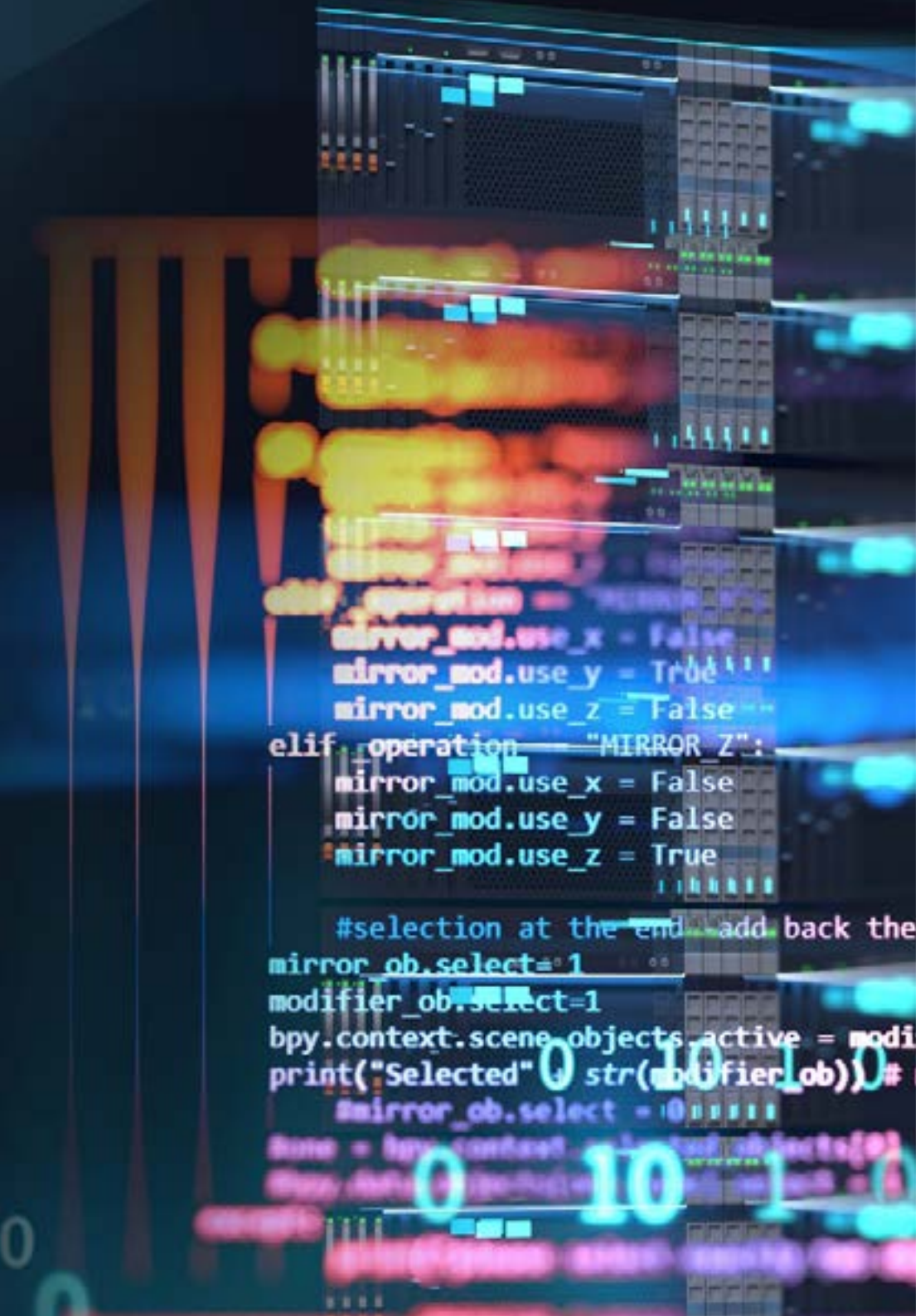
Google Career Launchpad is a solution for developing digital skills in technology and data analysis. With an estimated value of **5,000 dollars**, it is included **for free** in TECH's university program, providing access to interactive labs and certifications recognized in the industry.

This platform combines technical training with practical cases, using technologies such as BigQuery and Google AI. It offers simulated environments to work with real data, along with a network of experts for personalized guidance.

Key Features:

- **Specialized Courses:** Updated content in cloud computing, machine learning, and data analysis
- **Live Labs:** Hands-on practice with real Google Cloud tools, no additional configuration required
- **Integrated Certifications:** Preparation for official exams with international validity
- **Professional Mentoring:** Sessions with Google experts and technology partners
- **Collaborative Projects:** Challenges based on real-world problems from leading companies

In conclusion, **Google Career Launchpad** connects users with the latest market technologies, facilitating their entry into fields such as artificial intelligence and data science with industry-backed credentials.



Strategy

Strategy is a strategic planning platform designed to create, execute, and monitor business projects. Valued at **480 euros**, it is provided **free of charge** during the itinerary at TECH, offering professional technology to lead organizational transformations.

This platform simplifies team alignment through interactive *dashboards*, using Artificial Intelligence to predict trends and adjust tactics. It centralizes critical data in a secure environment, making it ideal for executives who require agility in dynamic settings.

Key Features:

- **Strategic Maps:** Design visual routes with hierarchical objectives and measurable timelines
- **Competitive Analysis:** Compare market metrics with integrated sector intelligence
- **Workflow Automation:** Schedule alerts and recurring tasks for cross-functional teams
- **ERP Integration:** Sync financial and operational data from SAP, Oracle, or Microsoft Dynamics
- **Benchmarking:** Evaluates performance against international standards with certified templates

Ultimately, **Strategy** enhances operational excellence with methodologies endorsed by Fortune 500 companies, preparing leaders to revolutionize industries, from consultancies to multinationals.

07

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

"At TECH you will NOT have live classes (which you might not be able to attend)"

The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

> *TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"*

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

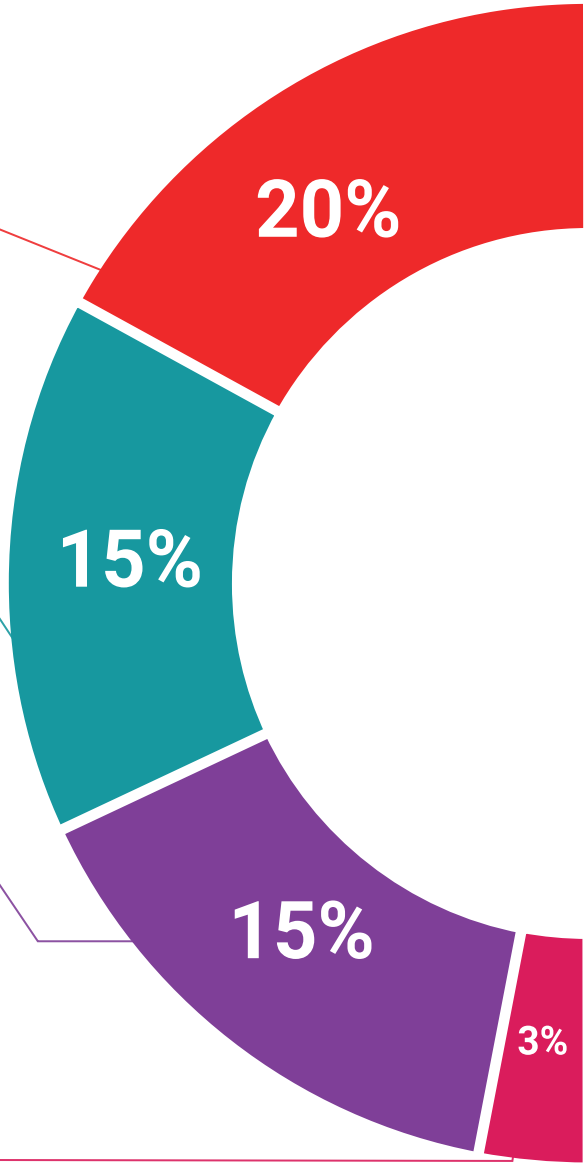
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

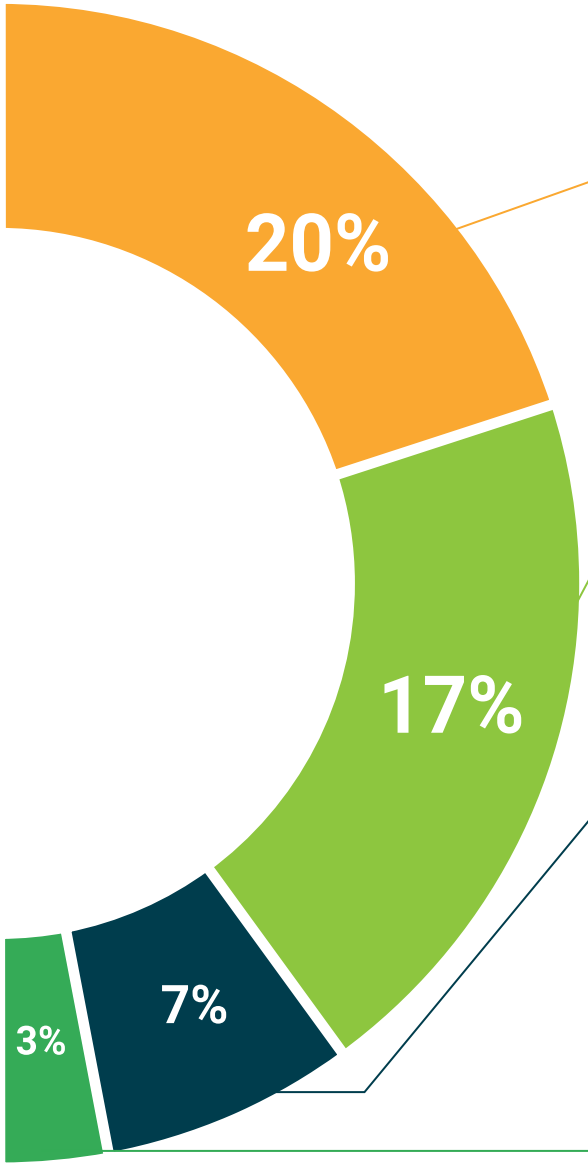
Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge. This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field.
Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.
Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

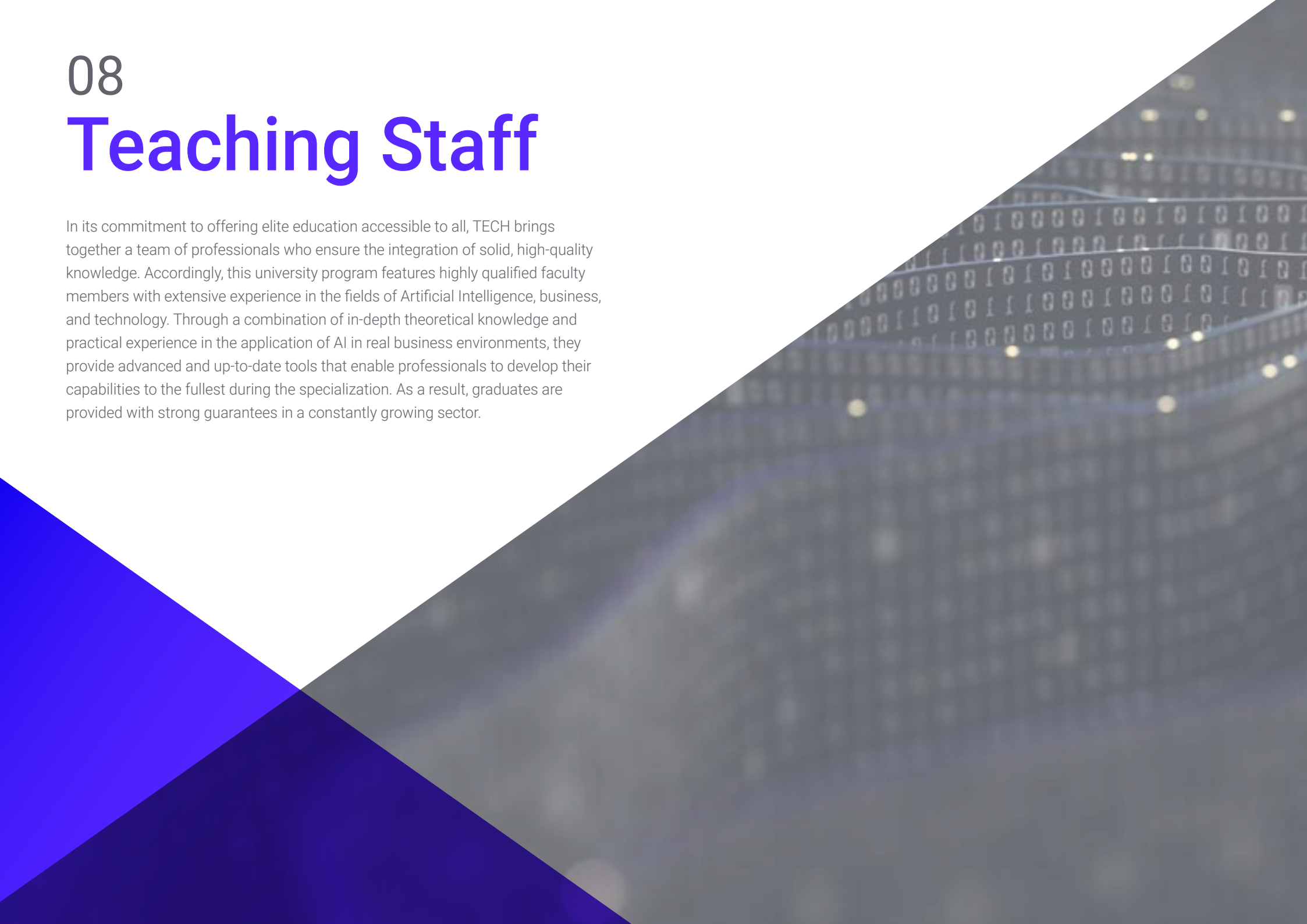
Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.

08

Teaching Staff

In its commitment to offering elite education accessible to all, TECH brings together a team of professionals who ensure the integration of solid, high-quality knowledge. Accordingly, this university program features highly qualified faculty members with extensive experience in the fields of Artificial Intelligence, business, and technology. Through a combination of in-depth theoretical knowledge and practical experience in the application of AI in real business environments, they provide advanced and up-to-date tools that enable professionals to develop their capabilities to the fullest during the specialization. As a result, graduates are provided with strong guarantees in a constantly growing sector.



Succeed alongside the very best and acquire the skills necessary to lead successfully in a globalized and digitalized market"

International Guest Director

With over 20 years of experience in designing and leading global talent acquisition teams, Jennifer Dove is an expert in recruitment **and** technology strategy**.** Throughout her career, she has held senior positions in several technology organizations within ***Fortune 50*** **companies**such as **NBCUniversal** and **Comcast**. Her background has allowed her to excel in competitive, high-growth environments.

As Vice President of Talent Acquisition **at** Mastercard **she is responsible for overseeing talent onboarding strategy and execution, collaborating with business leaders and** Human Resources **Managers to meet operational and strategic hiring objectives. In particular, she aims to build** diverse, inclusive **and** high-performing teams **that drive innovation and growth of the company's products and services.** In addition, she is adept at using tools to attract and retain the best people from around the world. **She is also responsible for** amplifying Mastercard's employer brand **and value proposition through publications, events and social media.**

Jennifer Dove has demonstrated her commitment to continuous professional development by actively participating in networks of Human Resources **professionals and contributing to the onboarding of numerous employees at different companies. After earning her bachelor's degree in** Organizational Communication**from the University of** Miami**, she has held management positions in recruitment for companies in various areas.**

On the other hand, it has been recognized for its ability to lead organizational transformations, integrate technologies **into** recruitment processes **and develop leadership programs that prepare institutions for future challenges. She has also successfully implemented** occupational wellness programs **that have significantly increased employee satisfaction and retention.**

Ms. Dove, Jennifer

- Vice President of Talent Acquisition at Mastercard, New York, United States
- Director of Talent Acquisition, NBCUniversal Media, New York, USA
- Head of Recruitment at Comcast
- Director of Recruiting at Rite Hire Advisory
- Executive Vice President of the Sales Division at Ardor NY Real Estate
- Director of Recruitment at Valerie August & Associates
- Account Executive at BNC
- Account Executive at Vault
- Degree in Organizational Communication from the University of Miami

Thanks to TECH, you will be able to learn with the best professionals in the world"

International Guest Director

A technology leader with decades of experience in **major technology multinationals**, Rick Gauthier has developed prominently in the field of **cloud services** and end-to-end process improvement. He has been recognized as a leader and manager of highly efficient teams, showing a natural talent for ensuring a high level of engagement among his employees.

He possesses innate gifts in strategy and executive innovation, developing new ideas and backing his success with quality data. His background at **Amazon** has allowed him to manage and integrate the company's IT services in the United States. At **Microsoft** he led a team of 104 people, responsible for providing corporate-wide IT infrastructure and supporting product engineering departments across the company.

This experience has allowed him to stand out as a high-impact manager with remarkable abilities to increase efficiency, productivity and overall customer satisfaction.

Mr. Gauthier, Rick

- Regional IT Director at Amazon, Seattle, United States
- Senior Program Manager at Amazon
- Vice President of Wimmer Solutions
- Senior Director of Productive Engineering Services at Microsoft
- Degree in Cybersecurity from Western Governors University
- Technical Certificate in Commercial Diving from Divers Institute of Technology
- Degree in Environmental Studies from The Evergreen State College

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”

International Guest Director

Romi Arman is a renowned international expert with more than two decades of experience in **Digital Transformation**, **Marketing**, **Strategy** and **Consulting**. Through that extended trajectory, he has taken different risks and is a permanent **advocate** for **innovation** and **change** in the business environment. With that expertise, he has collaborated with CEOs and corporate organizations from all over the world, pushing them to move away from traditional business models. In this way, he has helped companies such as Shell Energy become **true market leaders**, focused on their **customers** and the **digital world**.

The strategies designed by Arman have a latent impact, as they have enabled several corporations **to improve the experiences of consumers**, **staff** and **shareholders** alike. The success of this expert is quantifiable through tangible metrics such as **CSAT**, **employee engagement** in the institutions where he has practiced and the growth of the **EBITDA financial indicator** in each of them.

Also, in his professional career, he has nurtured and **led high-performance teams** that have even received awards for their **transformational potential**. With Shell, specifically, the executive has always set out to overcome three challenges: meeting **customers'** complex **decarbonization** demands **supporting** a "**cost-effective decarbonization**" and **overhauling** a fragmented **data**, **digital and technology** landscape. Therefore, his efforts have shown that in order to achieve sustainable success, it is essential to start from the needs of consumers and lay the foundations for the transformation of processes, data, technology and culture.

In addition, the executive stands out for his mastery of the **business applications** of **Artificial Intelligence**, a subject in which he holds a postgraduate degree from the London Business School. At the same time, he has accumulated experience in **IoT** and **Salesforce**.

Mr. Arman, Romi

- Digital Transformation Director (CDO) at Shell Energy Corporation, London, UK
- Global Director of E-Commerce and Customer Service at Shell Energy Corporation
- National Key Account Manager (OEM and automotive retailers) for Shell in Kuala Lumpur, Malaysia
- Senior Management Consultant (Financial Services Sector) for Accenture based in Singapore
- Bachelor's Degree from the University of Leeds
- Postgraduate Degree in Business Applications of AI for Senior Executives from the London Business School
- CCXP Customer Experience Professional Certification
- Executive Digital Transformation Course by IMD

Do you want to update your knowledge with the highest educational quality? TECH offers you the most updated content in the academic market, designed by authentic experts of international prestige"

International Guest Director

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Mr. Arens, Manuel

- Global Procurement Manager at Google, Mountain View, United States
- Senior Manager, B2B Analytics and Technology, Google, United States
- Sales Director at Google, Ireland
- Senior Industry Analyst at Google, Germany
- Accounts Manager at Google, Ireland
- Accounts Payable at Eaton, United Kingdom
- Supply Chain Manager at Airbus, Germany

Choose TECH! You will have access to the best didactic materials, at the forefront of technology and education, implemented by internationally renowned specialists in the field"

International Guest Director

Andrea La Sala is an **experienced Marketing executive** whose projects have had a **significant impact** on the **Fashion environment**. Throughout his successful career he has developed different tasks related to **Product**, **Merchandising** and **Communication**. All of this linked to prestigious brands such as **Giorgio Armani**, **Dolce&Gabbana**, **Calvin Klein**, among others.

The results of this **high-profile international executive** have been linked to his proven ability to **synthesize information** in clear frameworks and execute **concrete actions** aligned to **specific business** objectives. In addition, he is recognized for his **proactivity** and **adaptability to fast-paced** work rhythms. To all this, this expert adds a **strong commercial awareness**, **market vision** and a **genuine passion** for **products**.

As **Global Brand and Merchandising Director** at **Giorgio Armani**, he has overseen a variety of **Marketing strategies** for **apparel** and **accessories**. His tactics have also focused on the **retail environment** and **consumer needs** and **behavior**. In this position, La Sala has also been responsible for shaping the commercialization of products in different markets, acting as **team leader** in the **Design**, **Communication** and **Sales departments**..

Furthermore, in companies such as **Calvin Klein** or **Gruppo Coin**, he has undertaken projects to boost the **structure**, and **development** of **different collections**. He has been in charge of creating **effective calendars** for buying and selling **campaigns.**
He has also been in charge of the **terms**, **costs**, **processes** and **delivery times** of different operations.

These experiences have made Andrea La Sala one of the main and most qualified **corporate leaders** in **Fashion** and **Luxury**. A high managerial capacity with which he has managed to effectively **implement the positive positioning** of **different brands** and redefine their key performance indicators (KPIs).

Mr. La Sala, Andrea

- Global Brand & Merchandising Director of Armani Exchange at Giorgio Armani, Milan, Italy
- Merchandising Director at Calvin Klein
- Brand Manager at Gruppo Coin
- Brand Manager at Dolce&Gabbana
- Brand Manager at Sergio Tacchini S.p.A.
- Market Analyst at Fastweb
- Degree in Business and Economics from the University of Eastern Piedmont

The most qualified and experienced professionals at international level are waiting for you at TECH to offer you a first class teaching, updated and based on the latest scientific evidence. What are you waiting for to enroll?"

International Guest Director

Mick Gram is synonymous with innovation and excellence in the field of **Business Intelligence** internationally. His successful career is linked to leadership positions in multinationals such as **Walmart** and **Red Bull.** Likewise, this expert stands out for his vision to **identify emerging technologies** that, in the long term, achieve an everlasting impact in the corporate environment.

On the other hand, the executive is considered a **pioneer** in the **use of data visualization techniques** that simplified complex sets, making them accessible and facilitating decision-making. This ability became the pillar of his professional profile, transforming him into a desired asset for many organizations that bet on **gathering information** and **generating concrete actions** from them.

One of his most outstanding projects in recent years has been the **Walmart Data Café platform**, the largest of its kind in the world that is anchored in the **cloud** aimed at ***Big Data***analysis. In addition, he has held the position of **Director** of ***Business Intelligence*** at **Red Bull**, covering areas such as **Sales**, **Distribution**, **Marketing** and **Supply Chain Operations**. His team was recently recognized for its constant innovation regarding the use of Walmart Luminate's new API for Shopper and Channel insights.

As for his training, the executive has several Masters and postgraduate studies at prestigious centers such as the **University of Berkeley,**in the United States, and the **University of Copenhagen**, in Denmark. Through this continuous updating, the expert has attained cutting-edge skill. Because of this, he has come to be considered a **born leader** of the **new global economy**, centered on the drive for data and its infinite possibilities.

Mr. Gram, Mick

- Director of Business Intelligence and Analytics at Red Bull, Los Angeles, United States
- Business Intelligence Solutions Architect for Walmart Data Café
- Independent Business Intelligence and Data Science Consultant
- Business Intelligence Director at Capgemini
- Chief Analyst at Nordea
- Chief Business Intelligence Consultant for SAS
- Executive Education in AI and Machine Learning at UC Berkeley College of Engineering
- Executive MBA in e-Commerce at the University of Copenhagen
- Bachelor's and Master's Degree in Mathematics and Statistics at the University of Copenhagen

Study at the world's best online university according to Forbes! In this MBA you will have access to an extensive library of multimedia resources, developed by internationally renowned professors"

International Guest Director

Scott Stevenson is a distinguished expert in the **Digital Marketing** sector who, for more than 19 years, has been linked to one of the most powerful companies in the entertainment industry, **Warner Bros. Discovery**. In this role, he has played a fundamental role in **overseeing logistics** and **creative workflows** across various digital platforms, including social media, search, display and linear media.

This executive's leadership has been crucial in driving in **production strategies** in **paid media**, resulting in a **marked improvement** which has resulted in **company's conversion** rates. At the same time, he has assumed other roles, such as Director of Marketing Services and Traffic Manager at the same multinational during his former management.

Stevenson has also been involved in the global distribution of video games and **digital property campaigns**. He was also responsible for introducing operational strategies related to the formation, completion and delivery of sound and image content for **television commercials** and ***trailers***.

In addition, he holds a Bachelor's degree in Telecommunications from the University of Florida and a Master's Degree in Creative Writing from the University of California, which demonstrates his proficiency in **communication** and **storytelling.**. In addition, he has participated at Harvard University's School of Professional Development in cutting-edge programs on the use of **Artificial Intelligence** in **business.**. Therefore, his professional profile stands as one of the most relevant in the current field of **Marketing** and **Digital Media.**

Mr. Stevenson, Scott

- Director of Digital Marketing at Warner Bros. Discovery, Burbank, United States
- Traffic Manager at Warner Bros. Entertainment
- Master's Degree in Creative Writing from the University of California
- Bachelor's Degree in Telecommunications from the University of Florida

Achieve your academic and career goals with the best qualified experts in the world! The faculty of this MBA will guide you through the entire learning process"

International Guest Director

Awarded with the "*International Content Marketing Awards*" **for her creativity, leadership and quality of her informative contents, Wendy Thole-Muir is a recognized** Communication Director **highly specialized in the field of Reputation Management**.

In this sense, she has developed a solid professional career of more than two decades in this field, which has led her to be part of prestigious international reference entities such as Coca-Cola. Her role involves the supervision and management of corporate communication, as well as the control of the organizational image. **Among her main contributions, she has led the implementation of the Yammer** internal interaction platform. Thanks to this, employees increased their commitment to the brand and created a community that significantly improved the transmission of information.

On the other hand, she has been in charge of managing the communication of the companies' strategic investments **in different African countries.** An example of this is that she has managed dialogues around significant investments in Kenya, demonstrating the commitment of the entities to the economic and social development of the country. **At the same time, she has achieved numerous** recognitions **for her ability to manage the perception of the firms in all the markets in which it operates.** In this way, she has ensured that companies maintain a high profile and consumers associate them with high quality.

In addition, in her firm commitment to excellence, she has actively participated in renowned global Congresses and Symposiums **with the objective of helping information professionals to stay at the forefront of the most sophisticated techniques to** develop successful strategic communication plans. In this way, she has helped numerous experts to anticipate institutional crisis situations and to manage adverse events in an effective manner.

Ms. Thole-Muir, Wendy

- Director of Strategic Communications and Corporate Reputation at Coca-Cola, South Africa
- Head of Corporate Reputation and Communications at ABI at SABMiller de Lovania, Belgium
- Communications Consultant at ABI, Belgium
- Reputation and Communications Consultant at Third Door in Gauteng, South Africa
- Master's Degree in Social Behavioral Studies from the University of South Africa
- Master's Degree in Sociology and Psychology, University of South Africa
- Bachelor of Arts in Political Science and Industrial Sociology from the University of KwaZulu-Natal, South Africa
- Bachelor of Arts in Psychology from the University of South Africa

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Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shepherds GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- Doctorate in Psychology from the University of Castilla La Mancha
- Doctorate in Economics, Business and Finance from the Camilo José Cela University
- Doctorate in Psychology from University of Castilla La Mancha
- Master's Degree in Executive MBA from the Isabel I University
- Master's Degree in Sales and Marketing Management from the Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group

09

Certificate

This Advanced Master's Degree MBA in Artificial Intelligence guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Advanced Master's Degree issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a diploma for the **Advanced Master's Degree MBA in Artificial Intelligence** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University, is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This private qualification from **TECH Global University** is a European continuing education and professional development program that guarantees the acquisition of competencies in its area of expertise, providing significant curricular value to the student who successfully completes the program.

TECH is a member of the **Business Graduates Association (BGA)**, the international network that brings together the most prestigious business schools in the world. This distinction reaffirms its commitment to excellence in responsible management and executive training.

Accreditation/Membership

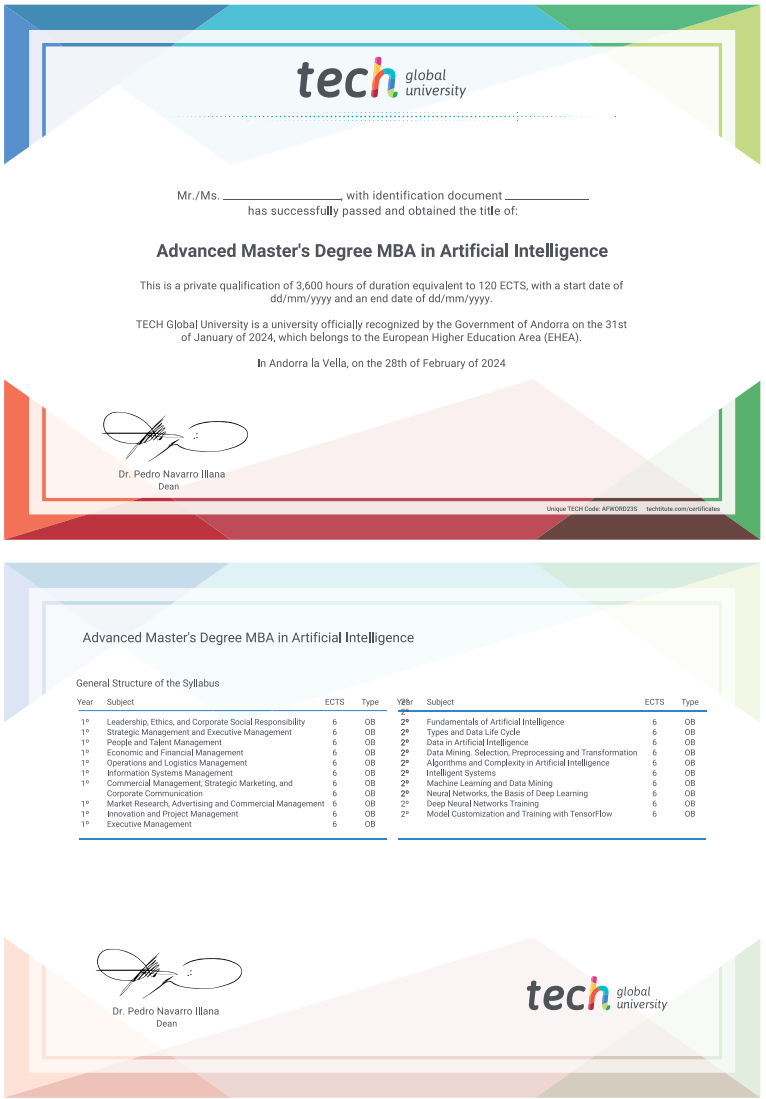
BUSINESS GRADUATES ASSOCIATION MEMBER

Title: **Advanced Master's Degree MBA in Artificial Intelligence**

Modality: **online**

Duration: **2 years**

Accreditation: **120 ECTS**



tech global university

Mr./Ms. _____ with identification document _____
has successfully passed and obtained the title of:

Advanced Master's Degree MBA in Artificial Intelligence

This is a private qualification of 3,600 hours of duration equivalent to 120 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

Unique TECH Code: AFWOR023S techtitute.com/certificates

Advanced Master's Degree MBA in Artificial Intelligence

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Leadership, Ethics, and Corporate Social Responsibility	6	OB
1º	Strategic Management and Executive Management	6	OB
1º	People and Talent Management	6	OB
1º	Economic and Financial Management	6	OB
1º	Operations and Logistics Management	6	OB
1º	Information Systems Management	6	OB
1º	Commercial Management, Strategic Marketing, and Corporate Communication	6	OB
1º	Market Research, Advertising and Commercial Management	6	OB
1º	Innovation and Project Management	6	OB
1º	Executive Management	6	OB

Year	Subject	ECTS	Type
2º	Fundamentals of Artificial Intelligence	6	OB
2º	Types and Data Life Cycle	6	OB
2º	Data in Artificial Intelligence	6	OB
2º	Data Mining. Selection, Preprocessing and Transformation	6	OB
2º	Algorithms and Complexity in Artificial Intelligence	6	OB
2º	Intelligent Systems	6	OB
2º	Machine Learning and Data Mining	6	OB
2º	Neural Networks, the Basis of Deep Learning	6	OB
2º	Deep Neural Networks Training	6	OB
2º	Model Customization and Training with TensorFlow	6	OB

Dr. Pedro Navarro Illana
Dean

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*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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Advanced Master's Degree
MBA in Artificial Intelligence

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Accreditation: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Advanced Master's Degree

MBA in Artificial Intelligence

Accreditation/Membership