Advanced Master's Degree

Senior IT Management

AMDSIM

tech technological university

tech technological university

Advanced Master's Degree

Senior IT Management

Language: **English**
Course Modality: **Online**
Duration: **2 years**
Accreditation: **TECH Technological University**
Official Nº of hours: **3,000 h.**
Website: **www.techtitute.com/us/school-of-business/advanced-master-degree/advanced-master-degree-senior-it-management**

Index

01

Welcome

Computerized processes in companies are becoming more and more common, so the use of information technologies has become essential in all companies. Therefore, it is necessary for professionals to be trained in their use, as well as to be competent managers and directors, who are up to date with the latest developments in the field to know how to lead their teams. Undoubtedly, the best way to obtain this qualification is through continuous studying in order to gain up-to-date knowledge. To that end, TECH provides students with this very comprehensive program, where you will find the latest information on the subject.

Advanced Master's Degree in Senior IT Management
TECH Technological University

Today's society demands managers with a profile that is much more in line with new trends and that stands out for having technological knowledge, practicing active listening with their workers and being self-critical of their work"

02

Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class centre for intensive managerial skills training.

TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success”

At TECH Technological University

Innovation

The university offers an online learning model that combines the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"Microsoft Europe Success Story", for integrating the innovative, interactive multi-video system.

The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95% | **of TECH students successfully complete their studies**

Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

100,000+
executives trained each year

200+
different nationalities

Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

500+ | **collaborative agreements with leading companies**

Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.

Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.

Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.

"At TECH, you will have access to the most rigorous and up-to-date case studies in the academic community"

TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:

Analysis

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.

Academic Excellence

TECH offers students the best online learning methodology. The university combines the Relearning method (a postgraduate learning methodology with the highest international rating) with the Case Study. A complex balance between tradition and state-of-the-art, within the context of the most demanding academic itinerary.

Economy of Scale

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.

03

Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.

We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you training of the highest academic level"

This program will provide students with a multitude of professional and personal advantages, particularly the following:

01

A significant career boost

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of participants achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of companies

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional areas.

Our global vision of companies will improve your strategic vision.

03

Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.

04

Take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.

05

Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

You will find a network of contacts that will be instrumental for professional development.

06

Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different areas in companies.

20% of our students develop their own business idea.

07

Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.

08

Be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified professors from the most prestigious universities in the world: the TECH Technological University community.

We give you the opportunity to train with a team of world renowned teachers.

04

Objectives

This program is designed to strengthen management and leadership skills, as well as to develop new skills and abilities that will be essential in the professional development of our students. After the program, you will be equipped to make global decisions with an innovative perspective and an international vision.

Achieve your goals by completing this highly academic program"

TECH makes the goals of their students their own goals too. Working together to achieve them.

The **Advanced Master's Degree in Senior IT Management** qualifies students to:

01 Define the latest trends in business management, taking into account the globalized environment that governs senior management criteria

02 Develop the key leadership skills that should define working professionals

03 Follow the sustainability criteria set by international standards when developing a business plan

04 Develop strategies to carry out decision-making in a complex and unstable environment

05 Create corporate strategies that set the script for the company to follow in order to be more competitive and achieve its own objectives

06 Develop the skills required to manage business activities strategically

07 Design innovative strategies and policies to improve management and business efficiency

08 Understand the best way to manage the company's human resources, getting greater performance from employees that, in turn, increases company profits

09 Acquire the communication skills that a business leader needs in order to ensure their message is heard and understood by the members of their community

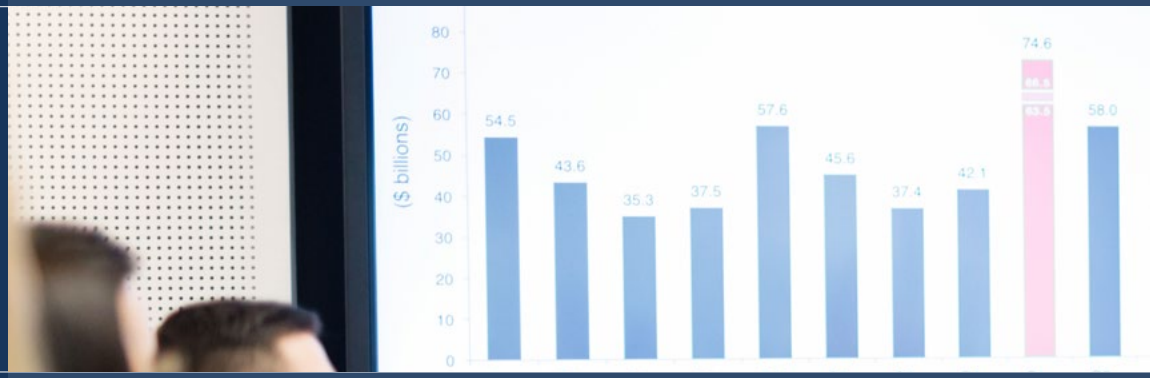
10 Understand the economic environment in which the company operates and develop appropriate strategies to anticipate changes

11 Manage the company's economic and financial plan

12 Understand the logistic operations that are necessary in the business environment, so as to manage them appropriately

13 Apply information and communication technologies to the different areas within a company

14 Carry out a Marketing strategy to make the product known to potential customers and clients, and to generate a suitable company image



15 Develop all the phases of a business idea: design, feasibility plan, execution, monitoring

16 Create innovative strategies in line with our projects

17 Assess the status, positioning and maturity of information technologies in business environments

18 Develop managerial skills and the knowledge necessary for technological leadership in the organization

19 Adopt IT strategic governance models that are integrated and harmonized with corporate strategy and management

20 Implement methods to systematize the technological innovation processes linked to company needs

21 Develop management activities related to information and communication technologies (ICT) and R&D&I environments

22 Participate in projects related to ICT management and the development of innovation and research

23 Analyze the social and economic environment surrounding ICT management and innovation

24 Apply the ethical, legislative and deontological framework for ICT professionals and management

25 Develop IT project management methodologies that control process and product quality

26 Carry out proper team management that enables greater personnel performance and, therefore, greater benefits for the company

27 Recognize talent in the organization

28 Know, develop and evaluate all the planning processes of an IT project

29 Bet on R&D&I as an essential element to develop new projects

30 Understand the importance of Social Media as an essential tool for company Marketing and advertising campaigns

05

Skills

After passing the evaluations for the Advanced Master's Degree in Senior IT Management, professionals will have acquired the necessary skills for quality and up-to-date practice based on a most innovative teaching methodology.

Develop the skills and abilities needed to successfully manage information technologies”

01 Manage a company as a whole, applying leadership techniques that influence employee performance in such a way that company objectives are achieved

02 Be part of and lead the company's corporate and competitive strategy

03 Resolve business conflicts and problems between workers

04 Correctly manage teams to improve productivity and, therefore, company profits

05 Exercise economic and financial control of a company

06 Control the company's logistics processes, as well as those involved in purchasing and procurement

07 Delve into the new business models associated with information systems

08 Apply the most appropriate strategies to support e-commerce for company products

09 Develop and lead marketing plans

10 Focus on innovation in all company processes and areas

11 Lead the different company projects

12 Commit to sustainably developing the company, avoiding environmental impact

13 Use new digital trends within the framework of new product development

14 Lead a company specialized in IT projects, focusing on team and project management

15 Apply the most appropriate information systems and technologies in the company

16 Carry out correct strategic planning to achieve company objectives

17 Apply the basic principles in Lean Management

18 Understand the importance of audits and certifications in R&D&I

19 Search for and develop an optimal user experience through information technology

20 Apply *social media* in company development

21 Have a broad understanding of Big Data

22 Implement an appropriate strategy for the proper development of a digital business

06

Structure and Content

The Advanced Master's Degree in Senior IT Management is a program designed to cater for professionals and is taught in a 100% online format so they can choose the time and place that best suits their availability, schedule and interests.

A program that takes place over 24 months and is intended to be a unique and stimulating experience that lays the foundation for your success as managers and entrepreneurs.

We present the best academic program on the current scene"

Syllabus

This TECH Technological University Advanced Master's Degree in Senior IT Management is an intense program that prepares you to face challenges and business decisions both on a national and international level. Its content is designed to promote the development of managerial skills that enable more rigorous decision-making in uncertain environments.

Over the course of 3,000 hours, you will analyze a multitude of practical cases through individual work, achieving a deep learning that will be very useful for your daily work. It is, therefore, an authentic immersion in real business situations.

This Advanced Master's Degree in Senior IT Management deals in depth with the main areas of a company, and it is designed for managers to understand information technology management from a strategic, international and innovative perspective.

A plan designed for students, focused on professional improvement, that also prepares them to achieve excellence in the field of business management. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional teaching staff, which will give you the skills to solve critical situations in a creative and efficient way.

This Advanced Master's Degree takes place over 24 months and is divided into 18 modules:

Module 1	Leadership, Ethics, and CSR
Module 2	Strategic Direction and Executive Management
Module 3	People and Talent Management
Module 4	Economic and Financial Management
Module 5	Operations and Logistics Management
Module 6	Information Systems Management
Module 7	Commercial Management, Marketing and Corporate Communications
Module 8	Innovation and Project Management
Module 9	Talent Management and Management Skills

Module 10	Technology Management
Module 11	Strategic Planning and IT Project Management
Module 12	Innovation Management
Module 13	Information Security Systems
Module 14	New Digital Trends
Module 15	Digital Business Strategy
Module 16	Social Media and Community Management
Module 17	Data Science and Big Data
Module 18	Web Design, Usability and User Experience

Where, When and How is it Taught?

TECH offers the possibility of developing this Advanced Master's Degree in Senior IT Management completely online. Over the course of 24 months, you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.

Module 1. Leadership, Ethics, and CSR

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. Business Ethics
1.3.1. Ethics and Integrity
1.3.2. Ethical Behavior in Companies
1.3.3. Deontology, Ethics Codes and Codes of Conduct
1.3.4. Fraud and Corruption Prevention

1.4. Sustainability
1.4.1. Business and Sustainable Development
1.4.2. Social, Environmental, and Economic Impact
1.4.3. The 2030 Agenda and SDGs

1.5. Corporate Social Responsibility
1.5.1. Corporate Social Responsibility
1.5.2. Roles and Responsibilities
1.5.3. Implementing Corporate Social Responsibility

Module 2. Strategic Direction and Executive Management

2.1. Organizational Analysis and Design
2.1.1. Organizational Culture
2.1.2. Organizational Analysis
2.1.3. Designing Organizational Structures

2.2. Corporate Strategy
2.2.1. Corporate Level Strategy
2.2.2. Types of Corporate Level Strategies
2.2.3. Determining Corporate Strategy
2.2.4. Corporate Strategy and Reputation/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. Strategy Models and Patterns
2.4.1. Wealth, Value, and Return on Investments
2.4.2. Corporate Strategy: Methodologies
2.4.3. Growing and Consolidating the Corporate Strategy

2.5. Strategic Management
2.5.1. Strategic Mission, Vision, and Values
2.5.2. The Balanced Scorecard
2.5.3. Analyzing, Monitoring, and Evaluating Corporate Strategies
2.5.4. Strategic Management: Reporting

2.6. Implementing and Executing Strategy
2.6.1. Strategic Implementation: Objectives, Actions and Impact
2.6.2. Strategic Alignment and Supervision
2.6.3. Continuous Improvement Approach

2.7. Executive Management
2.7.1. Integrating Functional Strategies into Global Business Strategies
2.7.2. Management Policy and Processes
2.7.3. Knowledge Management

2.8. Analyzing and Solving Cases/ Problems
2.8.1. Problem Solving Methodology
2.8.2. Case Method
2.8.3. Positioning and Decision Making

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

3.2. Strategic People Management
3.2.1. Job Design, Recruitment and Selection
3.2.2. Human Resources Strategic Plan: Design and Implementation
3.2.3. Job Analysis: Design and Selecting People
3.2.4. Training and Professional Development

3.3. Management and Leadership Development
3.3.1. Management Skills: 21st Century Skills and Abilities
3.3.2. Non-Managerial Skills
3.3.3. Skills and Abilities Map
3.3.4. Leadership and People Management

3.4. Change Management
3.4.1. Performance Analysis
3.4.2. Strategic Approach
3.4.3. Change Management: Key Factors, Process Design and Management
3.4.4. Continuous Improvement Approach

3.5. Negotiation and Conflict Management
3.5.1. Negotiation Objectives: Differentiating Elements
3.5.2. Effective Negotiation Techniques
3.5.3. Conflicts: Factors and Types
3.5.4. Efficient Conflict Management: Negotiation and Communication

3.6. Executive Communication
3.6.1. Performance Analysis
3.6.2. Leading Change. Resistance to Change
3.6.3. Managing Change Processes
3.6.4. Managing Multicultural Teams

3.7. Team Management and People Performance
3.7.1. Multicultural and Multidisciplinary Environments
3.7.2. Team and People Management
3.7.3. Coaching and People Performance
3.7.4. Management Meetings: Planning and Time Management

3.8. Knowledge and Talent Management
3.8.1. Identifying Knowledge and Talent in Organizations
3.8.2. Corporate Knowledge and Talent Management Models
3.8.3. Creativity and Innovation

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. Executive Accounting
4.2.1. International Accounting Framework
4.2.2. Introduction to Accounting Cycles
4.2.3. Company Financial Statements
4.2.4. Analysis of Financial Statements: Decision-Making

4.3. Budget and Management Control
4.3.1. Budgetary Planning
4.3.2. Management Control: Design and Objectives
4.3.3. Supervision and Reporting

4.4. Corporate Tax Responsibility
4.4.1. Corporate Tax Responsibility
4.4.2. Tax Procedure: A Case-Country Approach

4.5. Corporate Control Systems
4.5.1. Types of Control
4.5.2. Regulatory Compliance
4.5.3. Internal Auditing
4.5.4. External Auditing

4.6. Financial Management
4.6.1. Introduction to Financial Management
4.6.2. Financial Management and Corporate Strategy
4.6.3. Chief Financial Officer (CFO): Managerial Skills

4.7. Financial Planning
4.7.1. Business Models and Financing Needs
4.7.2. Financial Analysis Tools
4.7.3. Short-Term Financial Planning
4.7.4. Long-Term Financial Planning

4.8. Corporate Financial Strategy
4.8.1. Corporate Financial Investments
4.8.2. Strategic Growth: Types

4.9. Macroeconomic Context
4.9.1. Macroeconomic Analysis
4.9.2. Economic Indicators
4.9.3. Economic Cycle

4.10. Strategic Financing
4.10.1. Banking: Current Environment
4.10.2. Risk Analysis and Management

4.11. Money and Capital Markets
4.11.1. Fixed Income Market
4.11.2. Equity Market
4.11.3. Valuation of Companies

4.12. Analyzing and Solving Cases/ Problems
4.12.1. Problem Solving Methodology
4.12.2. Case Method

Module 5. Operations and Logistics Management

5.1. Operations Management
5.1.1. Define Operations Strategies
5.1.2. Supply Chain Planning and Control
5.1.3. Indicator Systems

5.2. Purchasing Management
5.2.1. Managing Stocks
5.2.2. Warehouse Management
5.2.3. Purchasing and Procurement Management

5.3. Supply Chain Management (I)
5.3.1. Operations Chain: Costs and Efficiency
5.3.2. Change in Demand Patterns
5.3.3. Change in Operations Strategy

5.4. Supply Chain Management (II) Implementation
5.4.1. Lean Manufacturing/Lean Thinking
5.4.2. Logistics Management
5.4.3. Purchasing

5.5. Logistical Processes
5.5.1. Organization and Management by Processes
5.5.2. Procurement, Production, Distribution
5.5.3. Quality, Quality Costs and Tools
5.5.4. After-Sales Service.

5.6. Logistics and Customers
5.6.1. Demand Analysis and Forecasting
5.6.2. Sales Forecasting and Planning
5.6.3. Collaborative Planning, Forecasting and Replacement

5.7. International Logistics
5.7.1. Customs, Export and Import processes
5.7.2. Methods and Means of International Payment
5.7.3. International Logistics Platforms

5.8. Competing through Operations
5.8.1. Innovation in Operations as a Competitive Advantage in the Company
5.8.2. Emerging Technologies and Sciences
5.8.3. Information Systems in Operations

Module 6. Information Systems Management

6.1. Information Systems Management
6.1.1. Business Information Systems
6.1.2. Strategic Decisions
6.1.3. The Role of the CIO

6.2. Information Technology and Business Strategy
6.2.1. Company and Industry Sector Analysis
6.2.2. Online Business Models
6.2.3. The Value of IT in a Company

6.3. IS Strategic Planning
6.3.1. The Process of Strategic Planning
6.3.2. Formulating IS Strategies
6.3.3. Strategy Implementation Plan

6.4. Information Systems and Business Intelligence
6.4.1. CRM and Business Intelligence
6.4.2. Business Intelligence Project Management
6.4.3. Business Intelligence Architecture

6.5. New ICT-Based Business Models
6.5.1. Technology-Based Business Models
6.5.2. Innovation Abilities
6.5.3. Redesigning Value Chain Processes

6.6. E-Commerce
6.6.1. E-Commerce Strategic Plan
6.6.2. Logistics Management and Customer Service in E-Commerce
6.6.3. E-Commerce as an Opportunity for Internationalization

6.7. E-Business Strategies
6.7.1. Strategies Using Social Media
6.7.2. Optimizing Service Channels and Customer Support
6.7.3. Digital Regulation

6.8. Digital Business
6.8.1. Mobile E-Commerce
6.8.2. Design and Usability
6.8.3. E-Commerce Operations

Module 7. Commercial Management, Marketing and Corporate Communications

7.1. Commercial Management
7.1.1. Sales Management
7.1.2. Commercial Strategy
7.1.3. Sales and Negotiation Techniques
7.1.4. Management of Sales Teams

7.2. Marketing
7.2.1. Marketing and the Impact on the Company
7.2.2. Basic Variables in Marketing
7.2.3. Marketing Plans

7.3. Strategic Marketing Management
7.3.1. Sources of Innovation
7.3.2. Current Trends in Marketing
7.3.3. Tools in Marketing
7.3.4. Marketing Strategy and Communication with Customers

7.4. Digital Marketing Strategy
7.4.1. Approach to Digital Marketing
7.4.2. Digital Marketing Tools
7.4.3. Inbound Marketing and the Evolution of Digital Marketing

7.5. Sales and Communication Strategy
7.5.1. Positioning and Promotion
7.5.2. Public Relations
7.5.3. Sales and Communication Strategy

7.6. Corporate Communication
7.6.1. Internal and External Communication
7.6.2. Communication Departments
7.6.3. Communication Managers: Managerial Skills and Responsibilities

7.7. Corporate Communication Strategy
7.7.1. Corporate Communication Strategy
7.7.2. Communication Plan
7.7.3. Press Release/Clipping/Publicity Writing

Module 8. Innovation and Project Management

8.1. Innovation
8.1.1. Macro Concept of Innovation
8.1.2. Types of Innovation
8.1.3. Continuous and Discontinuous Innovation
8.1.4. Training and Innovation

8.2. Innovation Strategy
8.2.1. Innovation and Corporate Strategy
8.2.2. Global Innovation Project: Design and Management
8.2.3. Innovation Workshops

8.3. Business Model Design and Validation
8.3.1. The Methodology Lean Start-Up
8.3.2. Innovative Business Initiative: Stages
8.3.3. Financing Arrangements
8.3.4. Model Tools: Empathy Map, Canvas Model, and Metrics
8.3.5. Growth and Loyalty

8.4. Project Management
8.4.1. Innovation Opportunities
8.4.2. Feasibility Study and Proposal Specification
8.4.3. Project Definition and Design
8.4.4. Project Execution
8.4.5. Project Closure

Module 9. Talent Management and Management Skills

9.1. Management Skills Development
9.1.1. Leadership
9.1.2. Emotional Intelligence
9.1.3. Organization: Areas, Processes and Projects

9.2. Managing Talent as a Competitive Advantage
9.2.1. Keys for Positive Management
9.2.2. Talents Maps in Organization
9.2.3. Cost and Added Value

9.3. Team Management
9.3.1. Developing High Performance Teams
9.3.2. Persons' Role in Groups
9.3.3. Personal Factors and Motivation for Successful Work
9.3.4. Integrating High Performance Teams

9.4. Organizational Systems and Changes
9.4.1. The Transformation Process
9.4.2. Anticipation and Action
9.4.3. Organizational Learning
9.4.4. Resistance to Change

9.5. Management and Motivation
9.5.1. The Nature of Motivation
9.5.2. Expectations Theory
9.5.3. Needs Theory
9.5.4. Motivation and Financial Compensation

9.6. Innovation in Talent and People Management
9.6.1. Strategic Talent Management Models
9.6.2. Talent Identification, Training and Development
9.6.3. Loyalty and Retention
9.6.4. Proactivity and Innovation

Module 10. Technology Management

10.1. Information Systems in Companies
10.1.1. The Evolution of the IT Model
10.1.2. Organization and IT Departments
10.1.3. Information Technology and Economic Environment

10.2. Business IT Positioning
10.2.1. The Perception of Added Value to the Business
10.2.2. Strategy Maturity Levels
10.2.3. IT and Corporate Governance

10.3. Developing Management Skills
10.3.1. Managerial Functions and Roles
10.3.2. The Role of a CIO in a Company
10.3.3. IT Director: Vision and Mission
10.3.4. E-Leadership and Holistic Innovation Management

10.4. Relational and Political Capabilities
10.4.1. Management Committees
10.4.2. Influence
10.4.3. Stakeholders
10.4.4. Conflict Management

10.5. Corporate Strategy and Technology Strategy
10.5.1. Creating Value for Customers and Shareholders
10.5.2. Strategic IS/IT Decisions
10.5.3. Corporate Strategy vs. Technological and Digital Strategy

10.6. Information Systems for Decision-Making
10.6.1. Business Intelligence
10.6.2. Data Warehouse
10.6.3. Balanced Scorecard (BSC)

Module 11. Strategic Planning and IT Project Management

11.1. Strategic Planning Processes
11.1.1. Plan Phases
11.1.2. Conceptual Vision
11.1.3. Organization of Work

11.2. Business Strategy Comprehension
11.2.1. Information Needs
11.2.2. Process Maps
11.2.3. Business Aspirations or Priorities

11.3. Current IS/IT Analysis
11.3.1. Resource Level and Expenditure/Investment Analysis
11.3.2. Perceived Quality Analysis
11.3.3. Application and Infrastructure Analysis
11.3.4. Environment and Competitor Product Analysis

11.4. Formulating Strategies
11.4.1. Plan Aspirations and Strategic Guidelines
11.4.2. The Objective IS/IT Model
11.4.3. Strategic Initiatives
11.4.4. Plan Implications

11.5. Implementation Plan
11.5.1. Implementation Approach
11.5.2. Project Plans

11.6. Information Systems Projects
11.6.1. Information Project Planning
11.6.2. Project Monitoring and Completion
11.6.3. Project Management Strategies

11.7. Technology Resources Management
11.7.1. Technology on Offer
11.7.2. Time and Cost Management
11.7.3. Agile Project and Productivity Management

11.8. Lean IT
11.8.1. Lean IT and Lean Thinking
11.8.2. The Basic Principles of Lean Management
11.8.3. Improvement and Problem-Solving Groups
11.8.4. New Forms of Maintenance and Quality Management

Module 12. Innovation Management

12.1. Creative Thinking: Innovation
12.1.1. Innovation in Technology Companies
12.1.2. Techniques to Promote Creativity
12.1.3. Conceptual Processes for Innovative Ideas

12.2. Process Engineering and Product Engineering
12.2.1. Innovation Strategies
12.2.2. Open Innovation
12.2.3. Innovative Organization and Culture
12.2.4. Multi-Functional Teams

12.3. Launch and Industrialization of New Products
12.3.1. Designing New Products
12.3.2. Lean Design
12.3.3. Industrializing New Products
12.3.4. Manufacture and Assembly

12.4. R&D&I Management Systems
12.4.1. Requirements of an R&D&I Management Systems
12.4.2. Line of Action, Activity, Process and Procedure
12.4.3. Recommended Framework for R&D&I Management

12.5. R&D&I Audit and Certification
12.5.1. Basic Principles in R&D&I Audits
12.5.2. R&D&I Audit Phases
12.5.3. Certification in R&D&I
12.5.4. R&D&I Management Systems Certification

12.6. R&D&I Management Tools
12.6.1. R&D&I Cause-Effect Diagram
12.6.2. Weighted Selection for R&D&I
12.6.3. Pareto Diagram for R&D&I
12.6.4. R&D&I Priority Matrix

12.7. Benchmarking Applied to R&D&I
12.7.1. Types of Benchmarking
12.7.2. The Benchmarking Process in R&D&I
12.7.3. Methodology Benchmarking Process Applied to R&D&I
12.7.4. Advantages of Benchmarking

12.8. Reengineering for the Radical Innovation of Company Business Processes
12.8.1. Origins and Evolution of Reengineering Processes
12.8.2. Reengineering Objectives
12.8.3. Correct Approach to Reengineering

12.9. Direction and Management of R&D&I Projects
12.9.1. R&D&I Project Elements
12.9.2. The Most Significant Stages in R&D&I Projects
12.9.3. R&D&I Management Processes

12.10. Project Quality Management in R&D&I
12.10.1. Quality Management Systems in R&D&I Projects
12.10.2. Quality Plans in R&D&I Projects
12.10.3. Quality Plan Content in R&D&I Projects

Module 13. Information Security Systems

13.1. Introduction to Information Security
13.1.1. Types of Attacks on Information Systems
13.1.2. Measures to Guarantee Information Systems Security
13.1.3. Risk, Safety and Contingency Plans

13.2. Information Networks Security
13.2.1. Online Threats
13.2.2. Computer Viruses
13.2.3. Social Engineering
13.2.4. Hackers

13.3. Ethical Hacking
13.3.1. Legal Considerations
13.3.2. Vulnerability Scanning
13.3.3. Useful Tools

13.4. Designing and Managing Secure Networks and Risk Management
13.4.1. Server Operating Systems
13.4.2. Network Configuration
13.4.3. IT Governance, Risk Management and Regulatory Compliance

13.5. Implementing an ISMS According to ISO 27000 Standards
13.5.1. Information Security Management Systems and Benefits
13.5.2. Information Security Management Standards
13.5.3. Implementation Stages of an SGSI

13.6. Industrial and Intellectual Property in the Field of Technology
13.6.1. Industrial Property
13.6.2. Domain Brands and Names
13.6.3. Intellectual Property

13.7. Recruitment and the ICT Sector
13.7.1. Recruitment Management and Legal Aspects
13.7.2. Main Contractual Figures Related to the IT Field

13.8. Data Protection, Privacy and Intimacy
13.8.1. Data Protection in Spain
13.8.2. Labor Relations, Privacy and the Right to Privacy
13.8.3. Main Fundamental Rights Related to the IT Environment

Module 14. New Digital Trends

14.1. The Internet of Things
14.1.1. Visions and Challenges
14.1.2. Key Technologies
14.1.3. Pioneering Projects

14.2. Gamification
14.2.1. Business Gamification Techniques
14.2.2. Gamification Design Framework
14.2.3. Operating Mechanisms and Motivation
14.2.4. Benefits and Return on Investment

14.3. Big Data
14.3.1. Sectoral Application
14.3.2. Business Models
14.3.3. New Professions

14.4. Artificial Intelligence
14.4.1. Methodological Aspects in Artificial Intelligence
14.4.2. Heuristic Search
14.4.3. Rule Inference Methods
14.4.4. Semantic Networks

14.5. Robotics
14.5.1. Robot Morphology
14.5.2. Mathematical Tools for Spatial Localization
14.5.3. Cinematic Control
14.5.4. Criteria for Implementing an Industrial Robot

14.6. Modelling and Simulation
14.6.1. Modeling Using DEVS
14.6.2. Modeling Random Inputs
14.6.3. Generating Random Inputs
14.6.4. Experiments and Optimization Design

14.7. Implementing Cryptography in Technology Projects
14.7.1. Electronic Signatures
14.7.2. Digital Certificates
14.7.3. Data Encryption
14.7.4. Practical Applications of Cryptography

14.8. Other Trends
14.8.1. 3D Printing
14.8.2. Drones
14.8.3. Artificial Vision
14.8.4. Augmented Reality

Module 15. Digital Business Strategy

15.1. Digital Strategy
15.1.1. Online Business Models
15.1.2. Technology Strategy and Impact on Digital Innovation
15.1.3. Strategic Planning of Information Technologies
15.1.4. Strategy and the Internet

15.2. Sourcing Strategy
15.2.1. Tools to Develop Sourcing Strategies
15.2.2. Cloud Computing
15.2.3. IT Sourcing Management

15.3. IT Governance
15.3.1. Current Trends Analysis and Best Practices in IT Function
15.3.2. Challenges and Key Decision in Management
15.3.3. Management Procedures, Requirements, Strategies and Models for Outsourcing

15.4. Social Business
15.4.1. Web 2.0 Strategic Vision and Its Challenges
15.4.2. Convergence Opportunities and ICT Trends
15.4.3. How to Monetize Web 2.0 and Social Media
15.4.4. Mobility and Digital Business

15.5. Business Process Management
15.5.1. Business Management by Processes
15.5.2. Processes Reengineering
15.5.3. Corporate Information Systems

15.6. Company Systems Based on Internet Collaboration
15.6.1. Customer Management Systems: Customer Relationship Management (CRM)
15.6.2. Supply Chain Management Systems
15.6.3. E-Commerce Systems

15.7. Knowledge Management and Enterprise Collaboration Systems
15.7.1. Content Management
15.7.2. Collaborative Work and Employee Portals
15.7.3. Knowledge Management Policies and Processes

15.8. Effective Organization for Systems Drive
15.8.1. IT Governance
15.8.2. Implementation Risks
15.8.3. Exploitation Risks

Module 16. Social Media and Community Management

16.1. Web 2.0 or the Social Web
16.1.1. Organization in the Age of Conversation
16.1.2. Web 2.0 Is All About People
16.1.3. New Environments, New Content

16.2. Digital Communication and Reputation
16.2.1. Crisis Management and Corporate Reputation Online
16.2.2. Online Reputation Report
16.2.3. Netiquette and Good Practices on Social Media
16.2.4. Branding and Networking 2.0

16.3. General, Professional, and Microblogging Platforms
16.3.1. Facebook
16.3.2. LinkedIn
16.3.3. Twitter

16.4. Video, Image, and Mobility Platforms
16.4.1. YouTube
16.4.2. Instagram
16.4.3. Flickr
16.4.4. Vimeo
16.4.5. Pinterest

16.5. Corporate Blogging
16.5.1. How to Create a Blog
16.5.2. How to Create a Content Plan for Your Blog
16.5.3. Content Curation Strategy

16.6. Social Media Strategies
16.6.1. Corporate Communication Plan 2.0
16.6.2. Corporate PR and Social Media
16.6.3. Analysis and Evaluation of Results

16.7. Community Management
16.7.1. Functions, Duties, and Responsibilities of the Community Manager
16.7.2. Social Media Manager
16.7.3. Social Media Strategist

16.8. Social Media Plan
16.8.1. Designing a Social Media Plan
16.8.2. Defining the Strategy to Be Followed in Each Medium
16.8.3. Contingency Protocol in Case of Crisis

Module 17. Data Science and Big Data

17.1. Data Science and Big Data
17.1.1. Impact of Big Data and Data Science on Business Strategy
17.1.2. Introduction to Command Line
17.1.3. Problems and Solutions in Data Science

17.2. Data Hacking Languages
17.2.1. SQL Databases
17.2.2. Introduction to Python
17.2.3. Programming in R

17.3. Statistics
17.3.1. Introduction to Statistics
17.3.2. Linear and Logistic Regression
17.3.3. PCA and Clustering

17.4. Machine Learning
17.4.1. Model Selection and Regularization
17.4.2. Random Trees and Forests
17.4.3. Processing Natural Language

17.5. Big Data
17.5.1. Hadoop
17.5.2. Spark
17.5.3. Collaborative Recommendation and Filtering Systems

17.6. Data Science Success Stories
17.6.1. Customer Segmentation Using the RFM Model
17.6.2. Experiment Design Application
17.6.3. Supply Chain Value: Forecasting
17.6.4. Business Intelligence

17.7. Hybrid Architectures in Big Data
17.7.1. Lambda Architecture
17.7.2. Kappa Architecture
17.7.3. Apache Flink and Practical Implementations
17.7.4. Amazon Web Services

17.8. Big Data in the Cloud
17.8.1. AWS: Kinesis
17.8.2. AWS: DynamosDB
17.8.3. Google Cloud Computing
17.8.4. Google BigQuery

Module 18. Web Design, Usability and User Experience

18.1. UX Design
18.1.1. Information Architectures
18.1.2. SEO and Analytics for UX
18.1.3. Landing Pages

18.2. Technical Terms in UX Design
18.2.1. Wireframe and Components
18.2.2. Interaction Pattern and Navigation Flow
18.2.3. User Profiles
18.2.4. Process and Process Funnel

18.3. Research
18.3.1. Research in Interface Design Projects
18.3.2. Qualitative and Quantitative Approach
18.3.3. Announcing Research Results

18.4. Digital Design
18.4.1. Digital Prototype
18.4.2. Axure and Responsive
18.4.3. Interaction Design and Visual Design

18.5. User Experience
18.5.1. User Focused Design Methodology
18.5.2. User Research Techniques
18.5.3. Involving Customers in the Process
18.5.4. Shopping Experience Management

18.6. Designing the User Experience Strategy
18.6.1. Content Trees
18.6.2. High-Fidelity Wireframes
18.6.3. Component Maps
18.6.4. Usability Guides

18.7. Usability Evaluation
18.7.1. Usability Evaluation Techniques
18.7.2. Viewing Data
18.7.3. Presenting Data

18.8. Customer Value and Customer Experience Management
18.8.1. Using Narratives and Storytelling
18.8.2. The Co-Marketing Strategy
18.8.3. Managing Content Marketing
18.8.4. The ROI of Customer Experience Management

07

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

TECH Business School uses the Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"

This program prepares you to face business challenges in uncertain environments and achieve business success.

Our program prepares you to face new challenges in uncertain environments and achieve success in your career.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and business reality is taken into account.

> *You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments"*

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

Relearning Methodology

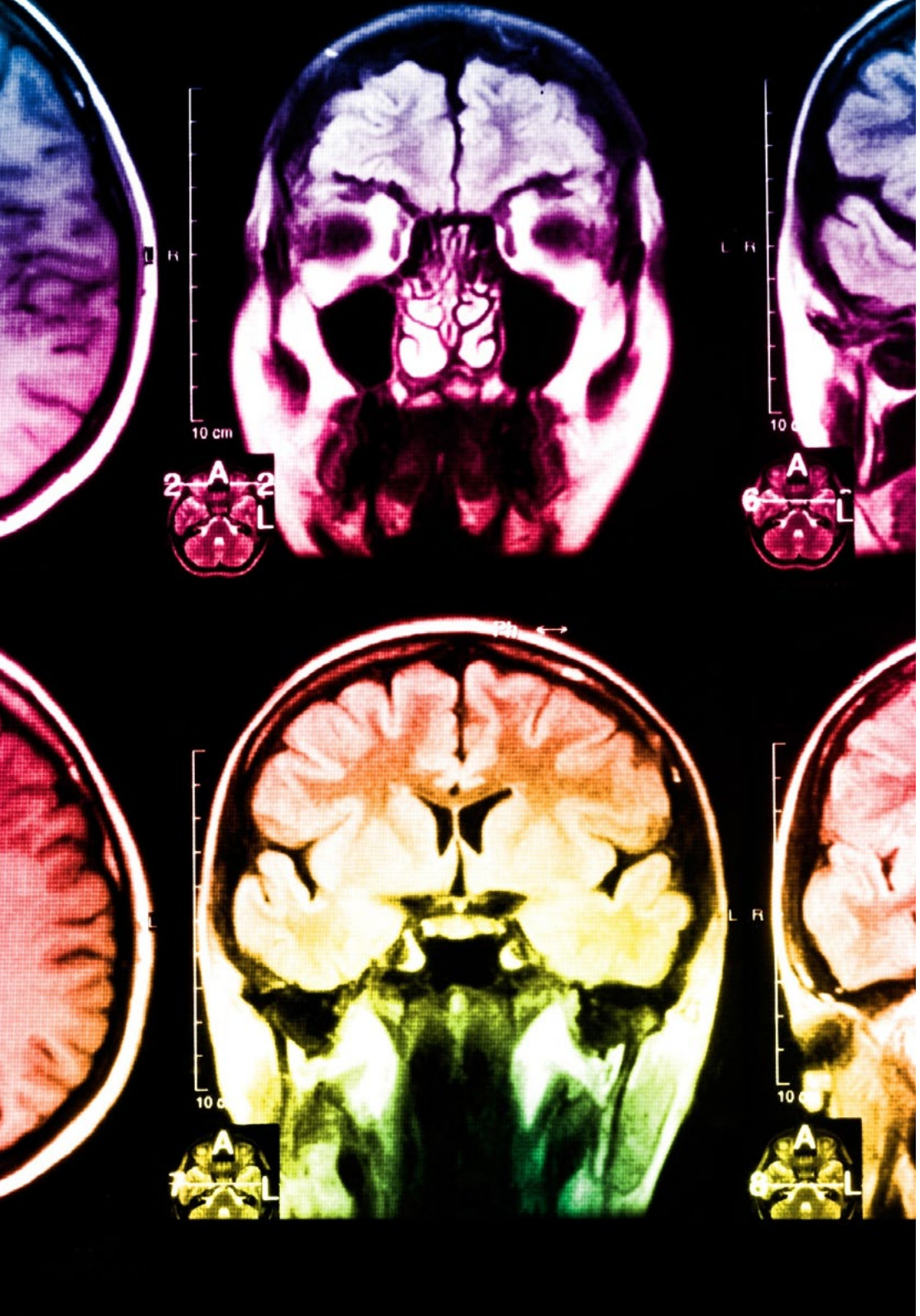
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our online business school is the only one in the world licensed to incorporate this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. With this methodology we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

This program offers the best educational material, prepared with professionals in mind:

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.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

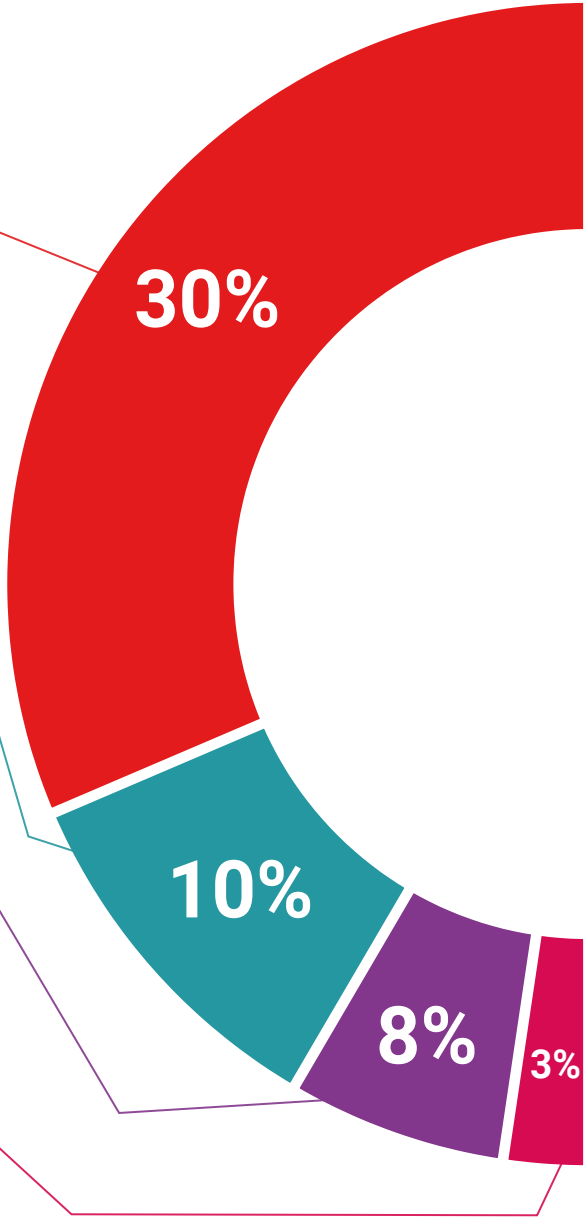
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

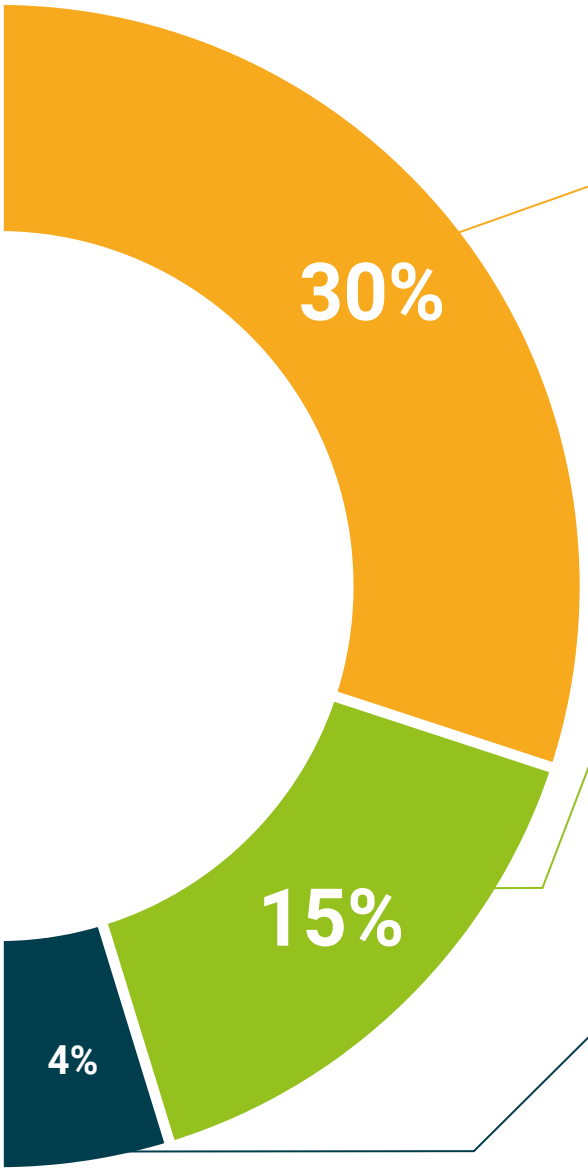
Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best senior management specialists in the world.

Interactive Summaries

The TECH team presents 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".

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

08

Our Students’ Profiles

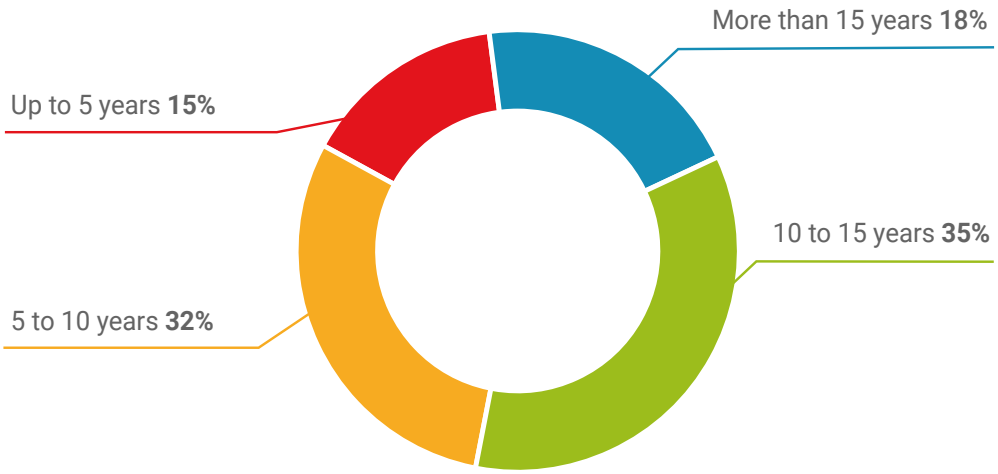
The Advanced Master's Degree in Senior IT Management is a program aimed at experienced professionals who want to update their knowledge and advance their professional career. This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

Our students are experienced professionals, aware of the importance of continuous studying to improve their daily practice"

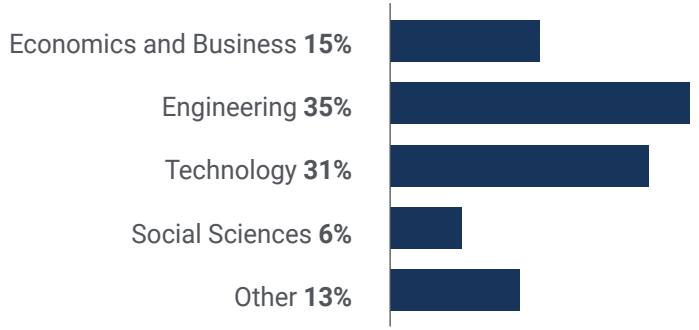
Average Age

Between **35** and **45** years old

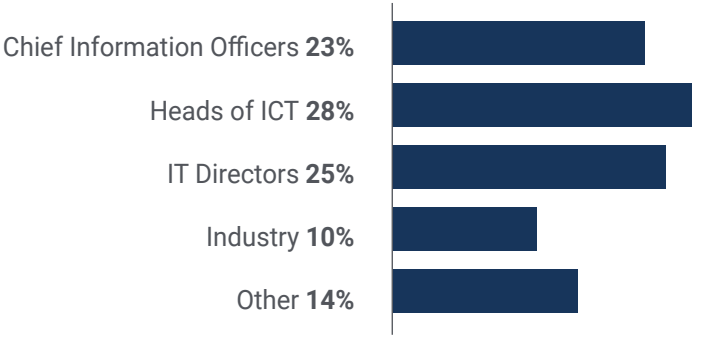
Years of Experience



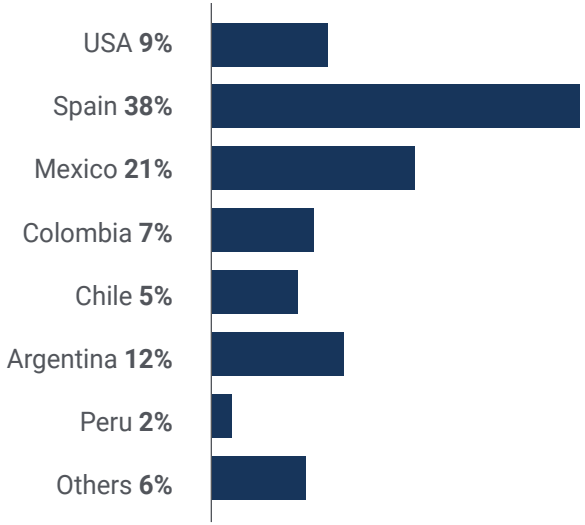
Training



Academic Profile



Geographical Distribution



Ramón Valverde

IT Manager at a Multinational Company

"This TECH program has allowed me to update my knowledge in a constantly changing sector, achieving the necessary training to act more confidently in my daily practice. Undoubtedly, an academic experience that I recommend to all those who wish to specialize in IT management"

09

Impact on Your Career

TECH is aware that studying a program like this entails great economic, professional and, of course, personal investment. The ultimate goal of this great effort should be to achieve professional growth.

That is why TECH makes all its efforts and tools available to students so they can acquire the necessary skills and abilities that will allow them to achieve this change.

At TECH we direct all our efforts towards helping you achieve the professional change you deserve”

If you want to make a positive professional change, this TECH program will help you achieve it.

Are you ready to take the leap? Excellent professional development awaits you

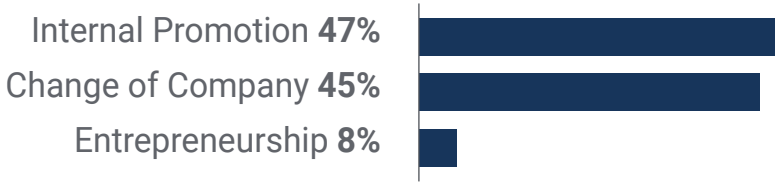
This TECH Technological University Advanced Master's Degree in Senior IT Management is an intensive program that teaches students to face challenges and business decisions both on a national and international level. The main objective is to promote your personal and professional growth, helping you to achieve success.

If you want to improve yourself, make a positive change professionally and network with the best, this is the place for you.

If you are looking for an improvement in your work environment, don't think twice and join the TECH alumni community.

When the change occurs

Type of change



Salary increase

This program represents a salary increase of more than **25.22%** for our students.

10

Benefits for Your Company

The Advanced Master's Degree in Senior IT Management contributes to raising the organization's talent to its maximum potential through the specialization of high-level leaders. Therefore, participating in this academic program will not only improve you on a personal level, but, above all, on a professional level, enhancing your knowledge and improving your managerial skills.

Additionally, joining TECH's educational community is a unique opportunity to access a powerful network of contacts in which to find future professional partners, clients, or suppliers.

After completing this Advanced Master's Degree, you will bring a new business vision to the company"

Developing and retaining talent in companies is the best long-term investment.

01

Intellectual Capital and Talent Growth

You will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

02

Retaining High-Potential Executives to Avoid Talent Drain

This program strengthens the link between the company and the executive and opens new avenues for professional growth within the company.

03

Building Agents of Change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

04

Increased International Expansion Possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.

05

Project Development

You will be able to work on a current project or develop new projects in the field of R&D or Business Development within the company.

06

Increased Competitiveness

This program will equip our students with the necessary skills to take on new challenges and thereby drive the organization forward.

11

Certificate

The Advanced Master's Degree in Senior IT Management guarantees you, in addition to the most rigorous and up-to-date training, access to a Advanced Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork"

This **Advanced Master's Degree in Senior IT Management** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Advanced Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Advanced Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Advanced Master's Degree in Senior IT Management**

Official Nº of hours: **3,000 h.**

tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

ADVANCED MASTER'S DEGREE

in

Senior IT Management

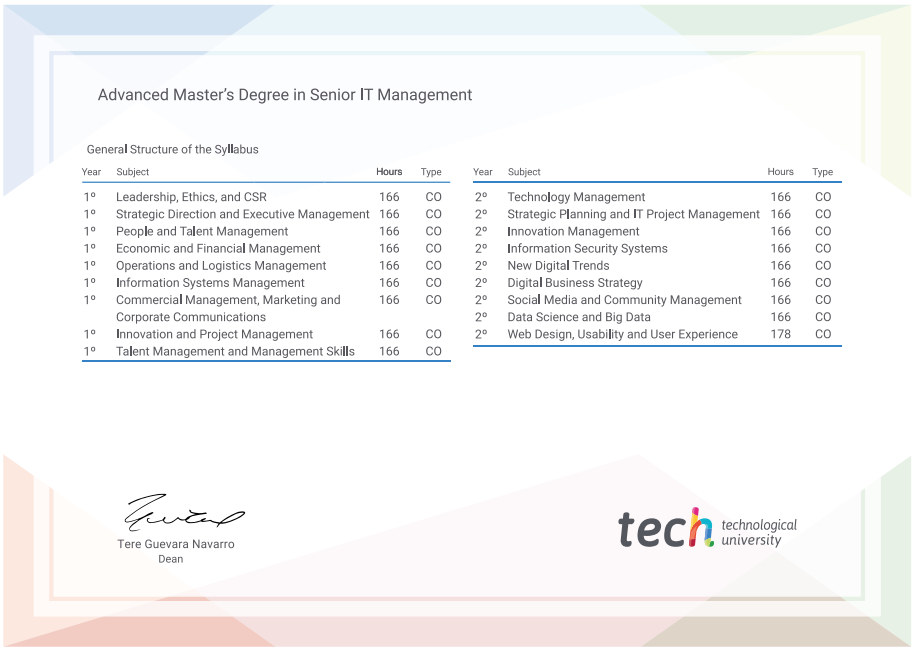
This is a qualification awarded by this University, equivalent to 3,000 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates



Advanced Master's Degree in Senior IT Management

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	Leadership, Ethics, and CSR	166	CO
1º	Strategic Direction and Executive Management	166	CO
1º	People and Talent Management	166	CO
1º	Economic and Financial Management	166	CO
1º	Operations and Logistics Management	166	CO
1º	Information Systems Management	166	CO
1º	Commercial Management, Marketing and Corporate Communications	166	CO
1º	Innovation and Project Management	166	CO
1º	Talent Management and Management Skills	166	CO

Year	Subject	Hours	Type
2º	Technology Management	166	CO
2º	Strategic Planning and IT Project Management	166	CO
2º	Innovation Management	166	CO
2º	Information Security Systems	166	CO
2º	New Digital Trends	166	CO
2º	Digital Business Strategy	166	CO
2º	Social Media and Community Management	166	CO
2º	Data Science and Big Data	166	CO
2º	Web Design, Usability and User Experience	178	CO

Tere Guevara Navarro
Dean

tech technological university

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

tech technological university

Advanced Master's Degree
Senior IT Management

Language: **English**

Course Modality: **Online**

Duration: **2 years**

Accreditation: **TECH Technological University**

Official Nº of hours: **3,000 h.**

Advanced Master's Degree

Senior IT Management

tech technological university