## Advanced Master's Degree Global Project Management

## A M D G P M





## Advanced Master's Degree Global Project Management

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/school-of-business/advanced-master-degree/advanced-master-degree-global-project-management

## Index

01	02		03	04	
Welcome	Why Study at TECH?		Why Our Program?	Objectives	
р. 4		р. б	p. 1		р. 14
	05		06	07	
	Skills		Structure and Content	Methodology	
		p. 22	p. 3		p. 52
	08		09	10	
	Our Students' Profiles		Course Management	Impact on Your Career	
		p. 60	p. 64	!	p. 68
			11	12	
			Benefits for Your Company	Certificate	
			p. 72		p. 76

## 01 Welcome

Companies operate in changing and highly competitive environments, so they have to focus on differentiation in order to achieve a niche in the market that allows them to develop successfully. At this point, project management takes on a relevant role, since it is responsible for identifying the needs and opportunities of the market in order to design projects that can reach the target audience. But the professional's work does not end there, they must know all the phases of the project, in depth in order to carry out the control of the same one that allows to take out to the market highly competitive products. This is, without doubt, the profile of a top level professional, which is why more and more people are deciding to look for top level academic programs so as to find a specialization within in this field. To address this need, TECH presents this training program, which aims to improve the knowledge and skills of professionals in this field, with the main objective of making them more competitive in their daily practice.

> Advanced Master's Degree in Global Project Management. TECH Technological University

> > 101

56 Be to

10 See

Ы

8

Become a successful project manager, able to identify opportunities and design relevant projects for your company"

# 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.

## Why Study at TECH? | 07 tech

GG

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"

## tech 08 | Why Study at TECH?

#### 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...



## 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.



executives trained each year

## 2007

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. by studying 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.



### Why Study at TECH? | 09 tech

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.



#### 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"



#### **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 Global Project 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.

GG

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"

## tech 12 | Why Our Program?

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



#### 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.



## 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.



#### 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.



#### 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.

## Why Our Program? | 13 tech



#### 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.



#### 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.



#### 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.



#### 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 as a didactic guide for project management professionals, as they will find all the necessary information to successfully manage a job that requires a high level of specialization, as they have to understand and manage all phases of projects. Therefore, TECH's main objective with this Advanced Master's Degree is that, at the end of the course, students will have acquired the necessary skills to be able to carry out their daily work to a high standard..



This program will provide you with the necessary strategies to properly manage your company's projects"

## tech 16 | Objectives

Your goals are our goals.

We work together to help you achieve them.

The Advanced Master's Degree in Global Project Management will enable students to:



Moving from the technical management side to the managerial side within the organizations



Know how to manage companies, work and people in highly uncertain environments



Improve knowledge of areas complementary to project management; business strategy and financial management





Improving the management of people and highperformance teams



Know how to work in a more effective, more agile and more aligned way with new technologies and current tools

## Objectives | 17 tech



Learn the key legal issues when drafting a project contract



Understand the importance of corporate social responsibility as an essential part of any project





Develop the ability to predict in highly uncertain environments



Know the best practices to get your team not only involved but also committed to it



Know how to distribute shared resource workloads among several projects

### tech 18 | Objectives

11

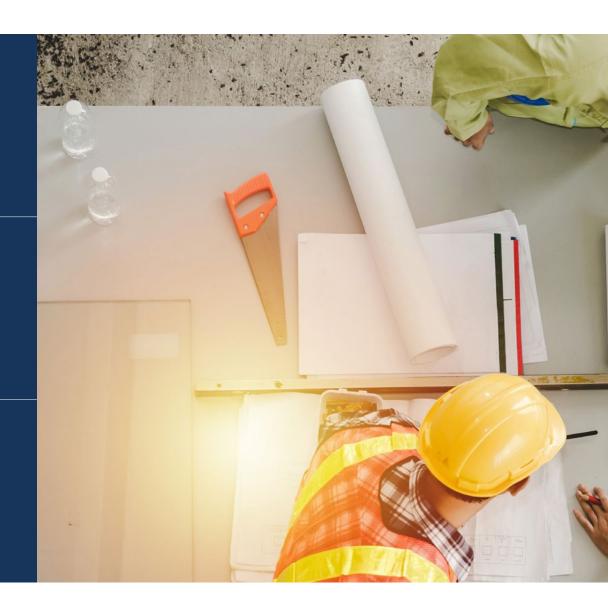
Develop skills and abilities necessary to make decisions in all types of projects, especially technological projects, multidisciplinary contexts and environments



Acquire the ability to analyze and diagnose business and management problems in the different areas of knowledge of project management



Master advanced business management tools, to know how to identify and anticipate opportunities, allocate resources, organize information, select, motivate and manage people, make decisions, achieve proposed objectives and evaluate results







Know how to estimate time in each process of project design and development



Evaluate the processes and estimate the cost of developing a technology project



Understanding the cost of failing to meet project quality

## tech 20 | Objectives



#### Perform quality controls at each stage of the project



Manage the different stages of EPC projects



Understand and manage the risks of technology projects





Conduct a comprehensive analysis of EPC projects



Manage contracts for large-scale projects

## Objectives | 21 tech



Learn how to provide an in-depth breakdown of guarantees, disputes and insurance in construction



#### Analyze cost, time and resources





Obtain a solid understanding of the integration phases of a project



Mastering project management in a global way



Understanding the management of a project with a global interdepartmental vision

## 05 **Skills**

At the end of this Advanced Master's Degree in Global Project Management of TECH Technological University, the student will have acquired the competencies and skills necessary to participate, manage and control all phases of a project. In this way, this program will provide you with the necessary knowledge that you will later apply to your daily work, making it a unique study opportunity that will mark a before and after in your training.

Develop the necessary skills that will allow you to control all phases of project creation"

## tech 24 | Skills



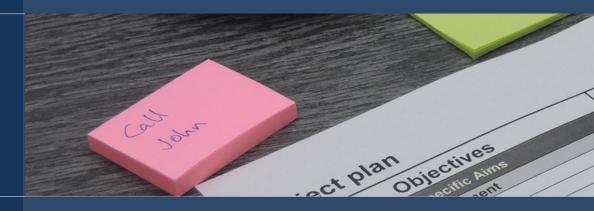
Learning to manage companies in environments of high uncertainty



Understanding how to manage a high-performance team



Better manage personal time and the time of others





Understand the relationship between scope, time and cost



Know how to analyze the income statement of companies



Understanding the main financial indicators of organizations



Understand the keys to successful R&D&I management in organizations





Calculate the feasibility of a project before its execution

07

Design and implement PMO structures within an organization



Identify the direct and indirect costs associated with any business activity

## tech 26 | Skills



Successfully manage technology projects to achieve business objectives



Perform the process of work monitoring and quality control of technological projects



Audit the quality of each of the processes involved in the project design





Apply the specific regulations and best practice criteria for the management of technology projects



Manage the scope of technology projects



Estimating the duration of projects and managing them appropriately



Understand emerging trends and practices in technology project resource management and implement them





Apply new trends in the field of communication



Understanding the human and material resources required to carry out a project



Apply the code of ethics in the management of technological projects

## tech 28 | Skills

21

Master the global environment of large turnkey construction, from the international context, markets, to project development, operation and maintenance plans and sectors such as insurance and asset management



Perform project management of this type in national and international environments



Apply acquired knowledge and problem-solving skills in current or unfamiliar environments within broader contexts related to EPC projects





Understand and internalize the scope of digital and industrial transformation applied to EPC project systems for efficiency and competitiveness in today's market



Recognize the main actors involved in the construction phase of an EPC project



Know how to manage a construction contract in international environments, paying special attention to the critical points that may affect the deadlines and costs of the execution of the contract



Have specific knowledge in the area of arbitration and possible disputes, so that he/she can be prepared to participate in future project processes that he/she manages





Obtain the necessary skills to make relevant decisions for the development of the project in a timely manner



Master important aspects of contract management such as guarantees, insurance and penalties



Know how to act as a project manager to manage quality, communications and possible non-conformities that may arise in the project

## 06 Structure and Content

The structure of this Advanced Master's Degree in Global Project Management has been developed with the academic needs of business professionals in an area that is truly essential in any company in mind. In this way, students will have the opportunity to take an academic tour of the latest and most relevant concepts in this area of action, bringing greater quality and safety to their daily practice, as well as a comprehensive and international vision to their work.

66

A very well-structured syllabus in a fully digital format that will allow you to self-manage your study time"

### tech 32 | Structure and Content

#### Syllabus

The Advanced Master's Degree in Global Project Management at TECH Technological University is an intensive program that prepares students to face business challenges and decisions both nationally and internationally. Its content is designed to promote the development of managerial skills that enable more rigorous decision-making in uncertain environments.

Throughout 3,000 hours of study, the student will analyze a multitude of practical cases through individual work, achieving high quality learning that can be applied to their daily practice. It is, therefore, an authentic immersion in real business situations. This program deals in depth with the main areas of the company and is designed for managers to understand project management from a strategic, international and innovative perspective.

A plan designed for students, focused on their professional improvement and preparing them to achieve excellence in the field of project 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 faculty, which will provide you with the competencies to solve critical situations in a creative and efficient way.

This program is developed over 2 years and is divided into 25 modules:

Module 1	Strategic Project Management
Module 2	Project Financial Management
Module 3	Recruitment and Project Quality
Module 4	People and Resource Management
Module 5	Innovative Organizations and Projects
Module 6	Agile Methodologies
Module 7	PMO
Module 8	Project Risk Management
Module 9	Project Finances
Module 10	Introduction to Technology Project Design and Management and Management of Technology Project Integration
Module 11	Scope Management of Technology Projects
Module 12	Time Management of Technology Projects
Module 13	Cost Management of Technology Projects

### Structure and Content | 33 tech

Module 14	Quality Management for Technological Projects
Module 15	Management of Technology Project Resources
Module 16	Communications and Stakeholder Management for Technology Projects
Module 17	Technology Project Procurement Management
Module 18	PMP® or CAPM® Certification and Code of Ethics. Emerging Trends and Practices in Technology Project Management and Leadership
Module 19	International Projects
Module 20	Turnkey Projects (EPC)
Module 21	Management and Control of Stages in Turnkey (EPC) Projects
Module 22	Contract Management in Projects
Module 23	Project Management in Contract Management
Module 24	Project Management in Projects: Communications and Quality Management
Module 25	Project Management in Projects: Purchasing and Resource Management

#### Where, When and How is it Taught?

TECH offers you the possibility of taking this program completely online. During the 2 years of training, 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.

## tech 34 | Structure and Content

Mod	ule 1. Strategic Project Management						
1.1.	Strategic Project Management and the Company	1.2.	Competitive Business Strategy	1.3.	Corporate Business Strategy	1.4.	Project Management Framework
1.5.	Integration and Knowledge Management	1.6.	Areas of Knowledge in Project Management	1.7.	Project Change Management: Training Management	1.8.	Stakeholder Management
1.9.	Project Communication Management	1.10	Traditional and Innovative Methodologies				
Mod	ule 2. Project Financial Management						
2.1.	Financial Plan	2.2.	Financial Model	2.3.	Project Viability Analysis	2.4.	Project Sensitivity Management
2.5.	Project Cost Management	2.6.	Project Cost Estimation	2.7.	Control Project Costs - EVM	2.8.	Economic Analysis of Decisions
2.9.	Ms Project Tools	2.10	Digital Tools and Systems for Project Management				
Med							
Mod	ule 3. Recruitment and Project Quality						
3.1.	Acquisition Planning	3.2.	Supplier Search Planning	3.3.	Supplier Relationship Management	3.4.	Legal Aspects of Recruitment
3.5.	Contract Management and Administration	3.6.	Project Sale Management	3.7.	Lean Management	3.8.	Process Improvement Techniques
3.9.	Total Quality Management and Advanced Project Management	3.10	Lean Tools for Project Management				

## Structure and Content | 35 tech

Module 4. People and Resource Management							
4.1. Organizational Culture	4.2. Organization Management	4.3. Talent Management and 4.4 Commitment	Motivation				
4.5. People Management and the Project Manager	4.6. Corporate Responsibility	4.7. Professional Ethics 4.8.	Executive Skills and Management Techniques of the Project Manager				
4.9. Negotiation	4.10. Project Resource Management						

Mod	Module 5. Innovative Organizations and Projects								
5.1.	Organizational Change Management	5.2.	Communication in Organizations	5.3.	Creative Thinking: Innovation	5.4.	Process Engineering and Product Engineering		
5.5.	Strategic Innovation Intelligence	5.6.	Entrepreneurship and Innovation	5.7.	Launch and Industrialization of New Products	5.8.	R+D+I Management Systems		
5.9.	Direction and Management of R+D+I Projects	5.10	Project Management for Start-ups						

Mod	lule 6. Agile Methodologies						
6.1.	Introduction to Agile Methodologies	6.2.	Iterative, Adaptive, Predictive and Hybrid Lifecycles	6.3.	Introduction to Scrum	6.4.	Agile Team Management
6.5.	Scrum Events	6.6.	Artifacts in Scrum	6.7.	Agile Estimating and Planning	6.8.	Metrics
6.9.	Collaborative Tools	6.10	Organizational Agility				

## tech 36 | Structure and Content

Мос	lule 7. PMO						
7.1.	Introduction to the Project Management Office	7.2.	Functions of the Project Management Office	7.3.	Creating the Conditions for Change Leading Organizational Change	7.4.	PMO Vision and Strategy
7.5.	PMO Model Design	7.6.	PMO Resource Plan	7.7.	PMO Implementation	7.8.	PMO Operation and Tools
7.9.	Project Management Culture and Knowledge Management in the Organization	7.10.	Agile PMO				
Mod	ule 8. Project Risk Management						
8.1.	Introduction to Risk Management	8.2.	Project Risk Management Planning	8.3	Risk Identification	8.4	. Qualitative Risk Analysis
8.5.	Risk Prioritization	8.6.	Quantitative Risk Analysis	8.7.	Scenario Analysis and Risk Response Plans	8.8	. Implementation of Risk Response
8.9.	Risk Monitoring and Control	8.10	. Lessons Learned and Knowledge Management				
Mod	ule 9. Introduction to Project Finance						
9.1.	Introduction to Corporate Finance	9.2.	Financial Statements and Cash Flows	9.3	Time Value of Money and Discounted Cash Flows	9.4	Fixed Income Valuation
9.5.	Equity Valuation	9.6.	Financial Investment Criteria: Capital Budgeting	9.7.	Project Analysis	9.8	. Risk and Return: The Cost of Capit
9.9.	Liability Structure	9.10	. Treasury and International Finance				

## Structure and Content | 37 tech

Module 10. Introduction to Technology Pro	ject Design and Management and Managem	ent of Technology Project Integration	
<ul> <li>10.1. Introduction to Technology Project Management</li> <li>10.1.1. The Role of the Project Manager</li> <li>10.1.2. Project Definition</li> <li>10.1.3. Organisational Structure</li> </ul>	<ul> <li>10.2. Project Management, Program Management, and Portfolio Management</li> <li>10.2.1. Portfolios, Programs and Projects</li> <li>10.2.2. Strategic Management</li> </ul>	<ul> <li>10.3. Standards and Best Practices for the Management of Technological Projects</li> <li>10.3.1. Prince2</li> <li>10.3.2. PMP</li> <li>10.3.3. ISO 21500: 2012</li> </ul>	<ul> <li>10.4. Organizational Influences on the Design and Management of Technology Projects</li> <li>10.4.1. Environmental Factors of a Company 10.4.2. Assets of an Organization's Processes</li> </ul>
<ul> <li>10.5. Technology Project Management Processes</li> <li>10.5.1. Life Cycle of Technological Projects</li> <li>10.5.2. Process Groups</li> <li>10.5.3. Dynamics of Process Groups</li> </ul>	<ul> <li>10.6. Development of the Act of Incorporation of Technological Projects</li> <li>10.6.1. Definition of the Act of Incorporation of Technological Projects</li> <li>10.6.2. Tools and Techniques</li> </ul>	<ul> <li>10.7. Development of the Plan for the Design and Management of Technological Projects</li> <li>10.7.1. Definition of the Plan for the Design and Management of Technological Projects</li> <li>10.7.2. Tools and Techniques</li> </ul>	<ul> <li>10.8. Knowledge Management of Technological Projects</li> <li>10.8.1. Importance of Knowledge Management i Technology Projects</li> <li>10.8.2. Tools and Techniques</li> </ul>
<ul> <li>10.9. Monitoring the Technology Projects Work</li> <li>10.9.1. Work Monitoring and Control</li> <li>10.9.2. Follow-up Reports on Technological Projects</li> <li>10.9.3. Tools and Techniques</li> </ul>	<ul> <li>10.10. Integrated Control of Changes in Technological Projects</li> <li>10.10.1. Objectives and Benefits of Change Control on Projects</li> <li>10.10.2. The CCB (Exchange Control Board)</li> <li>10.10.3. Tools and Techniques</li> </ul>	<ul> <li>10.11. Delivery and Closing of Technology Projects</li> <li>10.11.1. Objectives and Benefits of Project Closure</li> <li>10.11.2. Tools and Techniques</li> </ul>	
Module 11. Project Scope Management Te	chnological		
<b>11.1. Introduction to Scope Management</b> 11.1.1. Project Scope 11.1.2. Product Scope	<ul> <li>11.2. Fundamentals of Scope Management</li> <li>11.2.1. Basic Concepts</li> <li>11.2.2. Scope Baseline</li> </ul>	<b>11.3. Benefits of Scope Management</b> 11.3.1. Stakeholder Expectation Management 11.3.2. Scoop Creep y Gold Plating	<ul> <li>11.4. Considerations for Adaptive Environments</li> <li>11.4.1. Types of Adaptive Projects</li> <li>11.4.2. Scope Definition in Adaptive Projects</li> </ul>
<b>11.5. Scope Management Planning</b> 11.5.1. Scope Management Plan 11.5.2. Requirements Management Plan 11.5.3. Tools and Techniques	<b>11.6. Gather Requirements</b> 11.6.1. Requirements Gathering and Negotiation 11.6.2. Tools and Techniques	<b>11.7. Definition of Scope</b> 11.7.1. Project Scope Statement 11.7.2. Tools and Techniques	<ul> <li>11.8. Creation of the Work Breakdown Structure (WBS)</li> <li>11.8.1. Work Breakdown Structure (WBS)</li> <li>11.8.2. Types of EDT</li> <li>11.8.3. Rolling Wave</li> <li>11.8.4. Tools and Techniques</li> </ul>
11.9. Scope Validation	11.10. Scope Control		
11.9.1. Quality vs. Validation 11.9.2. Tools and Techniques	11.10.1. Data and Management Information in Projects		

- Projects 11.10.2. Types of Performance Reports Assignments 11.10.3. Tools and Techniques

## tech 38 | Structure and Content

#### Module 12. Time Management of Technology Projects

#### 12.1. Estimated Duration of Project Tasks

12.1.1. Three-value Estimation 12.1.1.1. Most Likely (tM) 12.1.1.2. Optimistic (tO) 12.1.1.3. Pessimistic (tP)
12.1.2. Analogous Estimate
12.1.3. Parametric Estimation
12.1.4. Bottom-up Estimates
12.1.5. Decision-Making
12.1.6. Expert Judgment

#### 12.5. Estimated Duration of Activities

- 12.5.1. Law of Diminishing Returns 12.5.2. Number of Resources
- 12.5.3. Technological Advances
- 12.5.4. Staff Motivation
- 12.5.5. Project Documentation

12.2. Definition of Activities and Breakdown of Project Work

#### 12.2.1. Decomposition 12.2.2. Define Activities

12.2.2. Define Activities 12.2.3. Breakdown of Project Work 12.2.4. Activity Attributes 12.2.5. List of Milestones

#### 12.3. Sequencing of Activities

- 12.3.1. List of Activities
- 12.3.2. Attributes of the Activities
- 12.3.3. Method of Diagramming Provenance
- 12.3.4. Determination and Integration of the Units
- 12.3.5. Advances and Delays
- 12.3.6. Network Diagram of the Project Timeline

#### 12.4. Estimation of Activity Resources

- 12.4.1. Register of Assumptions
- 12.4.2. List of Activities
- 12.4.3. Attributes of the Activities
- 12.4.4. Register of Assumptions
- 12.4.5. Lessons Learned Register
- 12.4.6. Project Team Assignments 12.4.7. Resource Breakdown Structure
- 12.7.7. NESOUICE DIEdkuowii Sliuciu

#### 12.6. Schedule Development

- 12.6.1. Schedule Network Analysis
- 12.6.2. Critical Path Method
- 12.6.3. Resource Optimization 12.6.3.1. Resource Leveling 12.6.3.2. Stabilization of Resources
- 12.6.4. Advances and Delays 12.6.5. Schedule Compression
  - 12.6.5.1. Intensification
  - 12.6.5.2. Fast Execution
- 12.6.6. Baseline Schedule
- 12.6.7. Project Timeline
- 12.6.8. Schedule Data
- 12.6.9. Project Schedules

#### 12.9. Schedule Control

- 12.9.1. Job Performance Information
- 12.9.2. Schedule Forecasts
- 12.9.3. Change Requests
- 12.9.4. Update to the Time Management Plan
- 12.9.5. Project Document Updates

#### 12.10. Recalculation of Times

- 12.10.1. Critical Path
- 12.10.2. Calculation of Minimum and Maximum Times 12.10.3. Project Clearances 12.10.3.1. What Is It? 12.10.3.2. How to Use it? 12.10.4. Total Slack
- 12.10.5. Free Clearance

#### 12.7. Types of Relationships and Types of Dependencies between all Project Activities

- 12.7.1. Mandatory Dependencies
- 12.7.2. Discretionary Units 12.7.2.1. Preferred Logic 12.7.2.2. Preferential Logic 12.7.2.3. Soft Logic
- 12.7.3. External Units
- 12.7.4. Internal Units

#### 12.8. Time Management Software for Technology Projects

- 12.8.1. Analysis of Different Software
- 12.8.2. Types of Software
- 12.8.3. Functionalities and Coverage
- 12.8.4. Utilities and Advantages

## Structure and Content | 39 tech

#### Module 13. Cost Management of Technology Projects

13.1.	What is the Cost Management
	Plan?

13.1.1. Planning Tools and Techniques 13.1.2. Cost Planning Results

#### 13.5. Determine the Budget

- 13.5.1. Useful Information for the Preparation of the Project Budget13.5.2. Tools and Techniques for the Preparation of
- Cost Estimates 13.5.3. Results of Project Budget Preparation

#### 13.9. Cost Control

13.9.1. Cost Control Objectives and Benefits

13.9.2. Tools and Techniques

- 13.2. Estimate Costs. Types of Estimates. Reserve Analysis
- 13.2.1. Useful Information for Cost Estimation 13.2.2. Tools and Techniques for Cost Estimation
- 13.2.3. Results of Cost Budget Preparation

#### 13.6. Cost Projections

13.6.1. Cost Management Data and Information 13.6.2. Types of Cost Performance Reports

#### 13.3. Types of Project Costs

13.7. Earned Value Technique (EVM)

13.7.1. Base Variables and Status Variables

13.7.3. Emerging Techniques and Practices

13.3.1. Direct and Indirect Costs 13.3.2. Fixed and Variable Costs

13.7.2. Forecasts

#### 13.4. Project Evaluation and Selection

13.4.1. Financial Dimensions of a Project13.4.2. VAN13.4.3. IRR and NRR13.4.4. Recovery Period or Payback

#### 13.8. Project Cash Flow

- 13.8.1. Types of Cash Flows
- 13.8.2. Estimating Net Cash Flows Associated with a Project
- 13.8.3. Discounted Cash Flows 13.8.4. Application of Risk to Cash Flows

#### Module 14. Quality Management for Technological Projects

#### 14.1. Importance of Quality Management in Projects

#### 14.2. Quality Theorists

- in Projects 14.1.1. Key Concepts 14.1.2. Difference between Quality and Grade
- 14.1.3. Precision 14.1.4. Accuracy
- 14.1.5. Metrics

- 14.2.1. Edwards Deming 14.2.1.1. Shewart - Deming Cycle(Plan Do-Check-Act)
  14.2.2. Continuing Improvement
  14.2.3. Joseph Juran. Pareto Principle Fitness-for-purpose" Theory
- 14.2.4. Theory "Total Quality Management"
- 14.2.5. Kaoru Ishikawa (Herringbone)
- 14.2.6. Philip Crosby (Cost of Low Quality)

#### 14.5. Quality Management Planning

14.5.1. Cost-Benefit Analysis
14.5.2. Multi-criteria Decision Analysis
14.5.3. Test Planning and Inspection
14.5.4. Flow Diagrams
14.5.5. Logical Data Model
14.5.6. Matrix Diagram
14.5.7. Interrelationship Digraphs

#### 14.6. Quality Compliance and Non-Compliance Costs

14.6.1. Compliance Costs
14.6.2. Non-compliance or Non-Compliance Costs
14.6.3. Prevention Costs
14.6.4. Valuation Costs
14.6.5. Internal Failures
14.6.6. External Failures
14.6.7. Marginal Cost of Quality
14.6.8. Optimum Quality

## 14.3. Regulations: ISO Business School 21500

#### 14.3.1. Introduction

14.3.2. Background and History14.3.3. Objectives and Characteristics14.3.4. Process Group - Subject Group14.3.5. ISO 21500 vs. PMBOK14.3.6. Future of the Standard

#### 14.7. Quality Management

14.7.1. Check lists
14.7.2. Analysis of Alternatives
14.7.3. Document Analysis
14.7.4. Process Analysis
14.7.5. Root Cause Analysis
14.7.6. Cause-and-effect Diagrams
14.7.7. Histograms
14.7.8. Scatter Plots
14.7.9. Design for X
14.7.10. Quality Improvement Methods

#### 14.4. Emerging Trends and Practices in Quality Management

- 14.4.1. Policy Compliance and Auditing
- 14.4.2. Standards and Compliance
- 14.4.3. Continuous Improvement
- 14.4.4. Stakeholder Involvement
- 14.4.5. Recurring Retrospectives
- 14.4.6. Subsequent Retrospectives

#### 14.8. Quality Audits

- 14.8.1. What is an Internal Quality Audit?
- 14.8.2. Different Types of Audits
- 14.8.3. Objectives of an Internal Audit
- 14.8.4. Benefits of Internal Audits
- 14.8.5. Actors Involved in Internal Auditing
- 14.8.6. Internal Audit Procedure

#### 14.9. Quality Control

- 14.9.1. Verification Sheets 14.9.2. Statistical Sampling
- 14.9.3. Questionnaires and Surveys
- 14.9.4. Performance Reviews
- 14.9.5. Inspection
- 14.9.6. Product Testing/Evaluation
- 14.9.7. Retrospectives and Lessons Learned

## Structure and Content | 41 tech

Module 15. Management of Technology P	roject Resources		
<ul> <li>15.1. Responsibilities and Role of Project Human Resources:</li> <li>15.1.1. Project Manager</li> <li>15.1.2. Sponsor</li> <li>15.1.3. Functional Director</li> <li>15.1.4. Program Director</li> <li>15.1.5. Portfolio Manager</li> <li>15.1.6. Team Members</li> </ul>	<ul> <li>15.2. Management of Technological Resources</li> <li>15.2.1. What are Technology Resources?</li> <li>15.2.2. Optimization</li> <li>15.2.3. Valuation</li> <li>15.2.4. Protection</li> </ul>	<ul> <li>15.3. Human Resource Management Planning and Estimating Activity Resources</li> <li>15.3.1. Resource Management Plan 15.3.1.1. Data Representation 15.3.2. Organizational Theory</li> <li>15.3.2. Resource Requirements</li> <li>15.3.3. Basis of Estimates</li> <li>15.3.4. Resource Breakdown Structure</li> <li>15.3.5. Resource Document Updates</li> </ul>	<ul> <li>15.4. Different Powers of the Project Manager</li> <li>15.4.1. Power and Influence</li> <li>15.4.2. Reward Power</li> <li>15.4.3. Power of Punishment</li> <li>15.4.4. Expert Power</li> <li>15.4.5. Reference Power</li> <li>15.4.6. Formal Power</li> <li>15.4.7. Practical Exercises on How to Use the Different Powers of the Project Manager</li> </ul>
<ul> <li>15.5. Acquisition of the Appropriate Project Equipment for our Project</li> <li>15.5.1. What is Equipment Acquisition?</li> <li>15.5.2. Means of Equipment Acquisition 15.5.2.1. Contracting 15.5.2.2. Outsourcing</li> <li>15.5.3. Decision-Making 15.5.3.1. Availability 15.5.3.2. Cost 15.5.3.3. Experience</li> </ul>	15.5.3.4. Skills 15.5.3.5. Knowledge 15.5.3.6. Capacity 15.5.3.7. Attitudes 15.5.3.8. International Factors 15.5.4. Pre-assignment 15.5.5. Virtual Teams	<ul> <li>15.6. Development of Interpersonal Skills (soft skills)</li> <li>15.6.1. Leadership</li> <li>15.6.2. Motivation</li> <li>15.6.3. Communication</li> <li>15.6.4. Influence</li> <li>15.6.5. Group Facilitation</li> <li>15.6.6. Creativity</li> <li>15.6.7. Emotional Intelligence</li> <li>15.6.8. Decision-Making</li> </ul>	<ul> <li>15.7. Project Team Development</li> <li>15.7.1. Recognition and Rewards <ul> <li>15.7.1.1. Preconditions to be Met in Order to Apply it</li> <li>15.7.1.2. Create a Recognition and Reward System</li> </ul> </li> <li>15.7.2. Training <ul> <li>15.7.3. Co-location (Tight Matrix)</li> <li>15.7.4. Communication Technology</li> <li>15.7.5. Team Building (Team Building) Activities</li> </ul> </li> </ul>
<ul> <li>15.8. Project Management. Performance Appraisals, Project Team Management</li> <li>15.8.1. Plan</li> <li>15.8.2. Types of Assessments 15.8.2.1. Personal Evaluations 360° Evaluations 15.8.2.2. Equipment Evaluation</li> <li>15.8.3. Definition of Variables</li> <li>15.9.4 Design of the Definement Approximate Outputs</li> </ul>	<ul> <li>15.9. Conflict Management and Resolution Techniques</li> <li>15.9.1. What are Project Conflicts? Types</li> <li>15.9.2. Cooperate and Resolve Problems</li> <li>15.9.3. Compromise /Consent</li> <li>15.9.4. Move away/avoid</li> <li>15.9.5. Smooth/Accommodate</li> <li>15.9.6. Force/Direct</li> <li>15.9.7. Practical Exercises to Know When to Use Each Conflict Resolution Technique</li> </ul>	<ul> <li>15.10. Emerging Trends and Practices in Resource Management for Technology Projects</li> <li>15.10.1. Resource Management Methods</li> <li>15.10.2. Emotional Intelligence (EI)</li> <li>15.10.3. Self-organized Teams</li> <li>15.10.4. Virtual Teams/Distributed Teams</li> <li>15.10.5. Considerations for Adaptation</li> <li>15.10.6. Considerations for Agile/ Adaptive</li> </ul>	

Environments

Each Conflict Resolution Technique

- 15.8.3. Definition of Variables
- 15.8.4. Design of the Performance Appraisal System 15.8.5. Implementation and Training of Evaluators

Module 16. Quality Management for Techr	nological Projects		
<ul> <li>16.1. Communications Management Planning</li> <li>16.1.1. Why is a Communications Management Plan important?</li> <li>16.1.2. Introduction to Communications Management</li> <li>16.1.3. Communications Analysis and Requirements</li> <li>16.1.4. Dimensions of Communications</li> <li>16.1.5. Techniques and Tools</li> </ul>	<b>16.2. Communication Skills</b> 16.2.1. Conscious Emission 16.2.2. Active Listening 16.2.3. Empathy 16.2.4. Avoid Bad Gestures 16.2.5. Reading and Writing 16.2.6. Respect 16.2.7. Persuasion 16.2.8. Credibility	<ul> <li>16.3. Effective, Efficient and Types of Communication</li> <li>16.3.1. Definition</li> <li>16.3.2. Effective Communication</li> <li>16.3.3. Efficient Communication</li> <li>16.3.4. Formal Communication</li> <li>16.3.5. Informal Communication</li> <li>16.3.6. Written Communication</li> <li>16.3.7. Verbal Communication</li> <li>16.3.8. Practical Exercises on the Use of Communication Types on a Project</li> </ul>	<ul> <li>16.4. Communications Management and Control</li> <li>16.4.1. Project Communications Management</li> <li>16.4.2. Communication Models</li> <li>16.4.3. Communication Methods</li> <li>16.4.4. Project Communication Channels</li> </ul>
<ul> <li>16.5. Emerging Trends and Practices in the Communication Field</li> <li>16.5.1. Evaluation of Communication Styles</li> <li>16.5.2. Political Awareness</li> <li>16.5.3. Cultural Awareness</li> <li>16.5.4. Communications Technology</li> </ul>	<ul> <li>16.6. Stakeholder Identification and Analysis</li> <li>16.6.1. Why is it Important to Manage Stakeholders?</li> <li>16.6.2. Stakeholder Analysis and Registration</li> <li>16.6.3. Stakeholder Interests and Concerns</li> <li>16.6.4. Considerations for Agile and Adaptive Environments</li> </ul>	<b>16.7. Stakeholder Management Planning</b> 16.7.1. Appropriate Management Strategies 16.7.2. Tools and Techniques	<ul> <li>16.8. Stakeholder Engagement Management (Stakeholders) Management Strategy</li> <li>16.8.1. Methods for Increasing Support and Minimizing Resistance</li> <li>16.8.2. Tools and Techniques</li> </ul>

#### 16.9. Monitoring of Stakeholder Involvement (Stakeholders)

- 16.9.1. Stakeholder Performance Report 16.9.2. Tools and Techniques

## Structure and Content | 43 tech

17.1. Introduction to Procurement	17.2. Basic Concepts	17.3. Procurement Management: Benefits	17.4. Acquisitions in Adaptive
Management 17.1.1. Definition of Contract 17.1.2. Legal Framework for Procurement	17.2.1. Definition of Contract 17.2.2. The Project Manager and the Contract 17.2.3. Main Activities 17.2.4. Centralized and Decentralized Contracting	17.3.1. Definition of the Procurement Strategy 17.3.2. Types of Strategies	Environments
17.5. Types of Contracts	17.6. Procurement Documentation	17.7. Negotiation with Suppliers	17.8. Procurement Management Planning
17.5.1. Fixed Price Contracts	17.6.1. Types of Documents in the Framework of an	17.7.1. Supplier Negotiation Objectives	17.8.1. Procurement Management Plan
17.5.2. Reimbursable Cost Contracts 17.5.3. Time and Materials Contracts	Acquisition 17.6.2. Document Flows in Procurement Management	17.7.2. Negotiation Techniques with Suppliers	17.8.2. Tools and Techniques
17.9. Procurement	17.10. Procurement Monitoring and		
17.9.1. Search, Selection and Evaluation of Offers	Control		
17.9.2. Tools and Techniques 17.9.3. Bid Weighting Matrix	17.10.1. Procurement Monitoring and Control Points by Contract Type		
	17.10.2. Tools and Techniques		

Module 18. PMP® or CAMP® Certificatio	n and Code of Ethics. Emerging Trends and Pra	actices in Technology Project Management a	nd Leadership
<b>18.1. What is PMP®, CAPM® and PMI®?</b> 18.1.1. What is PMP®? 18.1.2. CAPM® 18.1.3. PMI® 18.1.4. PMBOK	<ul> <li>18.2. Advantages and Benefits of Obtaining PMP® and CAPM® Certification</li> <li>18.2.1. Techniques and Tricks for Passing the PMP® and CAPM® Certification Exam on the First Attempt</li> <li>18.2.2. PMI-isms</li> </ul>	<ul> <li>18.3. Professional Experience Report to PMI® (Project Management Technology Institute)</li> <li>18.3.1. Becoming a PMI® Member</li> <li>18.3.2. Entry Requirements for the PMP® and CAPM® Certification Exams</li> <li>18.3.3. Analysis of the Student's Professional Experience</li> <li>18.3.4. Student Work Experience Report Help Template</li> <li>18.3.5. PMI® Software Experience Report</li> </ul>	<ul> <li>18.4. PMP® or CAPM® Certification Examination</li> <li>18.4.1. What is the PMP® or CAPM® Certification Examination like?</li> <li>18.4.2. Number of Scoring and Non-Scoring Questions</li> <li>18.4.3. Duration of the Examination</li> <li>18.4.4. Passing Threshold</li> <li>18.4.5. Number of Questions per Process Group</li> <li>18.4.6. Qualification Methodology</li> </ul>
<b>18.5. Agile Methodologies</b> 18.5.1. Agile 18.5.2. Scrum 18.5.3. Kanban 18.5.4. Lean 18.5.5. Comparison with PMI® Certifications	<ul> <li>18.6. Software Development in Agile Methodologies</li> <li>18.6.1. Analysis of the Different Software on the Market</li> <li>18.6.2. Advantages and Benefits</li> </ul>	<ul> <li>18.7. Advantages and Limitations of Implementing Agile Methodologies in Your Technology Projects</li> <li>18.7.1. Advantages</li> <li>18.7.2. Limitations</li> <li>18.7.3. Agile Methodologies vs. Traditional Tools</li> </ul>	<ul> <li>18.8. Code of Ethics in the Management of your Projects</li> <li>18.8.1. Responsibility</li> <li>18.8.2. Respect</li> <li>18.8.3. Impartiality</li> <li>18.8.4. Honesty</li> </ul>

## Structure and Content | 45 tech

Module 19. International Projects			
<b>19.1. Projects and Organizational Context</b> 19.1.1. Project in the Organization 19.1.2. Project Elements 19.1.3. Importance of the Project in the Organization	<b>19.2. Types of Projects by Service</b> 19.2.1. Types of Projects 19.2.2. Project Analysis 19.2.3. Project Orientation	<ul> <li>19.3. Main Processes in the Development of a Project</li> <li>19.3.1. Start-up and Planning Process</li> <li>19.3.2. Execution and Monitoring</li> <li>19.3.3. Closing Process</li> </ul>	<ul> <li>19.4. Cost, Scope and Quality Constraints Analysis</li> <li>19.4.1. Cost Constraint Analysis</li> <li>19.4.2. Restriction Scope</li> <li>19.4.3. Quality Restriction</li> </ul>
<ul> <li>19.5. Time, Resource and Risk Constraints</li> <li>19.5.1. Time Constraint Analysis</li> <li>19.5.2. Restriction Resources</li> <li>19.5.3. Restriction Risks</li> </ul>	<b>19.6. Analysis of Contract Types</b> 19.6.1. Contract at Unitary Price 19.6.2. "Lump Sum" Contract or Global Sum 19.6.3. Cost Plus Margin Contract	<ul> <li>19.7. Project Management According to Typology</li> <li>19.7.1. Project Management at Unit Price</li> <li>19.7.2. Lump Sum/Global Project Management</li> <li>19.7.3. Cost Plus Margin Project Management</li> </ul>	<b>19.8. Project, Program and Portfolio</b> 19.8.1. Analysis of the Project in the Organization 19.8.2. Analysis of the Program in the Organization 19.8.3. Portfolio Analysis in the Organization
<b>19.9. Interested in the Project</b> 19.9.1. Project Stakeholder Pyramid 19.9.2. Stakeholder Analysis 19.9.3. Stakeholder Interaction	<b>19.10. Analysis of the Organization's</b> <b>Process Assets</b> 19.10.1. Asset Analysis in Startup and Planning 19.10.2. Analysis of Assets in Execution and Control		

19.10.2. Analysis of Assets at Closing



Module 20. Turnkey Projects (EPC)			
<b>20.1. EPC Project</b> 20.1.1. EPC Project Context 20.1.2. Project Components 20.1.3. Needs Analysis	<b>20.2. EPC Project Stages</b> 20.2.1. Identification of Stages in EPC Projects 20.2.2. Identification of Initial Needs in Stages 20.2.3. Timing of Each Stage	<ul> <li>20.3. Management of the e-Engineering Stage</li> <li>20.3.1. Analysis of Stage E</li> <li>20.3.2. Timeline for Stage E</li> <li>20.3.3. Resources Required for Stage E</li> </ul>	<ul> <li>20.4. Analysis of the e-Engineering Stage</li> <li>20.4.1. Structure Necessary for the Development of Stage E</li> <li>20.4.2. Restrictions</li> <li>20.4.3. Difficulties and Risks</li> </ul>
<ul> <li>20.5. Management of the p-Procurement Stage</li> <li>20.5.1. Analysis of Stage P</li> <li>20.5.2. Schedule</li> <li>20.5.3. Resources Required</li> </ul>	<ul> <li>20.6. Analysis of the p-Procurement Stage</li> <li>20.6.1. Structure Required for the Development Stage P</li> <li>20.6.2. Restrictions</li> <li>20.6.3. Difficulties and Risks</li> </ul>	<ul> <li>20.7. Management of the c-Construction Stage</li> <li>20.7.1. Analysis of Stage C</li> <li>20.7.2. Schedule</li> <li>20.7.3. Resources Required</li> </ul>	<ul> <li>20.8. Analysis of the c-Construction Stage</li> <li>20.8.1. Structure Required for Stage C Development</li> <li>20.8.2. Restrictions</li> <li>20.8.3. Difficulties and Risks</li> </ul>
<ul> <li>20.9. EPC Projects: HR Department</li> <li>20.9.1. Main Functions</li> <li>20.9.2. Resources Required for this Department</li> <li>20.9.3. Coordination and Communications with the Rest of the Project</li> </ul>	20.10. EPC Projects: Contracts Department 20.10.1. Main Functions 20.10.2. Resources Required for this Department 20.10.3. Coordination and Communications with the Rest of the Project		

## Structure and Content | 47 tech

#### Module 21. Stage Management and Control in Turnkey Projects (EPC)

#### 21.1. Coordination of Stages in EPC Project

- 21.1.1. Stage Planning
- 21.1.2. Inter-team Communications
- 21.1.3. Incident Resolution Process Steps

#### 21.5. Stage C: Major Structural Components: Time frame

21.5.1. Component P. Term 21.5.2. Analysis of the Deadline Control Part of the Project

#### 21.5.3. Structure and Importance

#### 21.9. Analysis and Monitoring of Economic Deviations of the Project with Respect to Contract

- 21.9.1. Production Control
- 21.9.2. Cost Control
- 21.9.3. Production Monitoring vs. Cost

#### 21.2. Stage C: Main Structural Components - Quality

- 21.2.1. Component Q. Quality
- 21.2.2. Analysis of the Quality part of the Project
- 21.2.3. Structure and Importance

#### 21.6. International EPC Project Management

- 21.6.1. Project Manager Management
- 21.6.2. Director Characteristics
- 21.6.3. Coordination and Communication

#### 21.10. Management of Non-Conformities in EPC Projects

- 21.10.1. Main Non-Conformities in EPC Projects 21.10.2. Management Procedures
- 21.10.3. Analysis and Mitigation

#### 21.3. Stage C: Major Structural Components: Safety and Health

- 21.3.1. HSE Component. Health and Safety
- 21.3.2. Analysis of the Health and Safety Part of the Project
- 21.3.3. Structure and Importance

#### 21.7. Analysis of International EPC Projects

- 21.7.1. Global Analysis of the Project from the Management
- 21.7.2. Management Reporting Processes 21.7.3. Control of the Main KPIs of the Project

#### 21.4. Stage C: Main Structural Components - Cost

- 21.4.1. Component C. Costs
- 21.4.2. Analysis of the Cost Control Part of the Project21.4.3. Structure and Importance

#### 21.8. Deviations EPC Projects

- 21.8.1. Main Deviations in EPC Projects
- 21.8.2. Variance Analysis
- 21.8.3. Deviation Notification Procedure for Customer

#### Module 22. Contract Management in Projects

#### 22.1. Contract Management in Projects

- 22.1.1. Analysis of Contract Management in Projects 22.1.2. Necessity of Contract Management
- 22.1.3. Contract Management Objectives

#### 22.2. Functions of the Contract Manager

22.2.1. Main Functions of the CM in the Project 22.2.2. Characteristics of the CM Position 22.2.3. Contract Management Indicators

#### 22.3. Process in the Management of a Contract

- 22.3.1. Design of a Contract Management Plan
- 22.3.2. Stages of the Management Plan
- 22.3.3. Adversities in Contract Management

#### 22.5. Main Stages of Contract Management

#### 22.5.1. Planning and Execution

- 22.5.2. Control and Monitoring during Execution
- 22.5.3. Post-implementation Control and Monitoring

#### 22.9. Aspects to be Supervised

- 22.9.1. Contract Negotiation and Approval
- 22.9.2. Control During Ejection
- 22.9.3. Control of Compliance with Contractual Obligations

#### 22.6. Factors to Take into Account in the Management of Construction Contracts

22.6.1. Establishment of Objectives and Strategies 22.6.2. Design and Construction Phase of Lump SumContracts 22.6.3. Relations with Contractors

22.10. Management of Project Factors by

the Contract Manager

22.10.3. Risk and Change Management

22.10.1. Scope Management

22.10.2. Cost Management

#### 22.7. Contract Manager Challenges

- 22.7.1. Successful Contract Management and Administration
- 22.7.2. Customer Communications Management
- 22.7.3. Contract Analysis and Fulfillment

#### 22.4. Success Factors in the Management of a Contract

- 22.4.1. Analysis of the Main Success Factors
- 22.4.2. Planning and Evolution of Contract Management
- 22.4.3. Performance Management and Relationships between the Parties

#### 22.8. Aspects to be Solved

- 22.8.1. Contract Negotiation and Approval
- 22.8.2. Control During Ejection
- 22.8.3. Control of Compliance with Contractual Obligations

## Structure and Content | 49 tech

#### Module 23. Project Management in Contract Management

#### 23.1. Contract Management and Budget

- 23.1.1. Objectives of Budget Management by the Contract Manager
- 23.1.2. Main Types of Budgets

23.5.1. Bidding and Comparison

23.5.3. Subcontract Award

23.1.3. Budget According to Cost Structure

23.5. Subcontracting process to be

23.5.2. Pre-selection and Pre-recruitment

followed by the Contract Manager

#### 23.2. Contract Management and Construction Control

23.2.1. Objectives of Site Control Management

23.2.2. Hiring of an Inspection Body

23.6. Monitoring of Changes in

23.6.1. Importance of Change Tracking

23.6.3. Need for Timely Notifications

23.2.3. Verification and Monitoring of the Work

Subcontractor Contracts

23.6.2. Control of Changes in Time and Cost

#### 23.3. Contract Management and Health and Safety control on Site

- 23.3.1. Objectives of Health and Safety Control Management at the Construction Site
- 23.3.2. Aspects to be Considered for Health and Safety Control 23.3.3. On-site Verification and Follow-up

## 23.7. Contract Management and

### **Outsourcing Contract**

- 23.7.1. Basics of the Outsourcing Services Contract
- 23.7.2. Contract Management in this Type of
- Contracts 23.7.3. Points to Consider

#### 23.4. Contract Management and Subcontracting

- 23.4.1. Importance of the Contract Manager's Intervention in the Management of Subcontracting Contracts
- 23.4.2. Types of Subcontracting Contracts
- 23.4.3. Analysis of Contracts with Subcontractors

#### 23.8. Contract Management and **Contractual Disputes**

- 23.8.1. Contract Manager intervention in Disputes
- 23.8.2. Technical and Legal Difficulty in International Arbitration Cases
- 23.8.3. Importance of Contract Management for Future Disputes

#### 23.9. Classification of Disputes and Arbitrations

- 23.9.1. Types of Disputes and Arbitration
- 23.9.2. Preparation of Dispute Documentation
- 23.9.3. Importance of Traceability for Future Disputes

#### 23.10. Contract Manager and Client

23.10.1. Contract Manager Communications with the Customer

23.10.2. Follow-up of the Contract with the Customer 23.10.3. Importance of Communications Traceability Control

Module 24. Project Management in Proj	ects: Communications and Quality Manag	ement		
<b>24.1. Communications Control</b>	<b>24.2. Communications in Project</b>	<b>24.3. Communications Management</b>	<b>24.4. Project Quality Control</b>	
24.1.1. Communications in Project	24.2.1. Communications at Meetings	24.3.1. Communications Management Planning	24.4.1. Project Quality	
24.1.2. Dimensions of Project Communication	24.2.2. Project Communication Channels	24.3.2. Project Communications Management	24.4.2. Cost of Project Quality	
24.1.3. Communication Skills	24.2.3. Formal Forms of Communication	24.3.3. Control	24.4.3. Importance of Quality	
<b>24.5. Project Quality Management</b>	<b>24.6. Quality: Project Non-conformities</b>	<b>24.7. Project Stakeholder Management</b>	<b>24.8. Project Stakeholder Analysis</b>	
24.5.1. Quality Management Planning	24.6.1. The Importance of NCs	24.7.1. Stakeholder Expectation Management	24.8.1. Identification of Interested Parties	
24.5.2. Quality Management	24.6.2. Customer Nonconformities	24.7.2. Interpersonal and Team Skills	24.8.2. Engagement Planning	
24.5.3. Control	24.6.3. Contractor Nonconformities	24.7.3. Conflict Management	24.8.3. Engagement Management and Monitoring	
<b>24.9. Project Integration Management</b> 24.9.1. Development of the Project Charter 24.9.2. Development of the Project Management	<b>24.10. Project Integration Control</b> 24.10.1. Project Knowledge Management 24.10.2. Work Control			

24.9.2. Development of the Project Management Plan

24.9.3. Direction and Management of Project Work

24.10.1. Project Knowledge Management 24.10.2. Work Control 24.10.3. Integrated Change Control and Project Closure

## Structure and Content | 51 tech

#### Module 25. Project Management in Projects: Purchasing and Resources Management

#### 25.1. Purchasing Control

25.1.1. Purchases in Project 25.1.2. The Buyer 25.1.3. The Supplier

#### 25.5. Project Purchasing Analysis

25.5.1. Purchasing Management Planning 25.5.2. Execution of Purchases 25.5.3. Purchasing Control

#### 25.9. Analysis of Project Resources

25.9.1. Resource Team Development 25.9.2. Team Management 25.9.3. Equipment Control

#### 25.2. Project Buying Cycle

25.2.1. Analysis of the Buying Cycle 25.2.2. Description of Stages 25.2.3. Stage Study

#### 25.6. Resource Control

25.6.1. Project Resources 25.6.2. Conflict Management Ability 25.6.3. Conflict Levels and Resolution

#### 25.3. Purchase Contract

25.3.1. Elements of the Contract 25.3.2. Contract Terminology in Contract 25.3.3. Control of Claims and Litigation

#### 25.7. Management of Resources by Objectives

25.7.1. Management by Objectives (MBO) 25.7.2. Different Roles in Projects 25.7.3. Types of Leadership

#### 25.4. Project Purchasing Management

25.4.1. Types of Suppliers25.4.2. Procurement Category25.4.3. Types of Contracts

#### 25.8. Project Resource Management

25.8.1. Resource Management Planning 25.8.2. Estimation of Activity Resources

25.8.3. Obtaining the Necessary Resources

#### 25.10. Analysis of the Resource Interview Process from the PM

25.10.1. Interview Process

25.10.2. Analysis by the Project Manager 25.10.3. Factors to be Taken into Account for a Result Successful

# **666** The most complete and up-to-date syllabus on the current academic scene"

# 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 54 | Methodology

### 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.

666 At TECH, you will experience a learning methodology that is shaking the foundation 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.

## Methodology | 55 tech



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.

## tech 56 | Methodology

#### **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.



### Methodology | 57 tech

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.



## tech 58 | Methodology

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.

30%

10%

8%

3%



#### 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.

## Methodology | 59 tech



#### **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".



30%



#### **Testing & Retesting**

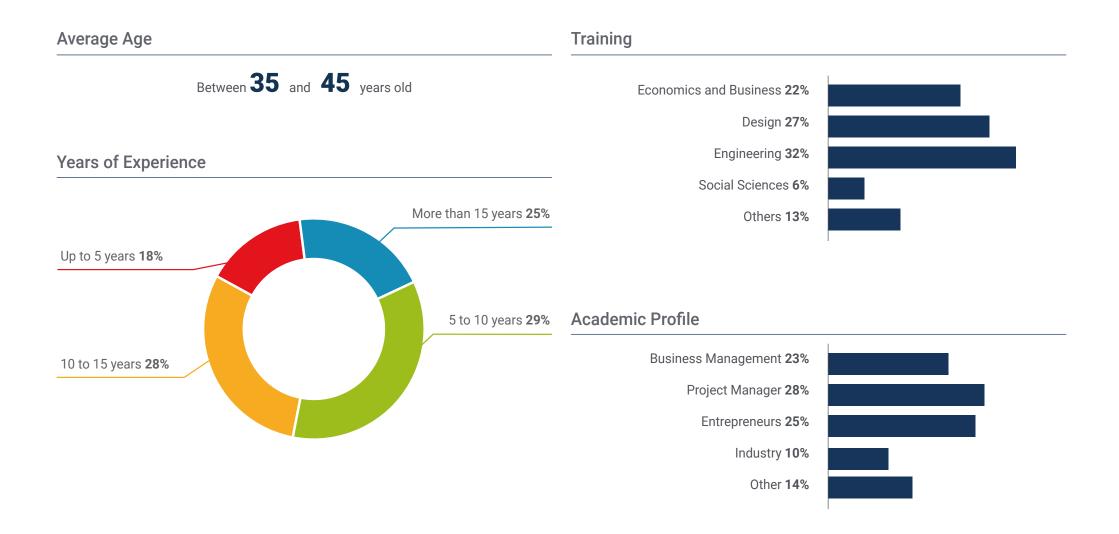
We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

## 08 Our Students' Profiles

This Advanced Master's Degree in Global Project Management is aimed at business professionals who wish to broaden their training in the field of project management. People who understand the importance of quality studies to continue their career successfully, and who wish to keep up to date on the main developments in the sector. Undoubtedly, professionals committed to their company and their work.

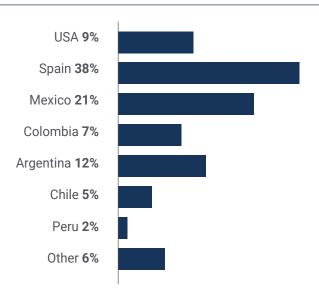
A first-class program aimed at professionals seeking academic and professional excellence"

## tech 62 | Our Students' Profiles



### Our Students' Profiles | 63 tech







## Antonio de la Torre

**Project manager** 

"Thanks to this TECH Advanced Master's Degree, I have had the opportunity to further specialize in project management, an area I have been working in for years. This program has so much new information that has given me a great deal of knowledge and, above all, a new way of doing some things and being much more efficient in my daily work. Without a doubt, I would repeat this program in a heartbeat"

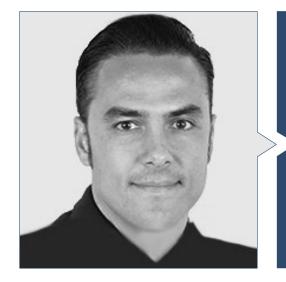
## 09 Course Management

This Advanced Master's Degree in Global Project Management of TECH Technological University has been created by a first-class teaching staff, composed of active professionals who have found in teaching the way to offer all their knowledge to professionals who want to open a niche in the project management sector. The teachers understand perfectly the importance of study in all stages of work and form a high-quality team.

The best teachers are at the best university. Don't miss the opportunity to train with them"

## tech 66 | Course Management

#### Management



#### Mr. Ruiz Cid, Martin Joaquín

- Technical Director EPC Project Group EPC Project Manager Leader at Soltec Energías Renovables
- Industrial Technical Engineer specializing in Mechanics/Structures from the Polytechnic University of Cartagena
- Industrial Engineer in Electricity from the Polytechnic University of Cartagena
- Official Master's Degree in Power Electronics and Adaptive Control
- MBA in Strategic Management of the Company by UNED
- Official Master's Degree in Renewable Energies and Environment
- Project Manager Professional Course
- Turnkey EPC Project Management Course
- Industrial Instrumentation Course

## Course Management | 67 tech

#### Professors

#### Mr. Rodríguez García, César

- Global Contract Manager at Soltec Energías Renovables
- Project Manager in Himoinsa
- More than 15 years of experience in the energy, Oil&Gas and renewable energy sectors as project manager and contract manager
- Technical Industrial Engineering from the Polytechnic University of Cartagena
- Postgraduate Degree in Project Management from the University of Murcia
- Master's Degree in Project Management by Euroinnova Business School

#### Mr. Rodríguez Toledano, Enrique

- Regional Director for Levante at Nervion
- More than 25 years in Project Management and large business accounts
- Specialized in the Construction of Power Plants and Oil&Gas Sector
- Technical Computer Engineer UNED
- Master's Degree in Project Management

#### Mr. Pampliega, Carlos

- Architect specializing in Project and Risk Management
- Certified Project Management Professional (PMP)
- Professional Scrum Master certified by Scrum.org
- Active Member of PMI-Madrid Spain Chapter. Since 2013
- Director of PMI Castilla y León Branch, the delegation in Castilla y León. 2013
- He regularly participates as a speaker in presentations and courses, as well as in congresses organized by PMI
- Consultant and Trainer in Project Management at different universities and business schools
- Member of the Editorial Board of the Scientific Journal Building & Management
- PMO Global Alliance Awards PMO Judges Committee Member

#### Dr. Roji Ferrari, Salvador

- Vice-Dean of International Relations, Faculty of Economics and Business Studies, Complutense University of Madrid
- Doctorate in Accounting and Finance. Complutense University of Madrid. 1997
- Degree in Journalism, Complutense University of Madrid, 1971-1977
- Master's Degree in Sciences of Finance. University of Maryland & Baltimore 1990
- Master's Degree in Business Administration (MBA). University of Maryland & Baltimore, 1989
- Professor of the Faculty of Economics and Business Administration, Department of Financial Administration and Accounting. Since 1994
- He has published 6 books on finance and business economics, as well as a multitude of articles and chapters on both divulgation and research

## 09 Impact on Your Career

The completion of TECH's Advanced Master's Degree in Global Project Management is a unique opportunity to achieve the professional change that students desire. In this way, students will find in this program the best project management training in the current academic panorama, which will be fundamental for their professional development and will give the desired boost to their career. The perfect opportunity to specialize in a fundamental area of business.

## Impact on Your Career | 69 tech





<u>A</u>

A program that offers you the most up-to-date academic resources on the market to give you the impetus you need to give your career a shot in the"

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

TECH Technological University's Advanced Master's Degree in Global Project Management is an intensive program that prepares students to face business challenges and decisions, both nationally and internationally. Its main objective is to promote personal and professional growth. Helping them achieve success.

Therefore, those who wish to improve themselves, achieve a Generating Positive Change at a professional level and interact with the best, will find their place at TECH.

A program of great academic value that will provide you with the necessary resources to improve in your profession.

Get the job improvement you want by improving your training with this TECH program.

#### When the change occurs



### Type of change

Internal Promotion **35%** Change of Company **25%** Entrepreneurship **40%** 

### Salary increase

This program represents a salary increase of more than **25%** for our students.





## 10 Benefits for Your Company

The completion of this Advanced Master's Degree in Global Project Management TECH will improve the training of students, but also in the companies in which they develop professionally, since, thanks to this program, they can learn the latest techniques and strategies in this field, which can be applied later in their work. Undoubtedly, this is a unique study opportunity that should not be missed.

66

Study at TECH and bring a new working method to your company which is, more dynamic, more effective, and more adapted to the needs of the 21st century"

## tech 74 | Benefits for Your Company

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



#### Intellectual Capital and Talent Growth

The project manager will bring to the company new concepts, strategies and perspectives that can bring about relevant changes in the organization.



#### Building agents of change

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



## 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.



#### Increased international expansion possibilities

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



## Benefits for your Company | 75 **tech**



### Project Development

The project manager will be able to work on a real project or develop new projects in the field of R&D or Business Development of his company.



#### Increased competitiveness

This Advanced Master's Degree will equip students with the necessary skills to take on new challenges and thus drive the organization forward.

## 11 **Certificate**

The Advanced Master's Degree in Global Project Management guarantees, in addition to the most rigorous and update training, access to a Advanced Master's Degree issued by TECH Technological University.

Certificate | 77 tech

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

## tech 78 | Certificate

This **Advanced Master's Degree in Global Project Management** contains the most complete and updated program on the market.

After the student has passed the evaluations, they will receive their corresponding **Advanced Master's Degree** issued by **TECH Technological University** by 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 from career evaluation committees.

Title: Advanced Master's Degree in Global Project Management Official N° of hours: 3,000 h.



/ear	Subject	Hours	Туре	Year	Subject	Hours	Туре
10	Strategic Project Management	120	CO	2°	Management of Technology Project Resources	120	CO
10	Project Financial Management	120	co	20	Communications and Stakeholder Management	120	co
10	Recruitment and Project Quality	120	co	4	for Technology Projects		
10	People and Resource Management	120	CO	2º	Technology Project Procurement Management	120	со
10	Innovative Organizations and Projects	120	CO	20	PMP® or CAPM® Certification and Code of Ethics. Emerging		co
10	Agile Methodologies	120	co		Trends and Practices in Technology Project Management and		
10	PMO	120	co		Leadership		
10	Project Risk Management	120	co	2°	International Projects	120	co
10	Project Finances	120	co	2°	Turnkey Projects (EPC)	120	co
10	Introduction to Technology Project Design and Management	120	CO	2°	Management and Control of Stages in Turnkey	120	CO
	and Management of Technology Project Integration				(EPC) Projects		
10	Scope Management of Technology Projects	120	CO	2°	Contract Management in Projects	120	CO
10	Time Management of Technology Projects	120	CO	2°	Project Management in Contract Management	120	CO
10	Cost Management of Technology Projects	120	CO	2°	Project Management in Projects: Communications and	120	CO
10	Quality Management for Technological Projects	120	CO		Quality Management		
				2º	Project Management in Projects: Purchasing and Resource Management	120	CO

\*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.

technological university Advanced Master's Degree **Global Project** Management » Modality: online » Duration: 2 years » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace

» Exams: online

## Advanced Master's Degree Global Project Management

