

COURSE GUIDE

2025/26

**Faculty** 345 - Faculty of Engineering - Bilbao

**Degree** DIPRO13a - Master in Project Management

**Cycle** .

**Year** .

COURSE

504896 - Program and portfolio management

**Credits, ECTS:** 3

COURSE DESCRIPTION

Application of methods and tools of programming and project portfolio management, as well as developing strategies within project programs, and implementing the management of a project office.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

COMPETENCIAS DE LA ASIGNATURA

Differentiate the project application environment, both at the level of regulations and standardization and at the business level

RESULTADOS DE APRENDIZAJE DE LA ASIGNATURA

- The student who successfully completes this subject should be able to:
- Apply portfolio and programme management tools.
  - Design an optimal short-term project to achieve long-term strategic corporate benefits.
  - Evaluate and quantitatively determine the degree of alignment of different projects in the company's business.

Theoretical and Practical Contents

Multiproject management: Requirements, methods and tools. Approach to the critical path. Office programming and project management.

Program and project portfolios.

Introduction to Projects and Programs: Concepts and cases. Strategies, tactics and processes necessary for the correct management of project portfolios.

METODOLOGIA (ACTIVIDADES FORMATIVAS)

Actividad Formativa	Hours	Porcentaje presencialidad
Expositive classes	30	50 %
Groupwork	45	10 %

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	15	15							
Horas de Actividad No Presencial del Alumno/a	20	25							

**Legend:** M: Lecture-based S: Seminar GA: Applied classroom-based groups

GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups

TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation tools and percentages of final mark

Denominación	Ponderación mínima	Ponderación máxima
Attendance and participation	0 %	30 %
Drawing up reports and presentations	30 %	50 %
Written examination	15 %	35 %
Presentations	0 %	45 %

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

The evaluation of the subject is carried out continuously throughout the course.

The following factors are taken into account in the grading of the course:

Attendance (25%): Although attendance is not compulsory, it is highly recommended due to the contents that are developed in the classroom, and necessary for the development of teamwork as it is necessary to iterate between the different roles that each member of the team acquires. For this reason, attendance is part of the calculation of the final grade.

Teamwork (50%): At the beginning of the course, students will be assigned to work teams of between 3 and 6 people. Teamwork in this class is considered very relevant and therefore has a significant importance in the evaluation of students.

Students will have to hand in a designated team work at the beginning of the course. The work will be handed in by uploading it to egela within the defined deadlines. In order to pass the course, the work must have obtained a grade higher than 5 out of 10. If the timetable allows it, the work will also be defended orally.



Exam (25%): As in the case of the certification exams of the associations of project management professionals, the exam will be a multiple-choice test. In order to pass the course, the work must have obtained a grade higher than 4 out of 10.

The grade for the course will be obtained by applying the corresponding weight to each of the factors (attendance, teamwork, exam).

If any of the (team) work has not passed the established cut-off mark, the final mark for the course will be No Presented.

If the exam mark is lower than 4.0, the final mark for the course will be that corresponding to the exam mark.

If the student decides to waive the Continuous Assessment of this subject, he/she must communicate it in writing before the third session. This date can be found in the Student Guide handed out in class and available on the eGela platform.

In this case, in order to pass the subject, the student will be assessed by means of a written exam that may contain additional questions to those posed in the exam to which students who are assessed on a continuous basis are submitted and that will include all the contents studied throughout the four-month period corresponding to the exam. This assessment will be completed with an oral exam which will take place on the same day as the written exam, by prior appointment for students registered for this exam. In the oral exam, students will be asked about the contents studied in the classroom, as well as about the activities carried out during the corresponding four-month period. In order to pass the course, students must pass both tests.

In the event that health conditions prevent the completion of a teaching activity and/or face-to-face assessment, a non-face-to-face modality will be activated, of which students will be promptly informed (applicable to all exams: ordinary, extraordinary and advance).

#### EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

Those who have to sit the extraordinary exam will do so in the same way as they did in the ordinary call. In other words, those who took the continuous assessment will complete the tests (work and exam) that they did not pass in the ordinary call.

The grade for the course will be obtained by applying the corresponding weight to each of the factors (attendance, work and exam).

If the work has not passed the established cut-off mark, the final mark for the course will be No Presented.

If the exam mark is lower than 4.0, the final mark for the course will be that corresponding to the exam mark.

Those who waive the continuous assessment, will be submitted to a written and oral exam as described in the previous section (Ordinary call: orientations and waiver).

#### MANDATORY MATERIALS

Slides uploaded to eGela.

Project Management Institute A Guide to the Project Management Book of Knowledge, Project Management Institute. 2013.

#### BIBLIOGRAPHY

##### Basic bibliography

##### BIBLIOGRAFÍA

##### MATERIALES DE USO OBLIGATORIO

- Apuntes proporcionados por el docente.

Project Management Institute A Guide to the Project Management Book of Knowledge, Project Management Institute. 2013.

##### BIBLIOGRAFÍA DE PROFUNDIZACIÓN

- "The Standard for Portfolio Management" Project Management Institute 2006 ISBN: 1-930699-90-5

- ¿The Standard for Program Management¿ Project Management Institute 2006 ISBN: 1-930699-54-9

- Managing Successful programmes OGC ISBN 0 11 330917 1

##### 1. Libros de Alineamiento de Proyectos

Título: Linking Project Management to Business Strategy

Autor: Aaron J. Shenhar, D. Milosevic, D. Dvir, H. Thamhain

Editorial: Project Management Institute 2007

Título: Translating Corporate Strategy into Project Strategy. Realizing Corporate Strategy Through Project Management

Autor: Peter Morris, PhD and Ashley Jamieson, MS

##### 2. Artículos de Alineamiento de Proyectos

- Randall L. England and Robert J. Graham, ¿From experience: Linking Projects to strategy¿, Journal of Product Innovation Management 1999; 16:52-64

- Adolfo López-Paredes, Javier Pajares- Gutierrez, José Manuel Galán-Ordax, ¿La empresa como cartera de proyectos y programas¿, Dyna Diciembre 2009, Vol. 84 nº9, 71/72



- Bravo Diaz, B., Dzul López L., ¿Coordinación entre los niveles de gestión de proyectos: portafolio, programa y proyecto¿, revista Dyna, ISSN 0012-7361, año 84, Nº5, Junio 2009
- Henderson, J.; Venkatraman, N. (1993) ¿Strategic Alignment: Leveraging information technology for transforming organisations¿ IBM System Journal, vol. 32, Nº1
- Jamieson, A., Morris, P.W.G., 2004, ¿Moving from corporate strategy to project strategy¿ (pp. 177-205 en ¿The Wiley Guide to Managing Projects¿)
- Karen E. Papke-Shields and Manoj K. Malhotra, ¿Assessing the impact of the manufacturing executive¿s role on business performance through strategic alignment¿, Journal of Operations Management, Volume 19, Issue 1, January 2001, Pages 5-22
- Marchant, L. (2005) ¿Hacia un modelo de implementación del alineamiento estratégico: Como transformar la misión de la empresa en comportamientos y resultados¿
- Randall L. Englund and Robert J. Graham ¿From Experience: Linking Projects to Strategy¿ Journal of Product Innovation Management 1999, 16:52-64, New York
- Roger Atkinson, ¿Project Management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria¿, International Journal of Project Management, Volume 17, Issue 6, December 1999, Pages 337-342
- Zayyana Shehu and Charles Egbu, ¿The nature of programme management and how they differ from Project Management¿, Glasgow Caledonian University, 2009

## 1. Estrategia empresarial

Título: The Strategy Process: Concepts, contexts, cases  
Autor: Mintzberg, H.; Lampel, J.; Quinn J.B.; Goshal S.  
Editorial: Pearson-Prentice Hall, fourth edition 2003  
ISBN: 0-13-122790-4

Título: Dirección Estratégica. Quinta edición  
Autor: Gerry Johnson, Kevan Scholes, 1984  
Editorial: Prentice Hall  
ISBN: 84-205-2984-2

Título: Cómo utilizar el Cuadro de Mando Integral para implantar y gestionar su estrategia  
Autor: Robert S. Kaplan y David P. Norton  
Editorial: gestión 2000.com  
ISBN: 84-8088-561-0

Título: Palancas de Control: Cómo usan los gerentes sistemas novedosos de control para conducir la renovación estratégica.  
Autor: Robert Simons  
Editorial: Temas Grupo Editorial

Título: Administración Estratégica. Textos y casos  
Autor: Arthur A. Thomson, Jr. & A.J. Strickland III  
Editorial: Mc Graw Hill  
ISBN: 970-10-4055-4

Título: Corporate Strategy: An analitical approach to Business policy for growth and expansion  
Autor: H. I. Ansoff. 1965  
Editorial: Mc Graw Hill, New York

Título: Exploring Corporate Strategy  
Autor: Gerry Johnson, Kevan Scholes  
Editorial: Prentice Hall.1999. Fifth edition  
ISBN: 0-13-080739-7

Título: Manual de Diagnóstico en la empresa  
Autor: Jean-Pierre Thibaut  
Editorial: Editorial Paraninfo  
ISBN: 84-283-2089-6

Título: Strategic Management  
Autor: H.I. Ansoff  
Editorial: Wiley.1979. Re-editado 2007

Título: The Strategy Concept and Process: A pragmatic approach



Autor: Hax A.C.; Majluf N.  
Editorial: Prentice Hall, 1991, 1996

Título: Strategy Safari  
Autor: Henry Mintzberg, Bruce Ahlstrand, Joseph Lampel  
Editorial: Prentice Hall - Financial Times  
ISBN: 978-0-273-71958-8

## 2. Artículos de Estrategia Empresarial

- Artto K., Kujala J., Dietrich P., Martinsuo M., ¿What is Project Strategy?¿, EURAM 2007 research conference in Paris
- Marja Naaranoja, Paivi Haapalainen, Heikki Lonka, ¿Strategic management tools in projects case construction project¿, International Journal of Project Management 25 (2007) 659-665
- Aaron J. Shenhar, Dov Dvir, Ofer Levy and Alan C. Maltz, ¿Project Success: A multidimensional Strategic Concept¿, Long Range Planning, Volume 34, Issue 6, December 2001, Pages 699-725
- Barney, J.B. (1991) ¿Firm resources and sustained competitive advantage¿ Journal of Management, 17(1), 99-120
- David K. Anderson and Tony Merna, ¿Project Management Strategy-project management represented as a process based set of management domains and the consequences for project management strategy¿, International Journal of Project Management 21 (2003) 387-393
- D. Norburn ¿Directors without direction¿, Journal of General Management, Vol.1, nº.2 (1974), pág. 37-49
- Illueca, M; Pastor, J.M. (1997) ¿El tamaño como determinante de la estrategia de las empresas Españolas¿
- Milosevic, D.Z. 1989 ¿Systems approach to strategic Project management¿ International Journal of Project Management 7, 173-179
- Mintzberg, H. &Waters, J. A. 1985 ¿Of strategies, deliberate and emergent¿ Strategic Management Journal6, 257-272

## REVISTAS

International Journal of Project Management

Project Management Journal

## DIRECCIONES DE INTERÉS EN INTERNET

[www.pmi.org](http://www.pmi.org) (2017)

[www.ipma.ch](http://www.ipma.ch) (2017)

## Detailed bibliography

Título: Linking Project Management to Business Strategy  
Autor: Aaron J. Shenhar, D. Milosevic, D. Dvir, H. Thamhain  
Editorial: Project Management Institute 2007

Título: Translating Corporate Strategy into Project Strategy. Realizing Corporate Strategy Through Project Management  
Autor: Peter Morris, PhD and Ashley Jamieson, MS

## Journals

International Journal of Project Management

Project Management Journal

## Web sites of interest

[www.pmi.org](http://www.pmi.org) (2017)

[www.ipma.ch](http://www.ipma.ch) (2017)