Universidad de Navarra

*Ecosistemas de innovación (MINT)*

*Guía docente 2026-27*

# PRESENTACIÓN

**Breve descripción**:

An “innovation ecosystem” is the term used to describe the various players, stakeholders, and community members that are critical for innovation. An innovation ecosystem is made up, on the one hand, by a series of agents and, on the other, by the relationships or interdependencies that exist between each of these agents.

An innovation ecosystem includes universities, government, corporations, startup accelerators, venture capitalists, private investors, foundations, entrepreneurs, and mentors. Each plays a significant role in creating value in the larger ecosystem by transforming new ideas into products/services through access and financial investment.

The value of an innovation ecosystem lies in the access to resources for the innovators and the flow of information for the ecosystem’s stakeholders. This information flow creates more investment opportunities for the right institutions to connect with the right ideas for their businesses and portfolios, at the right time, for the right reasons.

Companies need to master working within complex and rapidly changing innovation ecosystems and face a number of typical challenges:

- Identifying which technical capabilities are strategically important for the future, especially in light of digitalization.
- Shaping the innovation ecosystem, identifying and attracting the right partners, and getting the best out of collaborations and partnerships with externals, especially startups and academics.
- Developing effective venturing and incubation capabilities that deliver real business value.
- Transforming culture and capability from a traditional in-house R&D orientation towards an agile, entrepreneurial, open-innovation approach.

- **Titulación**: Máster en Innovación Tecnológica
- **Módulo/Materia**: Visión Estratégica (MINT) / Visión estratégica en entornos innovadores
- **ECTS**: 5 ECTS
- **Curso, semestre**: 1º, Primero
- **Carácter**: Obligatorio
- **Profesorado**:
- Rodríguez Ferradas, María Isabel - Email: mirodriguez@tecnun.es / Profesor contratado doctor
- Castellano Sanz, Paloma / Invitado (Colab.Docente)
- Pego Reigosa, Gustavo - Email: gpego@unav.es / Colaborador docente (Colab. Docente)
- Saborido Scafati, Andrés / Invitado (Colab.Docente)
- **Idioma**: Castellano

# RESULTADOS DE APRENDIZAJE (Competencias)

- CG1 - Integrar visión estratégica y tecnología para generar nuevos modelos de negocio.
- CG2 - Coordinar grupos de trabajo multidisciplinares para desarrollar procesos de transformación basados en tecnologías emergentes.
- CB8 - Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios
- CB9 - Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades
- CB10 - Que los estudiantes posean las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.
- CE1 - Comprender los cambios tecnológicos y las nuevas tecnologías disponibles, tanto desde el punto de vista estratégico como operativo de la organización.
- CE3 - Conocer y manejar los conceptos de la I+D+i, sujetos activos, marco legal, gestión de la propiedad intelectual y los procesos de transferencia de la tecnología.

## PROGRAMA

The program of this course will include the following units:

### Unit 1: Introduction to Innovation Ecosystems

- What is an Innovation ecosystem?
- Different types of Innovation Ecosystems
- Tools to find members of an Innovation Ecosystem

### Unit 2: Strategic Technology Management

- Maturity of technologies
- Roadmapping
- Technology portfolio management

### Unit 3: Open Innovation

- Definition
- Typologies
- Open Innovation practices

### Unit 4: Entrepreneurial mindset and experience

- Laying the foundations and encouraging entrepreneurship
- The perfect Pitch
- Team building, partner agreements and negotiation with investors

## ACTIVIDADES FORMATIVAS

The allocation of 125-150 hours (5 ECTS credits) to the module is broken down into the following learning activities:

- Face-to-face lectures: 25 hours
- Face-to-face practical classes, labs or workshops: 20 hours

- Guided assignments: 30 hours
- Tutorials: 5 hours
- Personal study: 40 hours
- Completion of assessed work: 5 hours

# EVALUACIÓN

## CONVOCATORIA ORDINARIA

This course will be evaluated by means of the following activities:

- 40% of the final mark = 3 Case Studies related to the content of Units 1, 2 and 3 respectively.
- 30% of the final mark = Pitch competition included in the 2nd Bimester Transversal Project related to contents of Unit 4 – (15% Pitch Deck contents + 15% Communication and presentation) **(*)**
- 30% of the final mark = Activities performed during and in relation to the Munich Technical Mission **(**)**

(*) **Each team will present their pitch in the final session with Wayra - Telefónica. ALL members of each team must be present and speak during the presentation**.

((**) **The evaluation for this mission is governed by a specific rubric divided into two components and that includes an institutional respect clause:**

**1) Academic Performance & Representation (70% of the mission grade):** Evaluates behavior and active participation during visits (30%), the Master's presentation (20%) and professional social media dissemination (20%).

**2) Critical Compliance & Logistics (Pass/Fail):** Punctuality and strict adherence to the schedule of the trip are mandatory. This block is eliminatory; failing to meet these minimums implies an automatic fail of the mark related to the trip.

**Institutional Respect Clause:** This mission takes place in collaboration with high-profile entities of the innovation ecosystem in Munich. Any behavior deemed disrespectful towards the hosts or their representatives (following a single formal warning) will result in an **automatic fail of the entire evaluation associated with the Munich Technical Mission**.

The detailed evaluation rubric will be provided and discussed in class prior to the trip.

## CONVOCATORIA EXTRAORDINARIA

- 40% of the final mark = 1 Case study related to contents of Units 1, 2 and 3.
- 60& of the final mark= 1 Case study related to contents of Unit 4.

## PLAGIO

En todos los casos demostrables, el estudiante suspenderá la asignatura entera y no solo el trabajo o examen plagiado. La calificación final será SUSPENSO ( 0 sobre 10)

In all provable cases, the student will fail the entire course, not just the plagiarized work or exam. The final grade will be a FAIL (0 out of 10).

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**ATTENTION**: It is reminded that any attempt at fraud, copying, plagiarism, or other irregular behavior is a serious infraction as contemplated in Title IV "Rules of academic discipline for students" within the System of rules on coexistence at the University of Navarra.

## HORARIOS DE ATENCIÓN

To arrange a meeting with a professors, please send him/her and e-mail.

**Mabel Rodríguez (mirodriguez@tecnun.es)**

**Gustavo Pego (gpego@unav.es)**

## BIBLIOGRAFÍA

- Fransman, M. (2018). Innovation ecosystems: Increasing competitiveness. Cambridge University Press. Localízalo en la biblioteca
- Chesbrough, H. (2006). Open innovation: a new paradigm for understanding industrial innovation. Open innovation: Researching a new paradigm, 400, 0-19.
- Sloane, P. (2011). A guide to open innovation and crowdsourcing: Advice from leading experts in the field. Kogan Page Publishers.
- Senor, D., & Singer, S. (2018). Start up Nation-La historia del milagro económico de Israel. Nagrela Editores, SL.