UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Course guide
804482 - EMP - Business

Last modified: 02/09/2025

Unit in charge: Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre.

Degree: BACHELOR'S DEGREE IN DIGITAL DESIGN AND MULTIMEDIA TECHNOLOGIES (Syllabus 2023). (Compulsory subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Dorado Garrido, Adrián

Others:

TEACHING METHODOLOGY

Project-based learning (PBL)
Gamified simulation (creation of a fictitious company with budget and contingencies)
Team dynamics, role-plays and weekly activities
Short presentations (pitch), collaborative work and practical sessions
Continuous feedback and self-assessment rubrics

Gamified approach
Students:
Receive €20,000/50,000 fictitious
Form teams and sign a partnership pact
Simulate business actions every week: branding, validation, marketing, pitch
They face unforeseen events and can gain strategic advantages
The final objective is not to end up in losses and to present the project to a 'jury'.

LEARNING OBJECTIVES OF THE SUBJECT

Knowledge
Identify elementary concepts of economic science, such as needs, goods and services, supply-demand and economic models; likewise identify the basic elements of business economics such as costs, income, break-even point, liquidity, solvency and profit.

Identify the procedure to follow in the creation of a business organisation in the field of digital and multimedia design.
Recognise the different types of business organisations offered by legislation, as well as identify the advantages and disadvantages of each type.

Recognise the different business management models, as well as the different tools for analysis and management of companies in the field of digital and multimedia design.

Skills
Examine financial elements such as the balance sheet, profit and loss account, operating cycle, working capital and financial ratios.

Recognise the different sources of finance for a company in the digital design and business field.

STUDY LOAD

Type	Hours	Percentage
Hours large group	30,0	20.00
Guided activities	12,0	8.00
Self study	90,0	60.00
Hours medium group	18,0	12.00

Total learning time: 150 h

CONTENTS

Business fundamentals and design

Description:
- Identifying needs - Business plan (problem, solution and value proposition)
- Business model: Canvas business model (segments, proposition, channels, costs, revenue and key resources)
- Partnership agreement and teamwork
- Target customer: segmentation, service design and empathy map

Full-or-part-time: 37h 30m
Theory classes: 15h
Guided activities: 12h 30m
Self study : 10h

Product validation and development

Description:
- Validation (interviews, surveys, testing)
- MVP (minimum viable product) and TRL of projects
- Pricing and monetisation (monetisation strategies)

Full-or-part-time: 37h 30m
Theory classes: 10h
Guided activities: 12h 30m
Self study : 15h

Strategy, management and growth

Description:
- Communication strategies (storytelling, networks, channels)
- Finance (income, expenses, profitability, KPIs, ROI and efficiency assessment)
- Legal aspects (legal forms, autonomy and contracts)
- Intellectual property (trademarks, patents, NDAs, etc.)
- Lean Startup (iteration, pivoting and improving the product)
- Growth plan (roadmap, milestones and risks)

Full-or-part-time: 37h 30m
Theory classes: 15h
Guided activities: 12h 30m
Self study : 10h

Team, leadership and preparation for investment

Description:
- Leadership (roles, soft skills, communication, role-play)
- Culture and values (organizational culture)
- Pitch deck (pitch deck preparation, storytelling and communication)
- Investment simulation (fictitious investor test in class, round simulation: defending your value and strategy)
- KPIs and impact analysis (product and business metrics, indicators for companies)
- Contingencies and crises (risks and crisis management)

Full-or-part-time: 37h 30m
Theory classes: 15h
Guided activities: 12h 30m
Self study : 10h

GRADING SYSTEM

Active participation and dynamics: 20%
Pitch and final presentation: 30%
Deliveries and weekly development: 30%
Economic result and final balance: 20%
- An evaluation rubric will be used for each section of the project.

Irregular actions that may lead to a significant variation in the grade of one or more students constitute a fraudulent performance of an evaluation act. This action will lead to a descriptive grade of fail and a numerical grade of 0 for the ordinary global assessment of the subject, without the right to re-evaluation.
If the teachers have evidence of the use of AI tools that are not permitted in the assessment tests, they may summon the students involved to an oral test or a meeting to verify the authorship.

BIBLIOGRAPHY

Basic:
- Osterwalder & Pigneur. Generación de modelos de negocio.
- Eric Ries. El método Lean Startup.
- Alexander Osterwalder. Testing Business Ideas.
- Allan Dib. El plan de marketing de una página.
- Seth Godin. Esto es marketing.

Complementary:
- Sean Ellis. Hacking Growth.
- David Ayala. Visibilidad online.

RESOURCES

Other resources:
Podcasts: Indie Hackers, Masters of Scale
Google Skillshop ☐ https://skillshop.withgoogle.com />Notion Startup Templates
Canva Business
Hubspot Academy
Figma Community – Design systems & pitch decks