



Business Simulation and Financial Analysis (6 ECTS credits)

Responsible: Jorge Alves; Nuno Moutinho; Paula Monte; E-mail: jorge@ipb.pt

Location: Bragança Campus

Partners: Bragança Polytechnic University (Portugal), Bremen University of Applied Sciences (Germany), Silesian University in Opava (Czech Republic)

Calendar: Virtual component starting 05/11/2025, ending 17/12/2025. Physical component starting 12/01/2026, ending 16/01/2026.

Level and field of studies: Bachelor and Master students in Management Studies

Contents: Business simulation (https://simemp.ipb.pt/). Follow-up. Financial management's role and objectives. Financial statements. Financial analysis methods and techniques. Economic and financial analysis of the company. Reporting techniques / templates. Final report.

Climate Responsive and Sustainable Building Design (6 ECTS credits)

Responsible: Isabel Abreu; E-mail: isabreu@ipb.pt

Location: Bragança Campus

Partners: Bragança Polytechnic University (Portugal), Bremen University of Applied Sciences (Germany), Cracow University of Technology (Poland)

Calendar: Virtual component starting 13/10/2025, ending 09/01/2026. Physical component starting 20/10/2025, ending 24/10/2025.

Level and field of studies: Bachelor's and master's degree students in architecture and civil engineering

Contents: Fundamentals of sustainable building design; Building architectural design for sustainability; Energy sustainable buildings principles: energy sufficiency, energy efficiency and renewable energies; Climate-responsive building strategies; Passive design for space heating and cooling; Learning from vernacular architecture; Nature-based solutions for buildings; Domestic energy production and consumption systems and their inclusion in the architectural design. At the end of the course the students should be able to: introduce sustainability issues into architectural design; assess the impact of architectural choices on the sustainability of buildings; select and design the best climate-responsive passive solutions; incorporate energy efficient and renewable energy systems into the architectural design; face the challenges of working with a real urban scenario through a project-based learning approach; and work within multidisciplinary teams of architects and engineers in a collaborative environment.

Digital Manufacturing (6 ECTS credits)

Responsible: João Rocha; E-mail: jrocha@ipb.pt

Location: Bragança Campus

Partners: Bragança Polytechnic University (Portugal), Hochschule Bremen (Germany), Cracow University of Technology (Poland), Vilnius College of Technologies and Design (Lithuania), Universidad de León (Spain)

Calendar: Virtual component starting 20/10/2025, ending 19/12/2025. Physical component starting 12/01/2026, ending 16/01/2026.

Level and field of studies: Bachelor and master students from any field.

Contents: 1. Introduction: A. How to produce (almost) everything in small laboratories; B. The concept FabLab. 2. Equipment: A. 3D printer; B. Cutting and laser engraving; C. 3D scanner; D. Cut vinyl; E. milling machine; F. others. 3. Software used in additive manufacturing (and digital manufacture): A. Open source; B. Commercial. 4. Practical application of the equipment: a case study (for example a tactile plan, of one of the schools of origin of the students, made in laser cutting, or a model of a building, that could be a school or a historic building in the city, etc.).

Emotional Education (6 ECTS credits)

Responsible: M. Augusta Romão da Veiga Branco; Bárbara Barroso; A. Paula Monte E-mail: <u>aubra@ipb.pt</u>
Location: Bragança Campus

Partners: Bragança Polytechnic University (Portugal), Institut Regional de Formation Sanitaire et Sociale Limousin - Croix-Rouge Française (France), Wroclaw Medical University (Poland), Silesian University in Opava (Czech Republic), Universidad de Almería (Spain), Universidad La Laguna (Spain).

Calendar: Virtual component starting 02/10/2025, ending 11/12/2025. Physical component starting 24/11/2025, ending 28/11/2025.

Level and field of studies: Bachelor and Master and PhD students in any area: Emotional Education is training that cuts across all scientific areas. The selection of students considers preferably: Educational Sciences, Health

Sciences, Social Sciences, Political Sciences or International Studies, Economics and Management, Engineering, IT, Mathematics, Astronomy, Marketing.

Contents: Emotional Intelligence (IE), Emotional Competence (EC), Emotional Education (EE): Concepts and neuro-differentiation. Functional and metabolic concepts from the perspective of Neuroscience: 1. Emotion 1.1. neuro-differentiation about neurochemical differences, survival purposes, direction and potential energy and grammars on the face and body expressions. 1.2. - Functions and Effects of Cognitive and Behavioral Processes. 2. Emotion and Feeling: neuro-differentiation. 3. The Microbiota-Gut-Brain Axis; Gut feelings: associations of emotions and emotion regulation with the gut microbiome. EE for EC - Health Promotion/ EC Dimensions. Management of emotional states of the body vs Emotional Regulation. Be emotionally competent as Educator, Manager, Entrepreneur. EE Laboratories I, II: Immersive Emotion Management Strategies: Emotional management through body expression: dance/music therapy, sociocultural guided physical activity and interaction in art reflection. Virtual Lab: Immersive experiences in virtual reality under technical and scientific guidance.

Heritage in Video Games (6 ECTS credits)

Responsible: Bárbara Barroso; Rita Costa; E-mail: bbarroso@ipb.pt

Location: Mirandela Campus

Partners: Bragança Polytechnic University (Portugal), Kajaani University of Applied Sciences (Finland), University West (Sweden), Université Marie & Louis Pasteur (France)

Calendar: Virtual component starting 06/10/2025, ending 16/01/2026. Physical component starting 03/11/2025, ending 07/11/2025.

Level and field of studies: Bachelor and Master students. The selection of students considers preferably the areas of: game design and development, arts, audiovisual media, interaction design, communication, computer science, IT, heritage studies.

Contents: By the end of the course, students should be able to build a holistic vision on the design and development of video games interpreting local heritage, including prototyping for iterative improvement. [General] Definitions of Heritage: Frameworks for understanding heritage. Historical Accuracy and Context: Accurate Representation – Immersion in historically accurate depictions; Contextual Information – Providing deeper historical understanding through facts and artifacts. Authenticity: Understanding and recognizing counterfactual play and artifact significance. Cultural Understanding: Showcasing cultural traditions, rituals, folklore, and art forms; Integrating local languages and symbols for basic language learning. [Focus on Game Design & Development] Game genres and gameplay possibilities: Incorporating features to encourage heritage-based activities. Promoting Interactivity with Artifacts: Simulations for examining historical artifacts and deciphering inscriptions; Virtual Museum exhibits showcasing artifacts, historical documents, and multimedia presentations. Using Storytelling and Narrative: Developing compelling historical narratives that engage players emotionally; Introducing branching narratives to explore different historical outcomes. Promoting Reflection and Analysis: Designing reflection spaces for contemplation and engagement with historical accounts. Iterative cycles of game design and development. [Focus on Multicultural Working Environment] Team dynamics and tools for online and remote collaborative work.

Theories in Translator Training (6 ECTS credits)

Responsible: Isabel Chumbo; E-mail: ischumbo@ipb.pt

Location: Bragança Campus

Partners: Bragança Polytechnic University (Portugal), Kaunas Technological University (Lithuania), Universidad de Salamanca (Spain), University of the National Education Commission, Krakow (Poland)

Calendar: Virtual component starting 13/10/2025, ending 19/12/2025. Physical component starting 19/01/2026, ending 23/01/2026.

Level and field of studies: Bachelor, Master and PhD students in Translation or related fields, such as Communication or Cultural Studies

Contents: This programme aims at equipping participants with the necessary theoretical frameworks that will have influence in the outcome of their translation practice in the near future. At the end of the course, the learner is expected to be able to: 1. Explain the nature and relevance of translation theory. 2. Understand a range of theories and theoretical concepts of translation and intercultural studies. 3. Discuss in detail a number of contemporary concepts and approaches on the basis of selected readings of key documents. 4. Provide an opportunity for critical reflection and debate on theoretical assumptions, as well as the relation between theories and practices of translation.