BIPS - Blended Intensive Program
RENEWABLE ENERGY PROJECTS MANAGEMENT
Universidad de Jaén (Spain)

Onsite teaching: 03.03.2025 – 07.03.2025
Online teaching: 17.02.2025 – 28.02.2025

1. ONLINE SCHEDULE

3 ECTS Blended intensive program includes both, the online course (2 ECTS) and the onsite course (1 ECTS).

• 1 ECTS – Online teaching: 17.02.2025 – 28.02.2025
• 1 ECTS – Onsite teaching – University of JAEN, Spain: 03.03.2025 – 07.03.2025
Duration. 1 week – 25 hours of student work

Activities Practical labs with specific software MS PROJECT, Workshops, Mixed Groups from each University participant, Renewables Energy Final Project, in Group of 5 students. All activities will involve a strong student participation under supervision of faculty members. Social events and cultural visits during a week-long stay of onsite work at the University of Jaén

• 0,5 ECTS – Online Project phase/Supervision (Hybrid Remote): 10.03.2025 –31.05.2025

Resolution of doubts and activities and study cases carried out in each of the blocks
Resolution of practical cases for planification and control carried out with MS- Project

• 0.5 ECTS – Preparation and Online Final presentation of the projects: 02.06.2025– 06.06.2025

Group tutorial with groups of 5 students in charge of preparing a final project on renewable energies as prior preparation for their defense final on line, during the las and final session of BIP program.

Selection process: Students will be selected by the instruction team among the ones that show a better CV in relation to the requirements, knowledge in energy renewables, project management and English.

Virtual component: 2. ECTS

Students online sessions through Google Meet or Team Viewer will receive online classes on the theoretical contents for two weeks in 5 sessions of 2 hours until completing 10 hours of 1 ECTS. In addition, mini-videos will be made and solved practical cases will be provided. Everything in English.

- **Syllabus:**

Subject 1. Basic concepts on renewable energies project

1.1. Presentation of the course. Presentation of the subject. Basic concepts about energy and energy systems. Introduction to Renewable energies Energy transformations and power plants. Practical exercises on power plants. History of energy systems. The world energy system. Risks of the current energy system.
Presentation of Activity 1
1.2. Energy Costs. LCOE (Levelized Cost of Energy). Practical Cases. Renewable energies in the energy system. Environmental and technical issues. Presentation of Activity 2.
1.3 Regulatory framework. Energy policy. Promotion plans for RES. Discussion of cases. The future of energy. Renewable energy planning and prospective. Techniques and methodologies. Activity 3

Subject 2. Renewable energy project management tools

2.1 Introduce methodologies for the management of renewable energy projects. (Planning, monitoring and control of renewable energy projects). (ISO 21500 Standard (IPMA) with the PmBook (PMI) and (PM2)
2.2 Renewable energy projects management. Basics of project management. Scope, Time and Cost.
2.3. Renewable energy projects management. Basics of project management. Project Control and Risk Management. Practical cases.
2.4 Renewable energy projects management. Practical cases (Excel / MsProject)

• 0,5 ECTS – Online Project phase/Supervision (Hybrid Remote): 10.03.2025 – 31.05.2025
Students online sessions through Google Meet or Team Viewer
Activities correction and Solution of activities and practical cases
Practical case on energy planning project and prospective
Practical case Energy project Planning and control

• 0.5 ECTS – Preparation and Online presentation of the projects: 02.06.2025–06.06.2025
Students online sessions through Google Meet or Team Viewer Group tutorial with groups of 5 students in charge of preparing a final project management on renewable energies as prior preparation for their defense.
This activity may include: forums, remote work, video conferences, mini-videos, joint reports, online work). The PLATEA platform will be used, enabling a specific space for this BIP, which will allow forums, surveys, sending agendas in pdf, doing online tutorials, enabling online Chat, delivery of exercises and practices, completion of questionnaires and tests and delivery of the Work team final.

2. ONSITE SCHEDULE

1 ECTS – Onsite teaching – University of JAEN, Spain: 03.03.2025 – 07.03.2025
Duration. 1 week – 25 hours of student work
Activities Practical labs, Workshops, Mixed Groups, Renewables Energy Final Project definition,

Activities inside Laboratories. (Workshops and Mixed Groups) for on-site MS-PROJECT management practices for the elaboration, planning, simulation, monitoring and control of projects in renewable energy management (Laboratories will be reserved, of Graphic Engineering Design and Projects Department (Rooms: CAD D-273, CAD-276 and CAD- 286)

Project Based Learning (PBL) methodology. Definition of a renewable energy project as a case study by teams of 5 students from different universities, to apply theoretical knowledge and practical project management and simulation tools.

All activities will involve a strong student participation under supervision of faculty members. (Professor Hermoso-Orzaez (BIP Coordinator)

Monday, March 3

15.30 Reception (Salón de Grados - EPS Jaén by Director of Higher Polytechnic School of Jaén)
16.00 Seminar I: "Impact of Renewable Energies on the Energy System and Prospective energetic "Prof. Julio Terrados Cepeda. Engineering Projects Area. University of Jaén.
17.30 Coffee break
18.00 Seminar I (cont.): The management of projects with thermal gasification of olive grove biomass. Applied case study: HORIZON 2020 Research & Innovation Project (1 MWe Fat Pomace Gasification Plant) Prof. Jose Antonio La Cal Herrera. (Project Manager and CEO BIOLIZA)-UJAEN
20.30 Welcome dinner
21:00 Visit Centre historical of Jaén and Gastronomic visit to the bars in the historic centre of Jaén

Tuesday, March 4

9.30 Seminar II: "Project management for the generation of green Hydrogen "Prof. Paulo Brito (IPP Portalegre)
11.00 Coffee break
11.30 Seminar II (cont.): "Portuguese strategy for the management of renewable energy projects to achieve carbon neutrality" Prof. Pedro silva Romano (IPP Portalegre)
13.00 Lunch
14.30 Seminar III: "Renewable energy projects in Romania. Management strategies" Prof. Ciprian LAPUSAN Technical University of Cluj-Napoca (Romania
16.00 Coffee break.
16.30 Seminar III (cont.): "La Gestión de Proyectos de Energías Renovables en la EU mediante metodología PM2" Prof. Manuel J. Hermoso Orzáez (university of Jaén), BIPCoordinator
18:00 Guided tour by LAGARTO TOUR tourist convertible minibus through the centre of Jaén.

Wednesday, March 5

(Laboratories reserved of Graphic Engineering Design and Projects, (CAD D-273, CAD-276 and CAD- 286)- Renewable Energy Project. Case practical study simulated in Group of 5 student)

09.30 Work in group. Definition of the project. Basic concepts of project management. Scope, Time and Cost.) Energy project Planning. (Ms Project). Use computer project management tools. (UJAEN + IPP + TUCN).
11.00 Coffee break.
11.30 Work in group (Cont.). Planification of the project. Project Control and Risk Management. (Excel/MsProject). Use computer project management tools (UJAEN + IPP + TUCN)
13.00 Lunch
14.30 Autonomous work in group.
16.00 Coffee break.
16.30 Autonomous work in group.
18:00 Cultural visits guided (visit to Jaén Cathedral and Arab baths).

Thursday, March 6- COMBINED INTENSIVE PROGRAM TECHNICAL-CULTURAL VISIT

08.30 Meet at Campus of Linares.
9:00 Departure UJA Jaen- Pozo Alcon
11:00 Visit to Pozo Alcón (Jaén). Oil Olive Factory and singular RENEWABLE ENERGY BIOMASS PROJECTS. (1 MW.- BIOLIZA EBC - Gasification Plant). GUIADANCE: Associated Professor: Jose Antonio La Cal Herrera. (Project Manager and CEO BIOLIZA)
13:00 Departure from Pozo Alcón to Úbeda e/ou Baeza
15:00 Lunch in Úbeda or Baeza
17:00 Monumental view of Úbeda and/or Baeza depending on the visiting time
20:00 Back to Jaén.

Friday, March 7

09.30 Work in group. Supervising the project.
11.00 Coffee break.
11.30 Work in group. Supervising the project.
12.00 Closing remarks (Salón de Grados EPS Jaén)
13.00 Farewell Lunch