FACT SHEET BIP

Name institution	University of the Basque Country (Universidad del País Vasco / Euskal Herriko Unibertsitatea, UPV/EHU)
Title / Name BIP: *(Enter the official name of the BIP)*	Power Electronics: power and digital design
Abstract: *(Brief summary of the activity – what it is about in 3–5 lines)*	This course will focus on power electronics, specifically on power and digital design of power converters. The students will discover the components forming a power converter and will learn how to combine them to have a good design. Concepts will transit smoothly from solid theoretical foundations to hands-on practical applications, developing a mini project.
Goal: *(What is the main objective or purpose?)*	The main goal is to give the students theoretical and practical knowledge of the components forming a power converter.
Topics covered: *(List the key themes or subject areas that will be addressed)*	Power converter basics. Power components characterization and design. Digital design.
Expected outcome(s): *(What should students gain or achieve by the end?)*	Students will finish the course with a rough overview of power converter design and digital hardware programming.
Start and end date of the BIP	15-19 March 2027
Content of virtual component: *(Describe any online or hybrid elements – e.g., webinars, online modules, collaborative tools)*	1st Session. Introduction (welcome meeting, presentation lecturers and students), content, bibliography. 2nd Session. Feedback on the projects the students have presented. Self-Directed Work and Private Communications: In addition to online sessions, students engage in meaningful self-directed work and maintain private communications with experts. This aspect of the virtual component allows for personalized mentoring and deep learning, where students can address specific questions and receive detailed guidance throughout the duration of the project.

Start and end date of the virtual component	2nd March- 3rd April
Maximum number of students: *(Total number of participants allowed)*	20
Maximum number per university: *(Limit per institution, if applicable)*	
BIP ID *(If already available)*	