

The mbed platform for teaching electronics applied to product design (2014)

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Autores: Miguel Macías, J. Enrique Agudo, Carlos J. García, Horacio M. González, Antonio

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Lugar: Bilbao, España Año: 2014 (11 - 13 de junio) Abstract: Spain's degree course

"Graduate in Industrial Design and Product Development Technical Engineering" (Spanish acronym: GITDI) has a strong multidisciplinary character. The curriculum requires students to acquire knowledge of very different disciplines and materials: "Mechanics, Electronics, etc." This variety means that, in some areas, not enough depth is gone into for the students to gain sufficient competence to incorporate certain technologies into their designs. In the case of Electronics, they can only take a single elective 6-credit course throughout the curriculum. It is shown here how rapid prototyping tools with microcontrollers like "Arduino" and "mbed" constitute, for their ease of use and intuitive programming and design, a basic element for students to quickly and with little prior knowledge acquire the competence sufficient to create new products with some level of technology.-->