Project Proposal - GreenChips-EDU

Call: DIGITAL-2022-SKILLS-03
(Advanced Digital Skills)
Topic: DIGITAL-2022-SKILLS-03-SPECIALISED-EDU

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GreenChips-EDU (1) - The Project Proposal at a Glance

PROJECT	
Project name:	Building a Digitally-Supported Education Ecosystem for Next Generation Microelectronics Experts in Sustainable Chips and Applications for a Green and Circular Economy
Project acronym:	GreenChips-EDU
Coordinator contact:	Bernd Deutschmann, TU Graz

- **EU Call:** Call: DIGITAL-2022-SKILLS-03 (Advanced Digital Skills)
- **Duration:** 48 months
- **Total budget:** 14 339 172€ (TU Graz: 2 261 992€)
- **EU Funding:** 50%
- **15 key players** from **7 EU countries**
- **6 Unite! partners**

GreenChips-EDU (2) – Objective and Purpose of the Project

- The **EU Chips Act** aims to increase Europe's semiconductors production to 20% by 2030.
- A **skilled workforce** to support this growth **is needed** more than ever.
- **EU's Green Deal** initiative focuses on a transition to **sustainability and energy efficiency.**
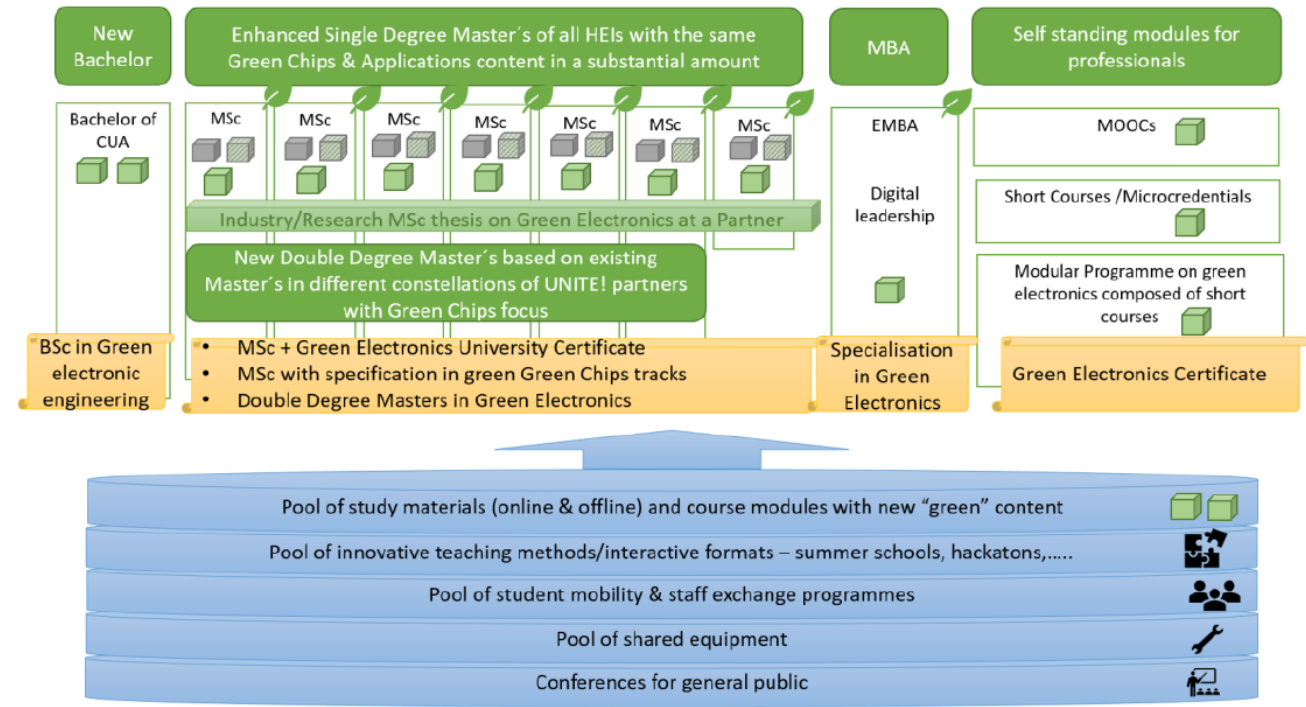- This underlines the **need for expertise** in sustainable chip development and green applications.

- **Problem:** EU wide shortage of skilled workers in microelectronics.
- Addressing this shortage will be crucial in meeting the goals of both the EU Chips Act and the Green Deal.

> The proposed project "**GreenChips-EDU**" supports these goals by addressing the needs and challenges of a green and digital transition in the microelectronics industry.

GreenChips-EDU (3) – Objectives of the Project

Objective 1 - Addressing skills needs

- Design of Bachelor and Master Degree programmes
- Massive Open Online Courses (MOOCs)
- MBA & Self-Standing Modules
- Summer Schools
- Sustainability Hackathons
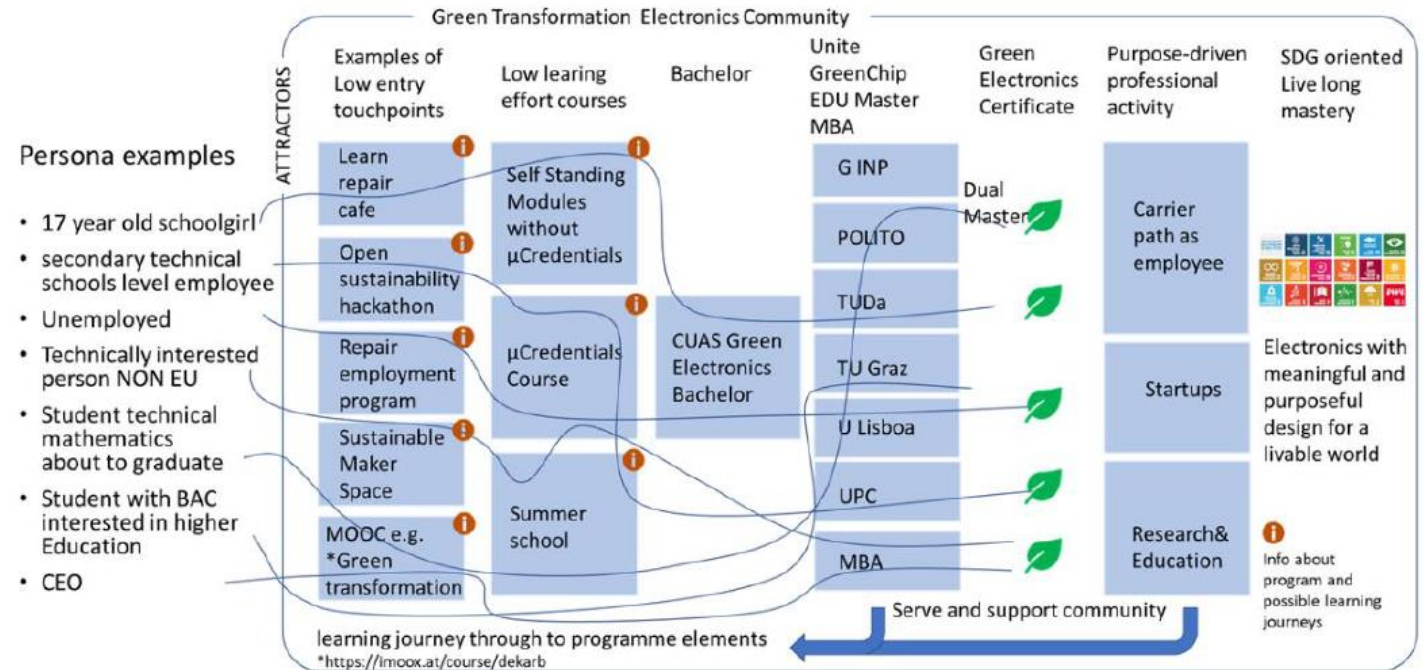- Maker Spaces
- Learning Repair Cafés

GreenChips-EDU (4) – Objectives of the Project

Objective 2 - Attracting qualified teaching staff and students

- Staff exchange programme
- Internships, summer schools or hackathons organized at different locations
- Double degree programmes
- Student mobility
- Scholarships

Learning Journey:

GreenChips-EDU (5) – Objectives of the Project

Objective 3 - Upgrading digital solutions, equipment and infrastructure, with a special focus on interoperability of IT systems across participating HEIs

- Up-to-date IC design infrastructure
- Access to IC fabrication facilities and to lab testing of fabricated chips
- CAD infrastructure shared among partners
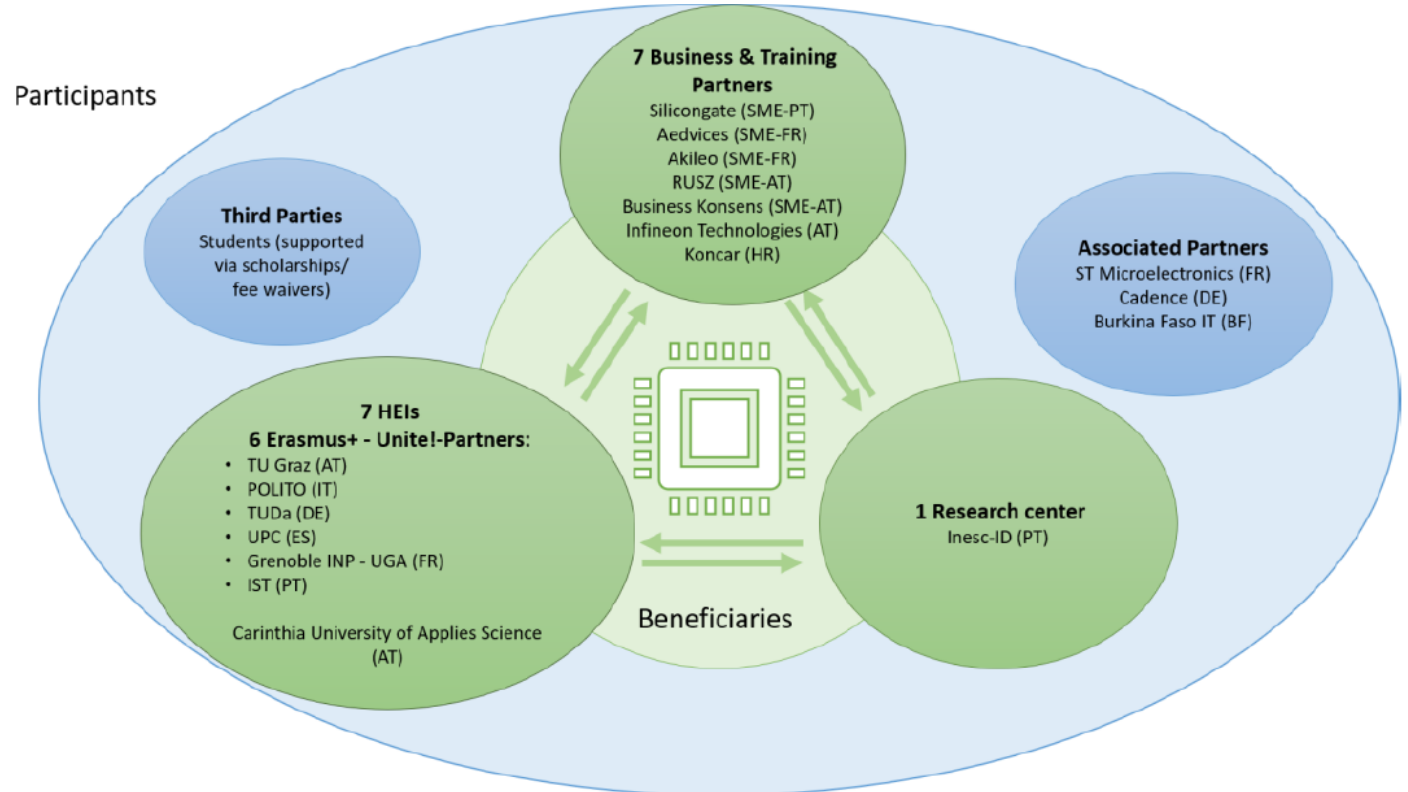- Common testing platform

Objective 4 - Establishing structural and sustainable partnerships between the members of the consortium

- Network will be further strengthened
- Harmonizing the education programmes
- Joint activities between all partners

GreenChips-EDU (6) – Knowledge Triangle in Green Microelectronics

15 partners from **7 European countries**, integrating the knowledge triangle of excellent **education**, **research** and **innovative companies**, will be in action to contribute to the overall goal of becoming world leaders in the training of digital specialists.

GreenChips-EDU will transform European higher education in microelectronics through multidisciplinary, multicultural and multilingual education, research and entrepreneurship.

Thank you

(C) Bernd Deutschmann, Institute of Electronics (IFE), Graz University of Technology, Austria

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