

Prototyping For Everybody

The Community Prototyping Lab and Micro Business Development join together to offer students a new rapid-assimilation certification program at the University of Colorado Denver and a new prototype laboratory in Denver's art district

Every day, a wide variety of new inventions and innovative products are manufactured for consumer, medical, and industrial uses. But before a new product can go to market, it must proceed through a lengthy process of conceptual design, development, and physical prototyping that is both costly and requires a great deal of technical expertise to complete. Professors at the University of Colorado Denver have developed a new curriculum that teaches research students how to quickly assimilate just enough new technical knowledge in order to successfully complete a prototyping project. Together with the Micro Business Development, they have also created the Community Prototyping Lab which allows students to participate in service learning programs designed to give them real-life experience by working for actual clients who are in need of low-cost prototypes.

Randall Tagg and Arlen Meyers of UC Denver have developed a curriculum that offers students training in two critical areas of physical prototyping: the assimilation of a variety of technical knowledge and hands-on experience in producing prototypes. In order for a researcher to turn a great idea into a physical product, it is necessary to incorporate many different types of technical knowledge into a working prototype that they can then use to raise funds, present to manufactures, and develop business plans for successful marketing of their product. It is much too time consuming for a single person to become an expert in every field, so rather than trying to master everything, the Certificate in the Scientific Foundation of Technical Innovations teaches students to gain enough understanding in fields such as design materials, mechanisms, actuators, sensors, and electronic components so that they can apply their knowledge to their prototypes. Community development of new products also plays an important role in the process, so to foster a community development environment they also created the Community Prototyping Lab.

The laboratory, which resides in the Micro Business Development in Denver's art district, not only offers a physical location for the program to house expensive technical equipment, but also allows students to have one-on-one contact with small businesses that need physical prototypes which they might not have the financial means to produce otherwise. By doing this, not only do students have a fully-stocked laboratory to work in, but they also gain experience in dealing with the business aspect of physical prototyping. In exchange for low-cost prototypes, business who use the service also agree to donate a percentage of the any profits that they might gain back to the laboratory in order to keep the program functioning.

I received some positive feedback in regards to this piece:

To: Gallagher, Lissa
Subject: Re: RACAS article

Lissa,

Thank you SO much! The article is wonderful. Please pass on my sincere Compliments and gratitude to the Pablo Warhola and the photographer who made such a fine summary of the goals of the Community Prototyping Lab.

Best regards,

Randy

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