

### **UF Engineering Innovation Institute Activity Highlights AY 2021-2022 (Summer 21 - Spring 22)**

- This year students were able to return to primarily face to face instruction and experiential programs. Our new state-of-the-art, flipped Innovation Studio provided small group, interactive learning experiences that the Institute didn't have in previous years. Our Engineering Innovation and Entrepreneurship courses were completely converted to a flipped format, with lecture material being delivered on-line between class times, which are then used to work interactively with the student teams.
- Even with the challenges of the coronavirus pandemic, EII provided in-depth coursework to 844 unique engineering students comprising 569 undergraduate and 279 graduate students. Almost 6,000 engineering students have taken the Institute coursework since the start of the program in 2010, with an average student growth rate of 18% per year. Many students will take multiple courses in the Institute as their academic schedules allow and total course enrollments for EII were at an all-time high of 972 this year. The vast majority of these are 3 credit-hour enrollments providing students with deep learning experiences complemented by experiential education programs.
- The Institute offers undergraduate and graduate certificates in Engineering Innovation, and an undergraduate Minor in Engineering Innovation. These are some of our most dedicated students as these require three or five of our courses respectively, and enrollments in both the Certificates and the Minor are accelerating. To date, 200 students have been awarded the Engineering Innovation Certificate, and in this fiscal year an additional 27 undergraduate and 19 graduate students applied to pursue the Engineering Innovation Certificate. To date, 52 undergraduate students have received the Engineering Innovation Minor, and in this fiscal year an additional 31 students applied to pursue the Minor.
- The Institute continued Skills-Builders Module training in collaboration with the Engineering Leadership Institute. These 1-hour, turnkey Modules are offered to faculty to supplement their courses across all College of Engineering departments. In this fiscal year, 845 engineering students in total received these materials, with EII faculty delivering Modules in Innovation and Creativity, A Global View of Innovation, Elevator Pitching, and Financials for Engineers to 286 engineering students.
- The Institute completed the fourth year of the UF Innovation Fellows program in cooperation with the Warrington College of Business and philanthropic funding from our alumni supporters. This project-based program is highly experiential and interactive as students work closely in multi-disciplinary teams to exercise their creative juices. We were able to return to face-to-face meetings this year, which greatly enhanced the experience for the students. This cohort of 13 Innovation Fellows were again diverse in discipline and background including

seven women and three students from under-represented minority backgrounds. Six students were recruited from the College of Engineering and six from the College of Business, along with one surgery resident from the College of Medicine, to work together over two semesters on self-directed projects. Instead of a visit to Silicon Valley as part of the program, the group visited Austin to experience that innovation community.

- The Institute continues to work closely with Dr. Elif Akcali (ISE), who became an EII Affiliate Faculty member this year, as we continue to support several of her proposals to federal agencies around creativity and divergent thinking. The Institute also collaborated this year with Dr. Ben Lok (CISE) to create a new faculty technology commercialization support program advising faculty on bringing an innovation and translation mindset into their labs. EII faculty member Dr. Melissa White serves as Affiliate Faculty in the UF College of the Arts / Center for Arts, Migration and Entrepreneurship and provides a critical link across campus and the region's innovation community.
- UF alumni support was strong this year. UF alum Dr. Michael Durham recognized the impact the Institute provides to our faculty and students through supporting a \$1M endowed Professorship in Creativity. Additionally, Bud and Kim Deffebach created the Space Coast Innovation Pathway Non-Traditional Internship Fund (\$100k) to support the Institute in building innovation partnerships linked to Florida's Space Coast.
- EII faculty worked closely with startups and small companies and incubators across the State of Florida (e.g., UF Innovate in Gainesville, Groundswell in Melbourne) in engaging students directly with these innovation ecosystems, including working on internship opportunities and assuming leadership-level responsibilities in startGNV (Gainesville's startup support group). For instance, EII hosted a startup sprint workshop in collaboration with the UF Entrepreneurship Collective club featuring multidisciplinary team-based project collaborations. Twenty-five students participated with mentors from the community provided by startGNV and local entrepreneurs as judges.
- EII faculty continued to support the efforts of engineering student led companies through mentoring and encouraging participation in various business competitions. For example, of the roughly 120 participants in the UF Big Idea Competition sponsored by the Warrington College of Business, sixteen companies listed their primary contact/founder as an engineering student, with a total of twenty-nine participants listing their home college as HWCOE. Four of the sixteen HWCOE student companies were selected to the Sweet 16 Finalists for the competition.
- EII continues to work with our regional economic development partners and leading technology companies to promote the Gainesville region as an attractive option for a company location to work with our faculty and students. As a result of years of discussions, EII worked with the leadership of Vobile, an international leader in AI for online content identification and monetization, to locate a facility in Gainesville in this reporting period. The company is currently recruiting and has already hired full-time employees for the new facility and plans are for 100+ employees in Gainesville over the next couple of years.
- Faculty service continues to grow through industry and entrepreneur engagement and the Institute put processes in place (e.g., readily accessible, current information on UF entrepreneurship, innovation and technology commercialization resources and support) that

support faculty research and education proposals and industry engagement. For instance, the Institute worked with the Florida Engineering Experiment Station to support the NSF Engineering Research Center for Engineered Neural Systems with Societal Impact proposal led by Dr. Jack Judy (ECE). This included recruiting 35 industry and practitioner partners committing \$650k in annual support and leading the ERC innovation ecosystem, including negotiating a comprehensive industry and practitioner agreement across four partner universities and establishing the ERC framework for technology commercialization.

- The Institute continues to support the college faculty in commercializing the results of their research. In this year, College of Engineering faculty research resulted in 113 inventions, 242 patent applications, and 54 technology licenses with industry. Annually, Herbert Wertheim College of Engineering faculty produce invention disclosures, technology licenses and options, and spin-off companies at three+ times the national university average per research dollar.

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