ADDITIVE MANUFACTURING

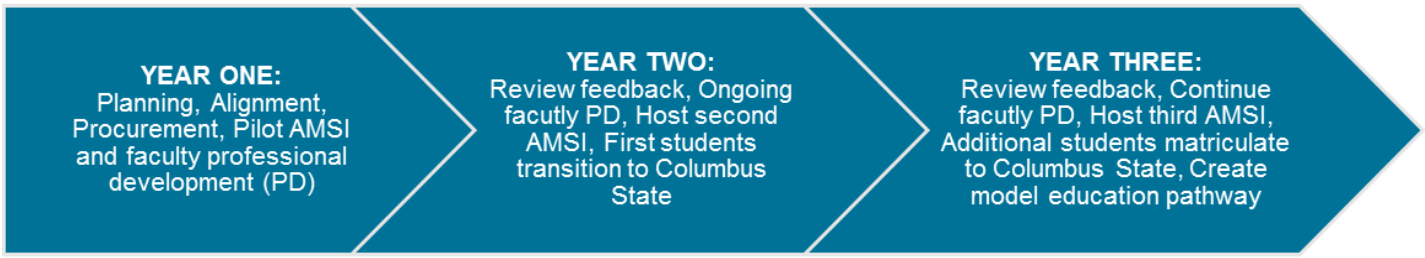
SUMMER INSTITUTE

Columbus State Community College and the PAST Foundation, with funding from the National Science Foundation, have partnered to host the Additive Manufacturing Summer Institute. This four-week, immersive experience exposes high-schoolers to additive manufacturing techniques, engineering principles, and careers in advanced manufacturing. We offer the program at no cost to students and teachers. The institute is open to students entering grades 10-12, as well as recent high school graduates and high school teachers.

Through the month of June, participants worked together on engineering and manufacturing design challenges, with state-of-the-art tools at their fingertips. Computer-aided design (CAD), 3-D printing, and design principles are applied to a hands-on project that transforms an idea into a tangible object.

1. **Additive Manufacturing Summer Institute:** Year one of the summer institute allowed students to work in teams to design and prototype an assistive device with additive manufacturing or 3-D printing techniques to help their community.
2. **High School Faculty Professional Development Initiative:** Teachers from local high schools developed an additive manufacturing curriculum, explored topics such as assembly, CAD, and computer numerical control, and participated in a three-week online professional development course.
3. **Model Education Pathway:** Students who completed the program are now prepared to pursue college-readiness coursework while in high school, or pursue a two-year degree in engineering technology.

PROJECT TIMELINE | JULY 2017 — JUNE 2020



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COLUMBUS STATE COMMUNITY COLLEGE

THE PAST FOUNDATION

NSF

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