



NSF ATE Grant #1902075: 2019 - 2022

Increasing the Number of Workforce-Ready Engineering Technicians in Southeastern Pennsylvania

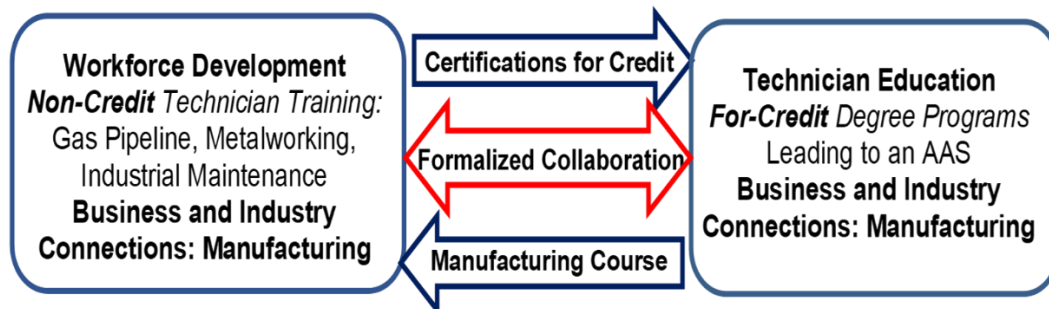
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Goal #1: Enhance the engineering technology curriculum in collaboration with our Business and Innovation Department and with our Center for Workforce Development (CWD)

Goal #2: Enhance our engineering design course to include additive and subtractive manufacturing

Goal #3: Create pathways into our programs for underrepresented groups: Community Outreach to K-12 Schools!



ENGINEERING TECHNOLOGY (AAS 2193 Occupational)

***Embed career exploration and soft skills training into curriculum as part of our college readiness course (Bucks+)**

Degree Course Requirements:

<u>COLL101</u> Introduction to College	1	<u>MGMT155</u> Entrepreneurship	3
<u>ENGR112</u> Engineering Design and		<u>MATH115</u> Elementary Statistics	3
<u>Manufacturing</u>	4	<u>MATH125</u> Pre-Calculus	4
<u>CHEM121</u> Chemistry I	4	<u>PHYS106</u> Physics A	4
Computer Science Elective	3-4	<u>PHYS107</u> Physics B	4
<u>MGMT135</u>	3	<u>ENGT240</u> Applied Circuits and Devices	4
<u>COMM110</u> Effective Speaking	3	<u>ENGT222</u> : Applied Statics	3
<u>ECON111</u> Macroeconomics	3	Technical Electives	12
Arts/Humanities	3	Internship	3
			64 – 65

****Technical Electives include Certifications through our Center Workforce Development, and Prior Work Experience**

Three modes of teaching engineering technicians during the pandemic:

Online (asynchronous format), **Remote** (synchronous via Zoom), **Hybrid** (at Home and at School)

Resources

Bucks County Community College (Bucks) Website: <https://www.bucks.edu/>

Engineering Technology Major at Bucks: <https://www.bucks.edu/catalog/majors/stem/engineeringtechnology/>

Workforce Development at Bucks: <https://www.bucks.edu/workforcedevelopment/>

Bucks+ at Bucks: <https://www.bucks.edu/bucks+/>

Drexel University Engineering Technology Program:

<https://drexel.edu/engineering/academics/departments/engineering-technology/>