Applied Engineering Technology

A Regional STEM Initiative

Tomorrow's Careers Today

The Opportunities — The New World of Manufacturing

The world of manufacturing has changed dramatically. Gone are the dreary environments and rote production lines of the past. In their place are advanced processes, high tech equipment and finely-tuned production methods focused on innovation and sustainability. The Philadelphia region is one of the largest and fastest growing markets for the new manufacturing economy and there is a massive, escalating need for workers with the motivation and skill to be a part of this revolution.

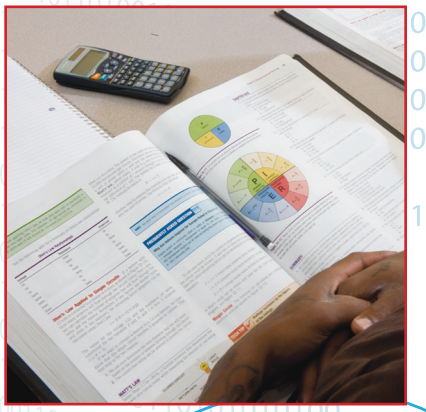


The Careers — Exciting and Fulfilling

Applied Engineering Technology is a highly technical educational path that supports careers in advanced manufacturing. The AET program prepares students to work side by side with engineers, designers and architects to translate their ideas and concepts into product prototypes for the 21st century marketplace.

Careers in the AET field include:

- Machine Tool Technician
- Mechanical Technician
- Nanofabrication Technician
- Process Technician
- Electrical/Electronics Technician
- Power Generation Technician

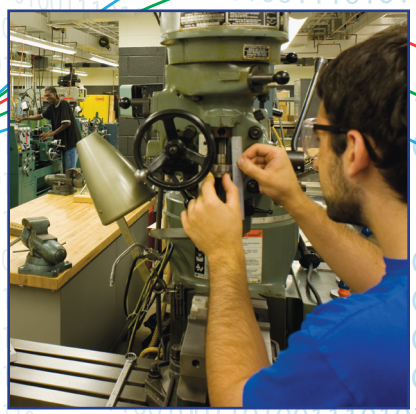


The Rewards–Excellent Salary and Benefits

AET students are trained for high-tech, high-paying positions in diverse manufacturing industries. Here's a look at the typical compensation and benefits offered.

Starting Salaries

AET Certificate	Associates Degree	Baccalaureate Degree
$23,000–$27,000	$28,000–$32,000	$38,000–$48,000



The Regional STEM Partnership

Delaware County Community College

Montgomery County Community College

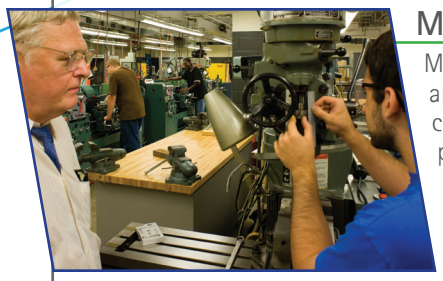
Community College of Philadelphia

DVIRC

THE COLLEGIATE CONSORTIUM for Workforce and Economic Development

What Does AET Mean for the 21st Century Learner & Future Professional?

The Applied Engineering Technology careers described below should acquaint the 21st century educator and learner with just a few of the STEM-based careers that sustain today's global economy, society and culture. For more information visit www.dvirc.org and click on Talent Development.



Machine Tool Technician

Machine Tool Technicians create products such as medical devices, automobile and aircraft components and other materials that support industries such as aerospace or medical fields. The technician creates these products using computer-aided drafting, design and machining technologies. Future professionals that choose this field must have a comprehensive grasp and mastery of higher level math and science skills.

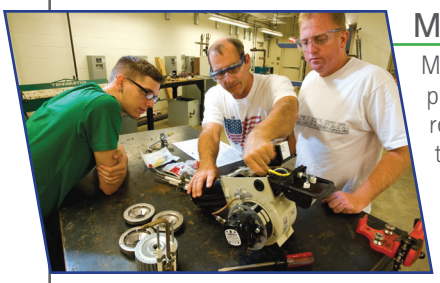
Average Annual Salary, $29,000 - $44,000



Process Technician

Process Technicians collaborate with chemical, mechanical and electrical engineers utilizing cutting edge technologies and computerized equipment to assist and ensure the process of product creation and development for high-quality results. They take raw materials and manage a process that ensures the highest quality of the end product such as medicine, gasoline, lubricants and your drinking water.

Average Annual Salary, $40,000 - $85,000



Mechanical Technician

Mechanical Technicians develop and maintain mechanical, fluid and structural engineering and product specifications by preparing design layouts, modifying existing engineering designs, and resolving design discrepancies. Mechanical Technicians function as the vital support link between the equipment used to create products and the team that designs the products.

Average Annual Salary, $34,000 - $55,000



Electronics Technician

Electrical and Electronics Technicians assist in the development, design and maintenance of electrical and mechanical equipment, systems design, engineering documents and data. Electrical/electronics technicians program and maintain the electrical circuitry that powers the production system – as such, these technicians must have complete mastery of STEM-related disciplines such as trigonometry, algebra and physics.

Average Annual Salary, $29,000 - $66,000



Nanofabrication Technician

Nanofabrication Technicians assist in the creation of products we use in our every day life, but do so in a way that is unique. In nanofabrication and nanotechnology, the product development cycle is actually reversed in that particles are grown at the atomic level in ways that enhance and strengthen raw materials. Nanofabrication technicians work in collaborative teams and must have a comprehensive mastery of STEM disciplines.

Average Annual Salary, $35,000 - $46,000



Power Generation Technician

Power Generation Technicians lead and manage the operations at facilities that produce energy. Power generation technicians may specialize in the following fields of energy production and transmission: nuclear, fossil fuel, wind, solar and geothermal. They manage heating and cooling processes that require them to make complex and immediate decisions concerning power distribution.

Average Annual Salary, $46,000 - $68,000

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