

The Henrico County Advanced Career Education (ACE) Centers offer training opportunities in the following areas for the 2016-2017 school year:

**ADVANCED CAREER EDUCATION (ACE) CENTER at HERMITAGE**  
804-756-3020

- |  |                                |
|--|--------------------------------|
| Air Cond., Refrigeration & Plumbing          | Graphic Communications         |
| Automotive Technology                        | Greenhouse Management          |
| Barbering                                    | Landscaping                    |
| CAD - Computer-Aided Drafting & 3D Animation | Legal Systems Administration   |
| Cosmetology                                  | Medical Systems Administration |
| Criminal Justice                             | Nurse Aide                     |
| Culinary Arts                                | Practical Nursing I            |
| Diesel Technologies                          | Precision Machining Technology |
| Electricity & Cabling                        | Sports Medicine                |
| Emergency Medical Technician                 | Veterinary Assistant           |
|  | Web Development/Programming    |

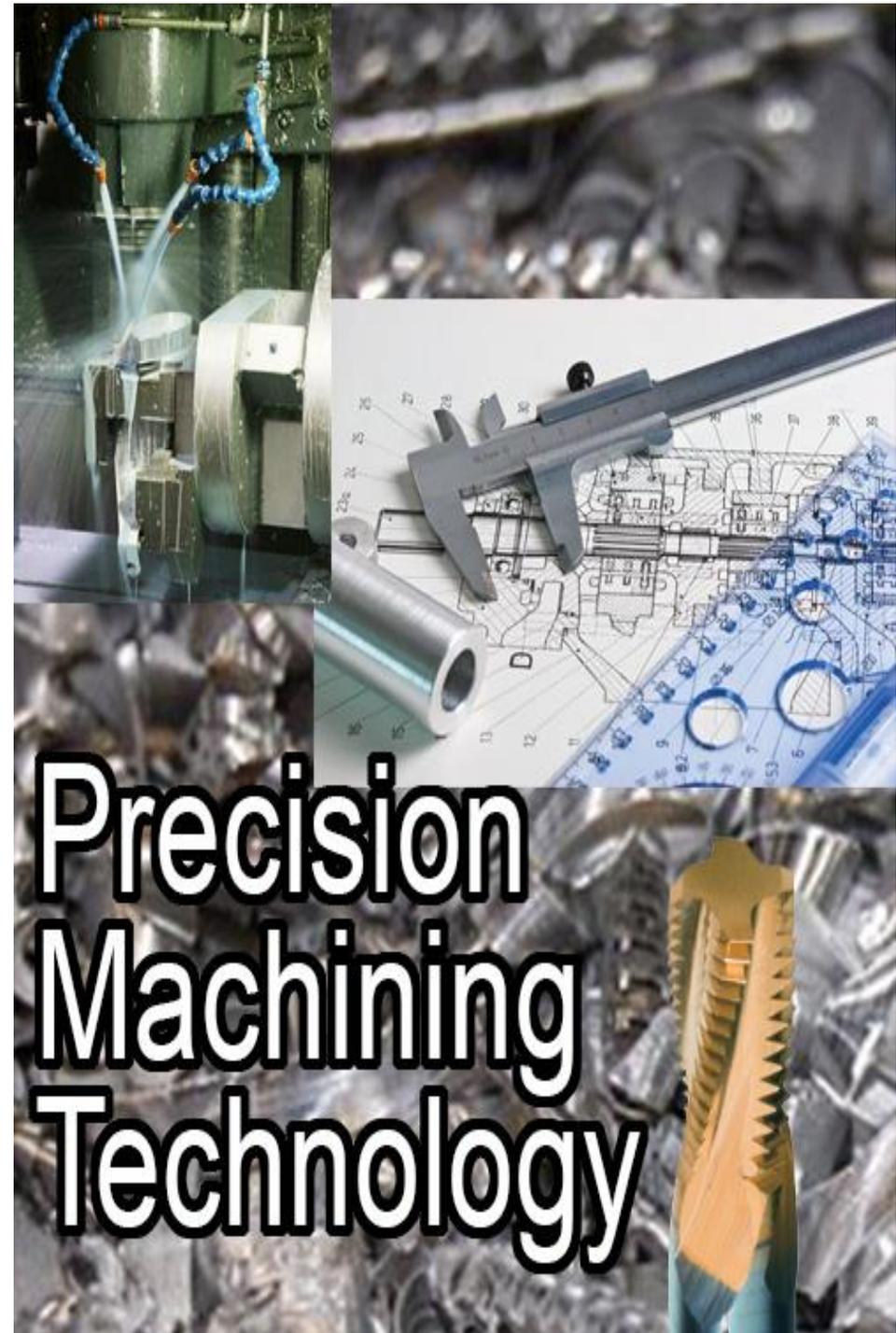
**ADVANCED CAREER EDUCATION (ACE) CENTER AT HIGHLAND SPRINGS**  
804- 328-4075

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| Auto Body Repair                     | Electricity & Cabling           |
| Automotive Technology                | High Tech Academy               |
| Carpentry                            | Tourism Marketing and Sales     |
| Computer Systems Technology          | Masonry                         |
| Cosmetology                          | Nurse Aide                      |
| Criminal Justice                     | Pharmacy Technician             |
| Early Childhood Education & Services | Practical Nursing I             |
|                                      | Radio Broadcasting & Journalism |

Henrico County Public Schools does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or provision of programs, services, or activities. Reasonable accommodation will be provided upon request for individuals with disabilities.

For additional information, please contact a counselor in your school or write or call:

Career and Technical Education Department  
Henrico County Public Schools  
3751-C Nine Mile Road, Henrico, VA 23223-0420  
(804) 781-1810  
HENRICOCTE.COM



**PRECISION MACHINING TECHNOLOGY I Course No. 8539**

Elective

36 weeks - 3 periods/3 credits

**Prerequisite: Recommendation of Counselor**

Introduces students to identification, care, and use of precision tools and instruments. Emphasizes the operation of the drill press, lathe, power saw and grinder. Covers the sharpening of lathe cutting tools, safety, and good housekeeping. Provides for operation and setup on the various types of precision grinders and drill presses. Combination of lecture and hands-on instruction.

**PRECISION MACHINING TECHNOLOGY II Course No. 8540**

Elective

36 weeks - 3 periods/3 credits

**Prerequisite: Precision Machining Technology I**

Precision Machining Technology I is a prerequisite. Continues development of fundamental manual machining skills, with emphasis on the milling machine, more advanced work on the lathe, and basic computer-numerical-control skills. A combination of lecture and hands-on instruction.

### **Major Units of Study**

- Safety of machine shop procedures
- Blueprint reading
- Measurements and measuring tools
- Operation of milling machines, lathes, drill presses, power saws, and grinding machines
- Welding
- Computer numerical control programming and operation

### **Recommended Background Courses**

Good math skills and technical drawing are highly recommended and are of great value to a student entering this field of work.

### **Desirable Aptitudes**

Mechanical ability is one of the most important aptitudes. People with mechanical skills like to tinker, troubleshoot and invent. Often they like to work on their cars or repair other mechanical items.

### **Salaries**

Wages vary from company to company and from area to area, but rank high among the skilled trades. The Richmond area has a wealth of job opportunities in the machine tool trades.

### **Why Study Precision Machining Technology?**

Precision Machining Technology courses at Hermitage Technical Center engage your hands and mind as you face the challenge of turning, grinding, milling, cutting and boring metals. Computer programming, math, and engineering skills are used daily. Once you have mastered one skill, many employers offer opportunities to learn and diversify into other areas.

Machining skills are vital to all areas of manufacturing. Individuals with skill in manual machining go on to careers in manufacturing design, computer-numerical-control programming and operation, as well as maintenance machining in the region's largest manufacturing companies. Machinists also often start their own companies.

### **What About College?**

Through a dual enrollment agreement with John Tyler Community College, students completing Precision Machining Technology I and II at Hermitage Technical Center can earn as many as **15 college credits** and a college certificate in Basic Precision Machining. After graduation, machining students can continue their studies at John Tyler, earning additional credentials including NIMS (National Institute for Metalworking Skills) certification.