

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



Web Development & Programming



Web Development/Programming Course No. 6630/6640

**Advanced Web Development/
Advanced Programming Course No. 6631/6641**

Prior Computer-Related Courses and/or Keyboarding are recommended.

Course Description

Web Development/Programming is a two-year, dual enrolled, 3-period program designed to offer the tools and skills students need to succeed in today's high-technology marketplace. Students have the opportunity to earn up to 12 credit hours with ECPI.

Instruction includes:

- Developing proficiency in Web programming specifically HyperText Markup Language (HTML), Cascading Style Sheets (CSS), JavaScript, JAVA and C++.
- Using Adobe Creative Suite products (Dreamweaver, Flash, Photoshop) to develop interactive websites.
- Incorporating principles of layout and design into Web and desktop-published projects.
- Developing real-world business application development skills using current web enabled application languages.
- Planning, defining and using databases.
- Refining presentation skills and designing electronic portfolios.
- Demonstrating an understanding of business ethics, copyright laws, computer crimes and privacy issues.
- Developing leadership and team-building skills through student organizations (Future Business Leaders of America – FBLA, and First Robotics) activities and small-group projects.
- Developing the skills to earn a certified Internet web professional certificate in site development.
- Developing the skills to earn a Microsoft Technology Associate certification in Software Development.

Course Outline

- Computer concepts and Networking essentials
- Program Design and Problem Solving
- Data Structures and Discrete Mathematics
- Internet Concepts and Web Technologies
- Hierarchy and Abstraction in Computing
- Website Design and Development
- Design for Usability
- Levels of Language, Software, and Translation
- Object-oriented programming language
- Principles of Software Engineering
- Models of Intelligent Behavior
- Careers in Computing
- Multimedia presentations and communication skills
- Ethical and Social Issues
- Leadership development and employability skills

Job Outlook

- The Bureau of Labor Statistics projects 27% percent employment growth for Web developers and 17% for software developers between 2014 and 2024.
- The 2015 median salary for Web developers was \$64,690 and \$100,690 for Software developers.
- Graduates of this course are encouraged to pursue programs leading to an industry certification and post-secondary associate/baccalaureate degrees in Computer Science, Information Technology or Business.

- ***This program is offered only at the Advanced Career Education Center at Hermitage.***
- ***Students may participate in a technical internship in the community, if selected.***
- ***Completion of this program includes an opportunity for students to receive industry certifications from Microsoft and CIW Web Foundations.***