

ACE

TRADE AND INDUSTRY

SUMMER 2009

GET READY FOR SPRING – AND SUMMER

Spring is in the air and summer is not far behind. Whether you are getting your car in tip-top shape, setting sail, or tackling a home DIY project, we've got a great new lineup of courses with your interests in mind.

For automotive enthusiasts, get to know the overall operation of your vehicle's electrical system (without burying you in the technical data) in Automotive Electrical Systems. Boaters receive all-important navigation training with Coastal Navigation and Watchstanding and Inland Navigation and Watchstanding. Students learn the same techniques used in the navigation plotting module of the USCG deck officer license exam.

For the do-it-yourselfer, our new Residential Electrical Series is dedicated to saving you money and keeping you safe. Learn to properly wire and install switches, outlets, fans, a variety of lighting fixtures, and much more.

Be sure to sign up for ACE On Point so we can keep you informed of upcoming activities, events, and classes of interest to you. Visit www.fcps.edu/aceclasses; click "Sign up for our newsletter" under ACE Quick Links.

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Home Improvement

Also see Property Maintenance Technician courses on page 6.

Bathroom Design Seminar

TI05162 | \$43

Professional designer discusses newest methods and materials for bathrooms: cost, decorating, latest fixtures. 1 session @ 3 hrs.

\$ 39 Tuition
\$ 4 User Fee

Section 0020	7:00 pm
Ferguson Enterprises Inc	W, August 5
Rm TBD	David, teacher

Bathroom Remodeling Workshop

TI05179 | \$355

Learn how to makeover a complete bathroom to include lavatory, shower/tub, electrical wiring, plumbing, tile, and vanity/sink. The class builds a mock bathroom and will have plenty of hands-on opportunities. 10 sessions @ 3 hrs each.

\$305 Tuition
\$ 50 User Fee

Section 0020	7:00 pm
Bryant Ctr	Tu, June 9-August 11
Rm 50A	Harvey, teacher

Brick Patios and Walkways

TI05151 | \$125

For years Dillard Carter has taught adult students how to build upward with bricks and mortar. In this course, he focuses on skills necessary for constructing flat patios and walkways by laying brick in either mortar or sand. 3 sessions @ 3 hrs each.

\$115 Tuition
\$ 10 User Fee

Section 0020	7:00 pm
Edison HS	M, May 4-May 18
Rm 526	Carter, teacher

Bricklaying for the Homeowner—Beginning to Advanced

TI05149 | \$199

Hands-on workshop. Learn the tools and techniques to successfully use mortar and brick for home improvement and repair projects. 7 sessions @ 3 hrs each.

\$189 Tuition
\$ 10 User Fee

Section 0020	7:00 pm
Edison HS	W, May 6-June 17
Rm 526	Carter, teacher

Build a Deck according to Fairfax County Code

TI05184 | \$45

Learn when a Fairfax County building permit is required and how to obtain one. Work through the process of creating a deck plan that incorporates the county building code requirements. 1 session @ 3 hrs.

\$ 45 Tuition

Section 0020	7:00 pm
Chantilly HS	Th, June 4
Rm 144	Sanchez, teacher

Section 0021	7:00 pm
Chantilly HS	Tu, July 7
Rm 144	Sanchez, teacher

Ceramic Tile: Just Do It

TI05165 | \$125

Introduction to ceramic tile with an emphasis on tile types, applications, basic tools, and skills. Focus is on kitchen and bathroom projects including tub and shower walls, bathroom and kitchen floors, and kitchen back splashes and counter tops. This course is both demonstration and hands-on workshop. 3 sessions @ 3 hrs each. (Saturday sections meet 2 sessions @ 4.5 hrs each.)

\$ 99 Tuition
\$ 26 User Fee

Section 0020	7:00 pm
Chantilly HS	Tu, May 5-May 19
Rm 577	Dominick, teacher

Section 0021	7:00 pm
Bryant Ctr	M, June 8-June 22
Rm 50A	Dominick, teacher

Section 0022	7:00 pm
Chantilly HS	Tu, July 7-July 21
Rm 577	Dominick, teacher

Designing Your Dream Home

TI05148 | \$175

Architect covers issues of design including the identification of space needs and functionality, site planning, and building concepts and gives an overview of technical topics such as energy efficiency, cost control, building codes, and construction. Students will be introduced to sources for dream home plans and methods of project delivery. 5 sessions @ 3 hrs each.

\$165 Tuition
\$ 10 User Fee

Section 0020	7:00 pm
Marshall HS	W, June 10-July 8
Rm 116	Pierce, teacher

Do-It-Yourself Plumbing

TI05190 | \$105

Repair and maintain faucets, valves, toilets, and clogged drains. 3 sessions @ 3 hrs.

\$ 89 Tuition
\$ 10 User Fee
\$ 6 Text: *Step-By-Step Guide On Home Plumbing*

Section 0020	7:00 pm
Chantilly HS	W, June 10-June 24
Rm 577	Olive, teacher

Section 0021	7:00 pm
Pimmit Hills Ctr	M, July 13-July 27
Rm 138	McCrone, teacher

Finishing a Basement

TI05174 | \$229

Hands-on workshop on all phases of basement finishing—from start to finish. 6 sessions @ 3 hrs each.

\$209 Tuition
\$ 20 User Fee

Section 0020	7:00 pm
Thoreau MS	W, June 3-July 8
Rm TBD	Fox, teacher

Home Maintenance for Everybody

TI05193 | \$145

Minimize costly, time-consuming service calls! Expert teacher shows successful, effective, inexpensive, and safe home repairs with basic tools. 3 sessions @ 3 hrs each.

\$117 Tuition
\$ 12 User Fee
\$ 16 Text: *Sunset Home Repair Handbook*

Section 0020	7:00 pm
Annandale HS	W, July 15-July 29
Rm 341	Phipps, teacher

Kitchen Design Seminar

TI05161 | \$43

Certified kitchen designer discusses space planning, equipment, building materials, code requirements, and cost. Determine whether to do it yourself or use a professional. 1 session @ 3 hrs.

\$ 39 Tuition
\$ 4 User Fee

Section 0020	7:00 pm
Ferguson Enterprises Inc	W, July 8
Rm TBD	David, teacher

Permitting that Project

TI05186 | \$45

A three-hour class on the who, what, where, why, and how of construction permits in Fairfax County. This class is appropriate for everyday homeowners or contractors who need to know the procedures and processes of the county permit system. Learn the different agencies involved and what to do after a permit has been issued. 1 session @ 3 hrs.

\$ 45 Tuition

Section 0020	7:00 pm
Chantilly HS	Th, June 11
Rm 142	Sanchez, teacher

Section 0021	7:00 pm
Chantilly HS	Tu, July 14
Rm 144	Sanchez, teacher

Power Tools: You Can Do It

TI05166 | \$69

Learning about power tools and their safe use can put many projects within your grasp. This demonstration and hands-on workshop introduces you to a wide array of tools and their proper use. It would be a great course to help you with holiday gift ideas. 2 sessions @ 3 hrs each.

\$ 64 Tuition
\$ 5 User Fee

Section 0020	8:30 am
Bryant Ctr	Sa, May 9-May 16
Rm 44	Dominick, teacher

Selecting a Contractor

TI05147 | \$69

How do you select a contractor to build a deck, remodel a bathroom, or perform other home renovation projects? This class is a must before you begin that selection process. 2 sessions @ 3 hrs each.

\$ 59 Tuition
\$ 10 User Fee

Section 0020	9:00 am
L. Braddock SS	Sa, June 13-June 20
Rm H225	Linder, teacher

Upholstery Workshop: Hands-On

TI05160 | \$449

Recondition, reupholster basic chair with master upholsterer. Must be comfortable with hand tools and able to lift and carry a chair. Bring tools. 7 sessions @ 7 hrs each.

\$ 425 Tuition
\$ 24 User Fee

Section 0020 9:30 am
Bryant Ctr Sa, May 2-June 13
Rm 71 Sowell, teacher

Contracting

Electrician Continuing Education

TI05275 | \$109

Comprehensive, three-hour review of the 2005 National Electric Code (NEC). Class fulfills the continuing education requirement for electricians holding either journeyman or master license in the Commonwealth of Virginia. You will be required to provide your trade license number and birth date when you register or when you arrive at class. You may not enter the classroom once class has started. Must register at least one week before class start date. Workbooks will be distributed at class. 1 session @ 3 hrs.

\$ 75 Tuition
\$ 34 Text: *Continuing Education Electrical Workbook*

Section 0020 6:30 pm
Marshall HS Tu, May 12
Rm 237 Miller, teacher

Section 0021 6:30 pm
South County SS M, June 8
Rm A140 Prasse, teacher

Section 0023 6:30 pm
Marshall HS Tu, July 7
Rm 237 Miller, teacher

Section 0024 6:30 pm
Chantilly HS Th, August 6
Rm 144 Staff, teacher

Gasfitters Continuing Education

TI05278 | \$69

Comprehensive, one-hour review of the 2006 International Fuel Gas Code. Class fulfills the continuing education requirement for Gasfitters holding either journeyman or master license in the Commonwealth of Virginia. You will be required to provide your trade license number and birth date when you arrive at class. You may not enter the classroom once class has started. Must register at least one week before class start date. Workbooks will be distributed at class. 1 session @ 1 hr.

\$ 47 Tuition
\$ 22 Text: *Continuing Education Gas Code Workbook*

Section 0020 1:00 pm
ACE Herndon Learning Lab Sa, May 2
Rm 414 Roston, teacher

Section 0021 6:30 pm
Marshall HS M, June 8
Rm 233 Dagenhart, teacher

HVAC Continuing Education

TI05276 | \$109

Comprehensive, three-hour review of the 2006 International Mechanical Code. Class fulfills the continuing education requirement for HVAC/Mechanical technicians holding either journeyman or master license in the Commonwealth of Virginia. You will be required to provide your trade license number and birth date when you arrive at class. You may not enter the classroom once class has started. Must register at least one week before class start date. Workbooks will be distributed at class. 1 session @ 3 hrs.

\$ 75 Tuition
\$ 34 Text: *Continuing Education Mechanical Workbook*

Section 0020 7:00 pm
Chantilly HS Tu, May 5
Rm 142 Sickels, teacher

Section 0021 7:00 pm
Marshall HS M, June 8
Rm 237 Roston, teacher

Section 0023 7:00 pm
Fairfax HS Th, July 9
Rm C114 Wise, teacher

Plumbers Continuing Education

TI05277 | \$109

Comprehensive, three-hour review of the 2006 International Plumbing Code. Class fulfills the continuing education requirement for Plumbers holding either journeyman or master license in the Commonwealth of Virginia. You will be required to provide your trade license number and birth date when you arrive at class. You may not enter the classroom once class has started. Must register at least one week before class start date. Workbooks will be distributed at class. 1 session @ 3 hrs.

\$ 75 Tuition
\$ 34 Text: *Continuing Education Plumbing Workbook*

Section 0020 9:00 am
ACE Herndon Learning Lab Sa, May 2
Rm 414 Roston, teacher

Section 0021 7:00 pm
South County SS M, June 8
Rm A120 Walters, teacher

Section 0023 7:00 pm
South County SS M, August 3
Rm A120 Walters, teacher

Obtaining VA Trade and Contractor's Licenses

TI05350 | \$49

Discover how to get trade and contractors' licenses for Fairfax and Virginia. Information applicable to general contracting, mechanical (HVAC), electrical, plumbing, and home improvement. 1 session @ 3 hrs.

\$ 49 Tuition

Section 0020 6:30 pm
Fairfax HS W, May 6
Rm D148 Wise, teacher

Virginia Trade License Renewal – Make It Easy

Have you been inundated with offers for continuing education classes? As you know, if your trade license is due for renewal, the Department of Professional and Occupations Regulation (DPOR) requires that you attend a continuing education class before renewing your license.

Fulfill this renewal requirement with ease—take your class with ACE. As an approved DPOR provider, our classes are affordable and conveniently located in Northern Virginia.

You do not need to be a Virginia or Fairfax County resident to take advantage of these classes.

Virginia Contractors

Applying for your contractor's license? In the Commonwealth of Virginia, you must complete an 8-hour basic business class as a part of the licensing process. The VA Contractor's Basic Business Course (TI05348) fulfills this requirement. Classes are conveniently located – it couldn't be easier.

NEW - Residential Electrical Series

This residential electrical series is for people who own residential property or just wish to know about the varied aspects of uncomplicated easy-to-do-electrical projects. Skills will be learned and practiced in a workshop environment. The teacher will use a combination of hands-on, lecture and demonstration in each class.

Students can register for sets of 6 or 3 classes for the best value, or register for individual classes. TI05199 The Basics, is a prerequisite for all other classes. Class sizes are limited to maximize individual instruction; early registration advised.

Residential Electrical Series - Six Classes

TI05197 | \$369

Tuition includes basic class and passport to attend all five topical courses in this series. 6 sessions @ 4.5 hrs each.

\$359 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 2-June 6
Rm B107 Mickelson, teacher

Residential Electrical Series - Three Classes

TI05198 | \$199

Tuition includes basic class and passport to attend choice of two other topical courses in the series. The trade and industry office will contact you regarding your two selected courses. 3 sessions @ 4.5 hrs each.

\$189 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 2-May 16
Rm B107 Mickelson, teacher

Class A - The Basics

TI05199 | \$99

Become familiar with supplies and equipment (wires, boxes, outlets, switches, and breakers); stripping and connecting wire (terminals, wire nut, and splicing). This class is the prerequisite for all other classes in this series. **Call 703-658-1225 or e-mail tradeandindustry@fcps.edu for required tool list.** 1 session @ 4.5 hrs each.

\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 2
Rm B107 Mickelson, teacher

Class B - Simple Household Electrical Units

TI05200 | \$99

Learn to install two single poles, switches, duplex outlets, and split outlets with boxes. Install a gang box, wire switches, and lights in parallel and in a series. 1 session @ 4.5 hrs.

Prereq: TI05199 Class A - The Basics
\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 9
Rm A208 Mickelson, teacher

Class C - Advanced Household Electrical Units

TI05201 | \$99

Learn to install light fixtures, two single poles switches, and a duplex outlet with boxes in an extended circuit. Install, repair, and replace a 3-way switch on a single outlet and a light fixture. 1 session @ 4.5 hrs each.

Prereq: TI05199 Class A - The Basics
\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 16
Rm B107 Mickelson, teacher

Class D - Special Household Electrical Installation I

TI05202 | \$99

Learn to install a Casablanca ceiling fan, attic fan, and bathroom vent. 1 session @ 4.5 hrs each.

Prereq: TI05199 Class A - The Basics
\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 23
Rm B107 Mickelson, teacher

Class E - Special Household Electrical Installation II

TI05203 | \$99

Learn to install surface wiring and complete a full circuit. 1 session @ 4.5 hrs each.

Prereq: TI05199 Class A - The Basics
\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, May 30
Rm B107 Mickelson, teacher

Class F - Special Household Electrical Installation III

TI05204 | \$99

Learn to install recess lighting, ceiling lights (hanging, rope, and track), and wall lights. 1 session @ 4.5 hrs each.

Prereq: TI05199 Class A - The Basics
\$ 89 Tuition
\$ 10 User Fee

Section 0020 8:00 am
L. Braddock SS Sa, June 6
Rm B107 Mickelson, teacher

Call 703-658-1225 or e-mail tradeandindustry@fcps.edu for further information on trade and industry courses.

VA Contractor's Basic Business Course

TI05348 | \$209

Those applying for an initial contractor's license in the Commonwealth of Virginia must complete an 8-hour business class approved by the Virginia Board for Contractors. This class fulfills that requirement. (Wednesday class meets for 2 3-hour sessions and 1 2-hour session.) Saturday class 1 session @ 8 hrs.

\$136 Tuition
\$ 73 Text: *Virginia Contractor Law* (\$26); *Virginia's Contractor's Business Reference Manual* (\$47)

Section 0020 8:00 am
L. Braddock SS Sa, May 16
Rm H233 Chestnut, teacher

Section 0021 6:30 pm
L. Braddock SS W, June 10-June 24
Rm H233 Levine, teacher

Section 0022 8:00 am
L. Braddock SS Sa, June 13
Rm H233 Chestnut, teacher

Section 0024 8:00 am
L. Braddock SS Sa, August 8
Rm H233 Chestnut, teacher

VA Contractor's License Exam Prep

TI05351 | \$269

Review contractor business concerns, including mechanic's liens, labor laws, construction contracts, and risk management. PSI materials not used in class. Contents of TI05350 Obtaining VA Trade and Contractor's Licenses are not included. 4 sessions @ 3 hrs each.

\$162 Tuition
\$107 Text: *Virginia Contractor Law* (\$26); *Virginia Contractor's B&L Practice Exam* (\$30); *Virginia Contractor's Business Reference Manual* (\$47); *Virginia Seminar Workbook* (\$4)

Section 0020 6:30 pm
L. Braddock SS Tu, July 21-August 11
Rm H233 Levine, teacher

HVAC

Air Conditioning Fundamentals

TI05378 | \$374

Hands-on introduction to basic air conditioning covering cycle and components as well as practical exercises in cleaning coils, checking and replacing oil and gas, checking pressure, and charging and evacuating systems. 10 sessions @ 3 hrs each.

\$288 Tuition
\$ 25 User Fee
\$ 61 Text: *Residential Construction Academy HVAC*

Section 0020 7:00 pm
L. Braddock SS Tu Th, May 12-June 11
Rm B107 Staff, teacher

CFC Certification Exam Prep

TI05388 | \$169

For Core (general required for all), Type I (small appliances less than 5# of refrigerant), Type II (high pressure and very high pressure), Type III (low pressure appliances), and Universal (all three types). Please note this is only the prep course and does not include the CFC examination. 3 sessions @ 3 hrs each.

\$ 99 Tuition
\$ 5 User Fee
\$ 65 Text: *Refrigerant Transition and Recovery Certification*

Section 0020 7:00 pm
Chantilly HS Tu, May 19-June 2
Rm 144 Sickels, teacher

CFC Certification Exam

TI05375 | \$89

For Core (general required for all), Type I (small appliances less than 5# of refrigerant), Type II (high pressure and very high pressure), Type III (low pressure appliances), and Universal (all three types). Please note this is the CFC examination only and does not include exam preparation. 1 session @ 3 hrs.

\$ 47 Tuition
\$ 42 Text: *CFC Certification Exams/Section 608 CFT Tests*

Section 0020 7:00 pm
Chantilly HS Tu, June 9
Rm 144 Sickels, teacher

Heating Fundamentals

TI05377 | \$378

Hands-on introduction to basic heating systems to include gas, heat pumps, and oil heating primarily in residential settings with minimal focus on commercial applications. 10 sessions @ 3 hrs each.

\$288 Tuition
\$ 29 User Fee
\$ 61 Text: *Residential Construction Academy HVAC*

Section 0020 7:00 pm
L. Braddock SS Tu Th, July 7-August 6
Rm B107 Staff, teacher

ELECTRICAL

Journeyman Electrician's Exam Prep

TI05416 | \$372

Focus on layout and proper use of the code. Find what you need quickly and easily. Includes rules for common installations and materials. 2005 NEC required—not included. 10 sessions @ 3 hrs each.

\$299 Tuition
\$ 73 Text: *Electrician's Exam Prep, 2005*

Section 0020 7:00 pm
L. Braddock SS Tu, May 5-July 7
Rm H235 Shifflett, teacher

Master Electrician's Exam Prep

TI05418 | \$385

Course includes topical study of NEC: general design, calculations, services, feeders, branch circuits, rules for general circuits, grounding various equipment, and practice test. Bring the 2005 NEC. 12 sessions @ 3 hrs each.

\$313 Tuition
\$ 72 Text: *Master Electrician's Review*

Section 0020 6:30 pm
South County SS Tu, June 16-September 1
Rm A143 Prasse, teacher

Master Electrician's Exam Prep—Accelerated

TI05419 | \$255

This is a fast-paced, intense, rigorous review of NEC. Approved for Prince George's County continuing education requirement. Bring a lunch. 2 sessions @ 7 hrs each.

\$176 Tuition
\$ 7 User Fee
\$ 72 Text: *Master Electrician's Review*

Section 0020 8:00 am
Centreville Ctr Sa, June 6-June 13
Rm 11 ACR, teacher

Occupational Electrical Wiring

TI05400 | \$316

Master basic materials, outlet boxes, switches, receptacles, protective devices, interior wiring, NEC requirements, service drops, service equipment, metering, and entrance panel installation. Taught via hands-on lab activities. 10 sessions @ 3 hrs each.

\$299 Tuition
\$ 11 User Fee
\$ 6 Text: *Step By Step Guide—Electricity*

Section 0020 7:00 pm
Chantilly HS Th, May 7-July 9
Rm 577 Swift, teacher

AUTOMOTIVE

Auto Mechanics—Beginning

TI05310 | \$195

Perform simple checks and repairs. Understand various systems, parts, and functions of your automobile to help diagnose and fix basic problems. Students must provide their own basic tools. A recommended tool list will be distributed and discussed at the first session. 5 sessions @ 3 hrs each.

\$179 Tuition
\$ 16 User Fee

Section 0020 7:00 pm
Fairfax HS W, May 6-June 3
Rm AUTO Fadely, teacher

Auto Mechanics—Beginning: Saturday Class

TI05311 | \$163

Perform simple checks and repairs. Understand various systems, parts, and functions of your automobile to help diagnose and fix basic problems. Students must provide their own basic tools. A recommended tool list will be distributed and discussed at the first session. 2 sessions @ 6 hrs each.

\$149 Tuition
\$ 14 User Fee

Section 0020 8:00 am
Marshall HS Sa, May 9-May 16
Rm 149 Terrien, teacher

Section 0021 8:00 am
Marshall HS Sa, June 13-June 20
Rm 149 Terrien, teacher

Auto Mechanics—Advanced

TI05313 | \$295

This is a hands on class where students will learn about various systems. Students will diagnose and perform repairs on their own vehicle. Assistance as needed. Bring your project vehicle, any special tools and necessary parts to the first class if possible. Some basic hand tools are provided. 8 sessions 3 hrs each.

\$279 Tuition
\$ 16 User Fee

Section 0020 7:00 pm
Marshall HS W, May 6-June 24
Rm 149 Winchell, teacher

Section 0021 7:00 pm
Marshall HS M, June 1-July 20
Rm 149 Terrien, teacher

NEW

Automotive Electrical Systems

TI05315 | \$145

Get a practical, real world explanation of how automotive electrical systems work without burying you in a bunch of technical data. Conventional, as well as antique, off-road and race vehicles will be discussed. 7 sessions @ 3 hrs each.

\$145 Tuition

Section 0020 7:00 pm
L. Braddock SS Tu, June 2-July 14
Rm H215 Morthimer, teacher

BOATING

NEW

Coastal Navigation and Watchstanding

TI07502 | \$175

Through lecture and hands-on training, use charts, plotting tools, government publications, and workbook exercises. Upon class completion, students are able to plot a course, create a route, plot their position by various types of fixes, and determine the Set and Drift arriving at Course to Steer allowing for set and drift. 2 sessions @ 8 hrs each.

Prereq: TI07501 Inland Navigation and Watchstanding Class
\$150 Tuition
\$ 25 User Fee

Section 0020 8:00 am
Plum Center-Edsall Park Sa Su, May 9-May 10
Rm 150 Staff, teacher

NEW

Inland Navigation and Watchstanding Class

TI07501 | \$255

Whether you are a novice or experienced boater, receive hands-on training utilizing charts, plotting tools, government publications, and workbook exercises. Upon class completion, students are able to plot a course, create an inland route, plot their position, calculate Course Made Good, Speed Made Good, Estimated Time of Arrival, and determine Compass Error. 2 sessions @ 8 hrs each.

\$150 Tuition
\$105 User Fee

Section 0020 8:00 am
Plum Center-Edsall Park Sa Su, May 2-May 3
Rm 150 Staff, teacher



Interested in teaching a Trade and Industry course? Teach an existing class or propose a new one. E-mail tradeandindustry@fcps.edu or call 703-658-1225.

Property Maintenance Technician Certificate Program

Please refer to back cover for registration information.

Master general repair skills and construction-related tasks to maintain buildings. The following seven courses are required for the Property Maintenance Technician (PMT) certificate program.

These classes are also open to individuals who wish to master general repair skills in order to maintain their homes.

Required Courses

- TI05581 | Drywall, Painting, and Waterproofing Workshop
- TI05582 | Heating and Air Conditioning Systems
- TI05583 | Nuts and Bolts of PMT Careers
- TI05587 | Electrical Workshop: Maintenance & Repair
- TI05590 | Plumbing Workshop: Maintenance & Repair
- TI05593 | Appliance Repair Workshop
- TI05595 | Door Locks Workshop: Installation Maintenance & Repair

Have you completed the Property Maintenance Technician certificate program? Are you looking for advanced training or to improve your skills in plumbing, HVAC, and electricity? Check out the course offerings in the Apprenticeship Program on page XX or at www.fcps.edu/aceclasses. New classes begin in September.

Property Maintenance

The following seven courses are required for the Property Maintenance Technician (PMT) certificate program (see page 70 for more information). These classes are also open to individuals who wish to master general repair skills in order to maintain their homes. Also see Home Improvement courses on page 32.

Appliance Repair Workshop

TI05593 | \$159

Learn to make minor repairs on disposals, range hoods, gas and electric stoves, washers, gas and electric dryers, and dishwashers. 5 sessions @ 3 hrs each.

\$ 129 Tuition
\$ 14 User Fee
\$ 16 Text: *Sunset Home Repair Handbook*

Section 0020 7:00 pm
Bryant Ctr Tu, June 2-June 30
Rm 50C Loughry, teacher

Section 0021 7:00 pm
Bryant Ctr W, July 8-August 5
Rm 50A Loughry, teacher

Door Locks Workshop: Installation, Maintenance, and Repair

TI05595 | \$55

Disassemble and reassemble door locks in a hands-on workshop. Develop skills for minor repairs, lubrication, and door set replacement. 1 session @ 3 hrs.

\$ 45 Tuition
\$ 10 User Fee

Section 0020 7:00 pm
Bryant Ctr W, May 13
Rm 50A Olive, teacher

Section 0021 7:00 pm
Bryant Ctr Tu, July 28
Rm 46 Olive, teacher

Drywall, Painting, and Waterproofing Workshop

TI05581 | \$209

Hang, tape joints, finish new, and repair damaged drywall. Learn professional painting tips and tricks to achieve a quality finish. Learn techniques and procedures to reduce bath/shower water damage to other areas. 5 sessions @ 3 hrs each.

\$ 173 Tuition
\$ 30 User Fee
\$ 6 Text: *Step by Step Guide to Room Finishing*

Section 0020 7:00 pm
Bryant Ctr M, May 11-June 15
Rm 50C Dominick, teacher

Section 0021 7:00 pm
Chantilly HS Tu, July 28-August 25
Rm 577 Dominick, teacher

Electrical Workshop: Maintenance and Repair

TI05587 | \$159

Introduction to NEC, tools, safety, replacing fixtures, switches, outlets, more. When do you need a permit? Demonstration and hands-on workshop. 5 sessions @ 3 hrs each.

\$ 144 Tuition
\$ 9 User Fee
\$ 6 Text: *Step-By-Step Guide Book On Home Wiring*

Section 0020 6:30 pm
Bryant Ctr W, May 6-June 3
Rm 50C Shifflett, teacher

Section 0021 7:00 pm
Bryant Ctr W, June 10-July 8
Rm 50C Shifflett, teacher

Heating and Air Conditioning Systems

TI05582 | \$190

Learn principles of heating and air conditioning systems and how to make minor adjustments and repairs to them. 5 sessions @ 3 hrs each.

\$ 150 Tuition
\$ 15 User Fee
\$ 25 Text: *Basic Refrigeration & Charging Procedures*

Section 0020 7:00 pm
L. Braddock SS M, May 18-June 22
Rm B107 Garner, teacher

Nuts and Bolts of PMT Careers

TI05583 | \$69

Five-hour overview of job opportunities, responsibilities, safety, and liability within the property maintenance career field. 2 session @ 2.5 hrs each.

\$ 69 Tuition

Section 0020 9:00 am
L. Braddock SS Sa, June 20
Rm A216 Wolfe, teacher

Plumbing Workshop: Maintenance and Repair

TI05590 | \$157

Course illustrates the complete plumbing system to include water supply, drainage, and vent pipes. 5 sessions @ 3 hrs each.

\$ 144 Tuition
\$ 7 User Fee
\$ 6 Text: *Step-By-Step Guide On Home Plumbing*

Section 0020 7:00 pm
L. Braddock SS M, June 8-July 6
Rm B107 McCrone, teacher

Section 0021 7:00 pm
L. Braddock SS W, July 1-July 29
Rm B107 McCrone, teacher

NETWORK CABLING

Provided in partnership with RBT Systems, Inc., cable certification courses qualify for BICSI continuing education credits. The cost of the course includes a technician's reference manual containing step-by-step, illustrated instructions for performing each skill. Also see Computer Networking courses on page 35.

Copper Based CAT 6 Network Cabling Certification

TI05432 | \$695

Multi-manufacturer learn-by-doing to fabricate, install, maintain, troubleshoot, and repair the physical layer (cabling system) used in the infrastructure for the transmission of high speed data services (broadband, LAN, Gigabit Ethernet, VoIP, xDSL, and ATM), voice, video, and security information network systems. Tuition includes consumable supplies and rental of state-of-the-art tools and equipment. Course outline available upon request. No prior experience or training required. No senior waivers or discounts. 3 sessions @ 8 hrs each.

\$ 648 Tuition
\$ 47 Text

Section 0020 8:00 am
Marshall HS F Sa Su, May 15-May 17
Rm TR1 RBT, teacher

Fiber Optic Network Cabling Certification

TI05435 | \$749

Course includes comprehensive introduction to fiber optic theory. Multi-manufacturer extensive “hands-on” course to achieve maximum performance. Learn to terminate, install, modify, troubleshoot, and maintain infrastructure of fiber optic network cabling systems for the transmission of high speed data services (Broadband, LAN, Gigabit Ethernet, VoIP, and ATM). TI05430 Copper Based CAT 6 Network Cabling Certification recommended, but not required. Tuition includes consumable supplies and rental of state-of-the-art equipment. No senior waivers or discounts. 3 sessions @ 8 hrs each.

\$ 715 Tuition
\$ 34 Text

Section 0020 Marshall HS Rm TR1	8:00 am F Sa Su, June 5-June 7 RBT, teacher
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BICYCLING

Bicycle Maintenance and Repair

TI05300 | \$59

Lecture/demonstration on bike fit; breakdown repairs; and the inspection, adjustment, lubrication, and renovation of diverse components. Bikes not required. 1 session @ 3 hrs.

\$ 42 Tuition
\$ 17 Text: *Park Tool Manual*

Section 0020 Pimmit Hills Ctr Rm 138	6:30 pm Tu, May 12 Muchnick, teacher
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Section 0021 Plum Center-Edsall Park Rm 122	6:30 pm W, June 3 Muchnick, teacher
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Section 0022 Pimmit Hills Ctr Rm 138	6:30 pm Tu, July 14 Muchnick, teacher
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Bicycle Mechanics Workshop

TI05301 | \$49

Self-directed, hands-on sequel to Bicycle Maintenance & Repair that teaches you to tune up, fix, or modify your bicycle or practice inspection, maintenance, or repair procedures. Bring bike, supplies, and inspiration. 1 session @ 3 hrs.

Prereq: TI05300 Bicycle Maintenance and Repair
\$ 49 Tuition

Section 0020 Pimmit Hills Ctr Rm 138	6:30 pm Tu, May 19 Muchnick, teacher
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Section 0021 Plum Center-Edsall Park Rm 122	6:30 pm W, June 10 Muchnick, teacher
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Section 0022 Pimmit Hills Ctr Rm 138	6:30 pm Tu, July 21 Muchnick, teacher
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Bicycling 101

TI05299 | \$49

New and intermediate riders learn safety, equipment, and maintenance basics; self sufficiency; use of gears; comfort and improvement tips. No riding.

\$ 49 Tuition

Section 0020 Pimmit Hills Ctr Rm 138	6:30 pm M, May 18 Muchnick, teacher
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Cycling With Confidence! (LAB Traffic Skills 101)

TI05302 | \$119

Learn the craft of cycling with on-bike and classroom instruction in key cycling skills for roads, paths, and groups; equipment use and care, breakdown repairs, efficient pedaling, bike handling, training, street cycling, and crash prevention. Students will need to bring a street-worthy bicycle and a bicycle helmet to every class session and be prepared to ride at the beginning of each class session. 3 sessions @ 3 hrs each.

\$ 109 Tuition
\$ 10 User Fee

Section 0020 Plum Center-Edsall Park Rm 122	6:30 pm Tu, June 16-June 30 Muchnick, teacher
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GREEN CONSTRUCTION TOPICS

NEW Defining Green

AP08301 | \$447

This course covers the impacts of the built environment on the green environment and introduces methods to reduce the environmental impact of both new and existing buildings. An overview of the LEED Green Building Rating System™ is included. 5 sessions @ 3 hrs each.

\$ 385 Tuition
\$ 30 User Fee
\$ 32 Text: *Your Role in the Green Environment*

Section 0001 Plum Center-Edsall Park Rm 150	9:00 am Sa, May 16-June 13 Staff, teacher
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CONSTRUCTION SUPERVISORY SKILLS

NEW Soft Skills for the Construction Industry

AP08312 | \$447

Navigate through intangible workplace issues such as conflict resolution, problem-solving, and communication techniques. 5 sessions @ 3 hrs each.

\$ 385 Tuition
\$ 30 User Fee
\$ 32 Text: *Tools for Success*

Section 0001 Plum Center-Edsall Park Rm 150	1:00 pm Sa, May 16-June 13 Staff, teacher
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T&I Course Locations

Annandale High School, Main Ent.
4700 Medford Dr, Annandale 22003

Bryant Adult Center, Ent. #1
2709 Popkins Ln, Alexandria 22306

Centreville Adult Center, Ent. #1
5775 Spindle Ct, Centreville 20121

Chantilly High School, Ent. #1
4201 Stringfellow Rd, Chantilly 20151

Edison High School, Ent. #1
5801 Franconia Rd, Alexandria 22310

Ferguson Enterprises, Inc.
13890 Lowe St, Chantilly 20151

Herndon High School, Ent. #4
700 Bennett St, Herndon 20170

Lake Braddock Secondary School
9200 Burke Lake Rd, Burke 22015

Marshall High School, Ent. #1
(for TR1: park in lower lot behind school)
7731 Leesburg Pike, Falls Church 22043

Oakton High School, Ent. #5
2900 Sutton Rd, Vienna 22181

Pimmit Hills Adult Center, Ent. #4
7510 Lisle Ave, Falls Church 22043

Plum Center for Lifelong Learning
6815 Edsall Rd, Springfield 22151

Robinson Secondary School, Ent. #1
5035 Sideburn Rd, Fairfax 22032

South County Secondary School
8501 Silverbrook Rd, Lorton 22079

Thoreau Middle School
2505 Cedar La, Vienna 22180

West Springfield Center/HS, Ent. #1
6100 Rolling Rd, Springfield 22152

**Very informative.
The hands-on
experience is
much easier to
understand...”**

Larry Mikesell
Home Remodeling Basics

ACADEMIA DE CONSTRUCCIÓN RESIDENCIAL

The Trade and Industry program is working in partnership with Academia de Construcción Residential (ACR) in providing eight, 36-hour courses taught using both Spanish and English so that Hispanic students gain a solid understanding of their craft while achieving English language proficiency for on-the-job communication.

Sessions are held Monday through Friday evenings and Saturdays at the ACR training site, 5608 General Washington Dr., Alexandria, VA 22312.

The number of students enrolled in any given class varies with each program cycle; however, to ensure that each student receives the highest quality instruction, the student-to-teacher ratio will never exceed 12-to-1 for either lecture or laboratory.

Four classes totaling 144 hours from the list below can be bundled in order to earn one of the following certificates: Construction—Spanish, Residential Electricity—Spanish, or Carpentry—Spanish. In addition we are now offering a new certificate HVAC-R Employment Ready-Spanish.

It is not necessary to be enrolled as a certificate student in order to take any or all of these classes.

Call 703-941-4841 for more information.

Air Conditioning Competency - Spanish

TI05541 | \$554

Establishes a basis for all other residential classes involving the vapor compression refrigeration system. Today's systems use new refrigerants and oils compared to units built just a few years ago. A properly maintained system by a qualified technician will prevent a catastrophic failure of the system. Teacher will use both English and Spanish in class. 10 sessions @ 3 hrs each.

\$554 Tuition

Section 0022	6:00 pm
ACR	Tu Th, July 21-August 4

AutoCAD—Spanish

TI05540 | \$549

Course is for individuals seeking a basic understanding of two-dimensional AutoCAD commands and concepts from starting a drawing to plotting a complete dimensioned drawing. Learn basic drawing and editing commands and basic system settings. Upon completion of this course you will be able to create, edit, view, and plot complete AutoCAD drawings. Teacher uses both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0020	8:00 am
ACR	Sa, May 9-July 11

Section 0022	6:00 pm
ACR	Th, May 21-July 16

Section 0021	8:00 am
ACR	Sa, July 11-September 5

Blueprint Reading Basic—Spanish

TI05513 | \$549

Upon completion of class, students will be able to interpret a mechanical working drawing, and read a set of construction blueprints. Emphasis is placed on understanding details for foundations, floor plans, elevations, and schedules. Other topics covered include orthographic projections, line types, dimensioning methods, tolerance, auxiliary views, sectional views, assembly drawings, and notes. Teacher will use both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0020	8:00 am
ACR	Sa, May 9-July 11

Section 0022	8:00 am
ACR	Sa, July 11-September 5

Commercial Air Conditioning Competency - Spanish

TI05543 | \$554

Commercial air conditioning technicians face a variety of equipment and systems. All refrigeration and A/C devices have certain components and functions in common. Commercial buildings may experience high occupancy and contain a variety of equipment leading to maintenance of light commercial air conditioning systems up to 20 tons. Teacher will use both English and Spanish in class. 10 sessions @ 3 hrs each.

\$554 Tuition

Section 0022	6:00 pm
ACR	Tu Th, May 19-June 18

Commercial Refrigeration Competency - Spanish

TI05542 | \$554

The commercial refrigeration technician will be faced with a variety of equipment and equal variety of troubleshooting and service situations. It is important to remember that all refrigeration and A/C devices have certain components and functions in common. Knowing how a system or component is supposed to function under typical conditions will greatly aid in solving malfunctions. Teacher will use both English and Spanish in class. 10 sessions @ 3 hrs each.

\$554 Tuition

Section 0022	6:00 pm
ACR	Tu Th, May 12-June 11

Section 0024	6:00 pm
ACR	Tu Th, July 7-August 6

Electricity One—Spanish

TI05511 | \$549

Course will equip students with basic technical knowledge and skills of the electrical trade. Students will receive hands-on experience in construction wiring, appliance installation, and troubleshooting circuits and equipment. Course will also review electrical theory and electrical code. Teacher will use both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0020	6:00 pm
ACR	M W, May 4-June 15

Section 0022	6:00 pm
ACR	M W, July 6-August 12

Electricity Three—Spanish

TI05530 | \$549

Course is for students with strong math skills. Learn to calculate the number of conductors that can be installed into conduit, what size overloads are required for a motor; etc. Gain experience using the NEC to determine design limits for electrical systems. Teacher uses both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0022	6:00 pm
ACR	F, June 12-August 7

Electricity Two—Spanish

TI05520 | \$549

Cover electrical theory; introduction to the National Electrical Code (NEC); residential wiring, grounding, installation of electrical services, and conduit bending and installation. Instruction includes hands-on experience as well as theory. Teacher uses both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0022	6:00 pm
ACR	Tu Th, May 5-June 11

Section 0023	6:00 pm
ACR	Tu Th, July 14-August 20

Plumbing Basic-Spanish

TI05512 | \$549

Course introduces students to tools, equipment, and materials associated with the plumbing trade. Course includes safety standard measures, the use and care of tools, recognition and assembly of fittings and pipes. Students will learn to troubleshoot and maintain residential gas systems. Students with little or no experience will acquire necessary skills to become employable in the trade as apprentice plumbers. Teacher will use both English and Spanish in class. 12 sessions @ 3 hrs each.

\$549 Tuition

Section 0020	8:00 am
ACR	Sa, May 9-July 11

Section 0022	8:00 am
ACR	Sa, July 11-September 5

FCPS ADULT AND COMMUNITY EDUCATION

Dept. A, 6815 Edsall Road, Springfield VA, 22151

MALE

FEMALE

ACE Participant ID Number _____

First Name _____ MI _____ Last Name _____

Street Address _____

City _____ State _____ Zip _____

Telephone – Home _____ Business _____ Date _____

	Course No.	Section No.	Start Date	Tuition Fee	Text Fee	Other Fees	Total
Section No. of Second choice here ▶				\$	\$	\$	\$
Section No. of Second choice here ▶				\$	\$	\$	\$
TOTAL							

Card Number

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Cardholder's Signature _____ Expires MO _____ YR _____

SIX WAYS TO REGISTER

- ONLINE**—Anytime, anywhere at www.fcps.edu/aceclasses
- PHONE**—703-658-1201
Monday–Friday 9 am–4:30 pm
- FAX**—Completed form (including credit card information) to 703-658-1275.
- MAIL**—Include your payment with form (make check payable FCPS ACE);
FCPS-ACE, Dept. A, 6815 Edsall Road, Springfield, VA 22151
- IN PERSON**—Call 703-658-1267 for directions.
 - Woodson Central Fairfax Customer Service Center
4105 Whitacre Road, Trailer 136*
Fairfax 22032
- PURCHASE ORDER**—Companies or organizations enrolling staff for training may complete registration forms and attach a company memo or purchase order. Payment is due within 30 days.

REGISTRATION INFORMATION

- CONFIRMATION**—Online registrations are confirmed immediately. Other registration methods are not confirmed unless requested. Please attend your first class unless notified otherwise by ACE staff.
- CLOSINGS**—Classes will not meet when FCPS schools are closed due to bad weather, holidays, or emergencies. For information about closings call 703-658-1203, watch TV cable 21, or check www.fcps.edu.
- REFUNDS**—You will automatically receive a refund when a class is unavailable or has been canceled. To request a refund, visit www.fcps.edu/aceclasses (Registration Options). Note: Requests must be received two business days prior to the class start date. A \$15 processing fee is assessed for each refund.
- For further course information, please call 703-658-1225.

03|09

Trade and Industry
 Adult and Community Education
 Fairfax County Public Schools
 6815 Edsall Road
 Springfield, VA 22151