

DHI SPRING TECHNICAL SCHOOL

April 7-14, 2019
NATIONAL CONFERENCE
CENTER
LANSDOWNE, VA

DHI technical and business practice education delivered in a traditional classroom format.

COURSE REGISTRATION FORMS



FLEXIBLE • CONVENIENT • AFFORDABLE

DHI 2019

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IMPORTANT PRICING INFORMATION

DHI strives to make its education available to its members at the most affordable costs. Course prices are established based upon DHI's cost to develop the curriculum and student materials, to provide qualified instructors to conduct the course, and the value and technical sophistication of the content. We provide volume discounts to encourage multiple students attending from the same company.

- **Company Discount (CD)**

Ask about our Company Discount – for 3 or more students from the same company per school.

- **Facilities Fee (FF)**

This fee covers the cost of food and beverage for meals and breaks and other ancillary costs of the facility DHI contracts to conduct the classes, and will vary from school to school depending on the property selected. It is a pass through cost of conducting the school and is in addition to the courses fees. Therefore it is a mandatory daily fee paid by each student regardless of whether they stay at the property. The Facilities Fee is not subject to discounts.

For the Spring 2019 Technical School in Lansdowne, VA, the mandatory Facilities Fee will be \$85 and includes all meals and two refreshment breaks.

DHI 2019 SPRING TECHNICAL SCHOOL COURSE REGISTRATION FORMS

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TAKE ADVANTAGE OF DISCOUNTS!

Experience face-to-face learning from the finest line-up of nationally recognized, highly-credentialed instructors! *See below for details.*

Hotel reservations can be made at www.dhi.org/springschool

COURSE NUMBERS AND TITLES		DURATION	DATES	MEMBER PRICE	NON-MEMBER	COLUMN A: COURSE TUITION	COLUMN B: FACILITIES FEE
COR117	Door, Frame, and Architectural Hardware Applications	4	Apr 11-14	\$1,500	\$2,025		\$340
COR123	Using Door, Frame and Hardware Standards (formerly CDC300 and ELT515)	2	Apr 8-9	\$750	\$1,013		\$170
COR125	Take-off and Estimating	2	Apr 8-9	\$750	\$1,013		\$170
COR133	Electrified Architectural Hardware	5	Apr 7-11	\$1,875	\$2,530		\$425
COR140	Using Codes and Standards	3	Apr 8-10	\$1,125	\$1,520		\$255
COR146	Introduction to Detailing Doors, Frames and Hardware (NEW)	2	Apr 10-11	\$750	\$1,013		\$170
COR147	Introduction to Specification Writing	3	Apr 12-14	\$1,125	\$1,520		\$255
COR153	Installation Coordination and Project Management	2	Apr 8-9	\$750	\$1,013		\$170
COR160	Material Purchasing Concepts	1	Apr 10	\$375	\$505		\$85
COR163	Developing Masterkey Systems (formerly AHC200)	1	Apr 7	\$375	\$505		\$85
DHT120	DHT Exam Prep*	2	Apr 12-13	\$750	\$1,013		\$170
DHC205	Intermediate Detailing Doors, Frames and Hardware (formerly AHC205 and CDC305)	4	Apr 8-11	\$1,500	\$2,025		\$340
DHC307	Advanced Detailing Doors, Frames and Hardware (formerly AHC207 and CDC305)	5	Apr 10-14	\$1,875	\$2,530		\$425
DHSC310	Writing Door and Frame Specifications (formerly CDC310)	3	Apr 12-14	\$1,125	\$1,520		\$255
DHSC315	Writing Hardware Specifications (formerly AHC215)	5	Apr 7-11	\$1,875	\$2,530		\$425
AHC220	AHC Exam Prep*	3	Apr 12-14	\$1,125	\$1,520		\$255
CDC315	CDC Exam Prep*	2	Apr 11-12	\$750	\$1,013		\$170
EHC400	Electrified Hardware Applications and Documentation	4	Apr 7-10	\$1,500	\$2,025		\$340
EHC433	Advanced Electrified Architectural Hardware (formerly EHC405 and EHC410)	5	Apr 7-11	\$1,875	\$2,530		\$425
EHC420	EHC Exam Prep*	2	Apr 12-13	\$750	\$1,013		\$170
DAI600	Fire and Egress Door Assembly Inspection EXAM OFFSITE	3	Apr 11-13	\$1,950	\$2,450		\$255
DAI600	Fire and Egress Door Assembly Inspection EXAM ONSITE	4	Apr 11-14	\$1,950	\$2,450		\$340
						TOTAL A + B	

*To register for the credential or certification exam at this school please visit www.dhi.org/examsessions.

DISCOUNTS

Ask about our Company Volume Discount - for 3 or more students from the same company per school.

Facilities fee (FF) of \$85 per day per student is required. Includes all meals and 2 breaks. Fee is charged whether staying or not at the National Conference Center. Breakfast is included for students who are staying at the Embassy Suites site.

Discounts are not applicable on this fee.

Please refer to Course Descriptions to see any recommended prerequisites and/or reference materials that may be required.

Class sizes are limited. Course offerings subject to change without notice.

CONTINUE TO NEXT PAGE TO COMPLETE COURSE REGISTRATION.

DHI 2019 SPRING TECHNICAL SCHOOL COURSE REGISTRATION FORMS

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REGISTER ONLINE AT www.dhi.org/springschool

NAME		NAME FOR BADGE	
TITLE		MEMBERSHIP STATUS <input type="checkbox"/> DHI Member ID Number _____ <input type="checkbox"/> Non-Member	
COMPANY		ADDRESS	APT/SUITE NO.
CITY		STATE/PROVINCE	ZIP/POSTAL CODE
TELEPHONE	FAX	EMAIL REQUIRED (All registration confirmations AND exam results are sent via email.)	
PAYMENT INFORMATION			
PAYMENT METHOD <input type="checkbox"/> Check enclosed, payable in U.S. dollars to DHI <input type="checkbox"/> Please charge my: <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> AMEX			
CARD NUMBER	EXPIRATION DATE	CW/SECURITY CODE	TOTAL DUE (COLUMN C FROM PAGE 3)
CARD HOLDER'S NAME (Print name as it reads on card)	SIGNATURE		
CREDIT CARD BILLING ADDRESS <input type="checkbox"/> CHECK IF THE CREDIT CARD BILLING ADDRESS IS THE SAME ADDRESS LISTED FOR STUDENT ABOVE. IF DIFFERENT, PLEASE NOTE CREDIT CARD BILLING ADDRESS BELOW:			
ADDRESS		APT/SUITE NO.	
CITY	STATE/PROVINCE	ZIP/POSTAL CODE	

PLEASE BE ADVISED

- All courses begin at 8:00 am and end at 5:30 pm. Punctual and complete attendance is mandatory.
- See page 5 for more details and tuition policies.
- Tuition fees do not include hotel accommodations and facilities fee.

PLEASE COMPLETE PAGES 3 & 4 OF THIS FORM AND RETURN TO:

DHI14150 Newbrook Drive, Suite 200
Chantilly, VA 20151
Phone: 703.222.2010 • Fax: 703.222.2410
or
Register online at www.dhi.org

ACCOUNTING USE ONLY.

I understand and acknowledge that during my attendance at DHI's Technical School ("School"), I may be photographed, videoed or otherwise recorded by the Door and Hardware Institute ("DHI") and/or those designated by DHI. As a condition of my attendance at the School, I agree to irrevocably grant to DHI, its assigns, licensees and successors the right to photograph, publish, record, broadcast, exhibit, digitize, display, copyright, license, transfer, reproduce, translate, modify, edit or otherwise use perpetually throughout the world, in all media now and hereafter known or devised, in whole or in part, my image, likeness, name, biographical information, actions, performance, voice, conversations, quotes and material spoken or otherwise provided by me (collectively, the "Material") during my attendance at the School. I also agree that DHI shall be the sole owner throughout the universe and in perpetuity of any and all rights in and to any and all works containing the Material, in whole or in part, for all purposes whatsoever and in any manner or media including, without limitation, printed works, videocassette, DVD, and computer online services. I shall have no rights or interest thereunder whatsoever.

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COURSE CURRICULUM							
SUN 4/7	MON 4/8	TUES 4/9	WED 4/10	THURS 4/11	FRI 4/12	SAT 4/13	SUN 4/14
	COR125 Take-off and Estimating		COR160 Mat Purch Con	COR117 Door, Frame, and Architectural Hardware Applications			
COR163 Dev Mstrkey Sys	COR140 Using Codes and Standards			DAI600 Fire and Egress Door Assembly Inspection			DAI600 Exam Option
EHC400 Electrified Hardware Applications and Documentation				CDC315 CDC Exam Prep		Certification Exam Sessions	
	COR153 Install Coord & Proj Mgmt		DHC307 Advanced Detailing Doors, Frames and Hardware				
DHSC315 Writing Hardware Specifications					DHT120 DHT Exam Prep		
	DHC205 Intermediate Detailing Doors, Frames and Hardware				COR147 Introduction to Specification Writing		
	COR123 Using Door, Frame & Hrdwr Stans		COR146 Intro to Dtlng Drs, Frms & Hrdwr		DHSC310 Writing Door and Frame Specifications		
COR133 Electrified Architectural Hardware					AHC220 AHC Exam Prep		
EHC433 Advanced Electrified Architectural Hardware					EHC420 EHC Exam Prep		

New course

Classes/schedule are subject to change.

TECHNICAL SCHOOL POLICIES & PROCEDURES

RECOMMENDED PREREQUISITES

Refer to the *Education Resource Guide* for further details as to the recommended prerequisites for classes, posted at www.dhi.org.

TUITION STRUCTURE

Member tuition applies to any DHI individual member. Tuition includes all student materials except for a few select reference guides as noted in the *Education Resource Guide* (<http://www.dhi.org/shared/forms/PDFforms/EducationResourceGuide.pdf>).

CLASS SIZE

Registrations are entered in the order they are received. Should a course sell out, registrants are placed on a waitlist upon receipt of a completed application. Those with full tuition payment are waitlisted first, followed by those with an application only. If waitlisted registrants with paid tuition, are not placed in their first class choice, they may opt to transfer to another current course, or future course with full credit or receive a full refund. (if applicable)

TUITION POLICIES

Registration

- Tuition payment must be received with registration to ensure a place in a course. Confirmation of registration after receipt of payment will be provided.

Cancellations and Administration Fee

- For cancellations received up until 4 weeks prior to the start of the Spring Technical School, March 11, 2019, either a 95% refund or a 100% credit for future courses is available. Credit is valid only for one calendar year.
- For cancellations received within 4 weeks of the start of the Spring Technical School, March 12, 2019, a 90% credit only will be applied to a future course and valid only for one calendar year.

Refunds

- No refunds will be given to any missed sessions.
- No refunds will be given to any non-completion of course(s).
- Once a Technical School begins, no refunds nor credit will be given for missed or non-completed courses. Special circumstances such as a significant medical issue, death in family, etc. may allow for a partial or full credit of tuition fees only, not including facility fees, to be issued for a future course. Proof of special circumstance may be required.

HOTEL ACCOMMODATIONS

Students are responsible for making their own hotel reservations. To take advantage of DHI's rates please be sure to book by March 15. Complete education housing information is available online at www.dhi.org/springschool.

PHOTOGRAPHY DISCLAIMER

I understand and acknowledge that during my attendance at the DHI Spring Technical School, I may be photographed, videoed or otherwise recorded by the Door and Hardware Institute ("DHI") and/or those designated by DHI. As a condition of my attendance at the DHI Spring Technical School, I agree to irrevocably grant to DHI, its assigns, licensees and successors the right to photograph, publish, record, broadcast, exhibit, digitize, display, copyright, license, transfer, reproduce, translate, modify, edit or otherwise use perpetually throughout the world, in all media now and hereafter known or devised, in whole or in part, my image, likeness, name, biographical information, actions, performance, voice, conversations, quotes and material spoken or otherwise provided by me (collectively, the "Material") during my attendance at the DHI Spring Technical School. I also agree that DHI shall be the sole owner throughout the universe and in perpetuity of any and all rights in and to any and all works containing the Material, in whole or in part, for all purposes whatsoever and in any manner or media including, without limitation, printed works, videocassette, DVD, and computer online services. I shall have no rights or interest thereunder whatsoever.

COURSE DESCRIPTIONS

COR117 DOOR, FRAME, AND ARCHITECTURAL HARDWARE APPLICATIONS

(4 days) (32 CEPS)

RECOMMENDED PREREQUISITES:

COR101 - Fundamentals of Architectural Doors & Hardware

COR102 - Introduction to Building Codes

Today's construction projects use some of the most advanced materials and products ever made. Fire-rated and means of egress door openings have specific requirements they must meet to be able to function correctly. This course teaches you about the doors and frames (e.g., hollow metal, wood, and aluminum) in use today. Many hardware items can be employed in more than one application, and knowing which application is correct for a particular opening will make you indispensable to your customers and clients. An assortment of product samples are used in this course to help you identify many of the hardware items in use today.

You will learn how to:

- Read door and frame details
- Determine wall/partition construction
- Select frame types and anchors
- Explain different types of door and frame construction
- Use door accessories (e.g., lite kits, louvers)
- Size special-purpose hinges (e.g., wide-throw)
- Learn the application of raised-barrel hinges and swing-clear hinges
- Select proper strike plates
- Size push/pull bars
- Resolve closer/overhead stop/holder conflicts
- Size thresholds and saddles

COR123 USING DOOR, FRAME & HARDWARE STANDARDS (FORMERLY CDC300 & ELT515)

(2 Days) (16 CEPS)

One of the first courses in the DHT Curriculum

Develop an understanding and thorough knowledge of how industry standards affect door openings. Knowledge of the many door, frame and hardware standards is essential to properly specify, detail, furnish and install these products for projects. These standards contain a wealth of information and can be used to establish levels of quality and function for all types of buildings.

This class covers the following industry standards:

- Steel Door Institute's (SDI) Technical Documents and ANSI/SDI Standards and Test Methods
- Hollow Metal Manufacturers Association (HMMA) 800 Series of Technical Publication
- Window and Door Manufacturers Association (WDMA) I.S.-1A (2013) & I.S.-6A (2013)
- Architectural Woodwork Institute's (AWI) Architectural Woodwork Standards (2nd edition) 2014
- American Architectural Manufacturers Association's (AAMA) Aluminum Storefront and Entrance Manual SFM-1-14
- American National Standards Institute (ANSI)/Builders Hardware Manufacturers Association (BHMA) A156 Series of Product Standards

STUDENT TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ Steel Door Institute's SDI Fact File (Suggest Electronic format) 2018, (Technical Documents and ANSI/SDI Standards and Test Methods)
- ✓ Hollow Metal Manufacturers Association (HMMA) Hollow Metal Manual, 800 Series of Technical Publications
- ✓ Window and Door Manufacturers (WDMA) IS-1A (2013) Architectural Flush Woods Doors and IS-6A (2013) Architectural Stile and Rail Wood Doors
- ✓ Architectural Woodwork Institutes (AWI) Architectural Woodwork Standards 2nd Edition (2014)

COR125 TAKEOFF AND ESTIMATING

(2 Days) (16 CEPS)

RECOMMENDED PREREQUISITES:

COR103 – Understanding and Using Construction Documents

COR117 – Door, Frame, and Architectural Hardware Applications

Profitability of a company often hinges on the accuracy and efficiency of the bids that estimators turn out. Overprice, and your bid will not be considered; underprice, and you will have more work than you need, and you will consistently lose money with each project.

This course introduces you to material takeoff techniques and estimating skills that will help you become a more accurate and efficient estimator.

You will learn how to:

- Perform material takeoffs
- Prepare Requests for Information (RFI)
- Prepare Requests for Substitutions
- Calculate overhead costs
- Apply mark-ups
- Prepare estimates

COR133 ELECTRIFIED ARCHITECTURAL HARDWARE

(5 Days) (40 CEPS)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

Electrified hardware items are used on virtually all new building projects. You need to understand how these products are properly used and what their capabilities are if you are going to advance in this industry. This course provides you with the principles of low-voltage electricity through hands-on class exercises. In addition, this course is focused on teaching you how separate electrified architectural hardware components are used to create single-opening systems. Learn how to design low-voltage circuits and to hook up these components through the hands-on labs.

You will learn how to:

- Coordinate voltage and amperage requirements
- Draw elevation, logic, and point-to-point wiring diagrams
- Write operational descriptions
- Troubleshoot circuits

NOTE: STUDENTS ARE REQUIRED TO BRING A CALCULATOR TO THIS CLASS.

COURSE DESCRIPTIONS

COR140 USING CODES AND STANDARDS

(3 Days) (24 CEPS)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

Knowledge of the many industry-related codes and standards differentiates our industry from numerous other distributor chain-driven industries. Staying current and up-to-date on the ever-changing codes and standards requires both professional and personal commitment. This course covers NFPA 80, Standard for Fire Doors and Other Opening Protectives (2013 edition), NFPA 101, Life Safety Code (2012), ICC/ANSI A117.1, Usable and Accessible Buildings and Facilities (2009 edition), and International Building Code (2012 edition).

You will learn how to:

- Tell the difference between codes and standards
- Look up information
- Interpret codes and standards
- Determine requirements for fire-rated openings
- Determine requirements for means of egress openings

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ NFPA 80, Standard for Fire Doors and Other Opening Protectives (2013 edition)
- ✓ NFPA101, Life Safety Code (2012 edition)
- ✓ ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities (2009 edition)

Electronic copies are allowed, however, we recommend you download the material on your computer.

COR146 INTRODUCTION TO DETAILING DOORS, FRAMES & HARDWARE

(2 Days) (16 CEPS)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

This course is the first of three in a series of combined detailing courses. One of the most important skills you can develop in our industry is the ability to properly coordinate and schedule doors, frames and hardware that are to be provided on projects. In this course, you will begin to learn to detail doors, frames and hardware on projects with a beginner level of complexity of occupancy type through a series of in-class exercises. This is a great face-to-face first step for those interested in working towards their DHT credential.

You will begin to:

- Understands basic fire door and egress code principles
- Apply basic door, frame and hardware knowledge in building very simple openings
- Apply basic blue print reading and scaling skills
- Coordinate the application of hardware with doors and frames

COR147 INTRODUCTION TO SPECIFICATION WRITING

(3 Days) (24 CEPS)

If you are pursuing the Architectural Hardware Consultant (AHC), Certified Door Consultant (CDC), Electrified Hardware Consultant (EHC), or Door + Hardware Specification Consultant (DHSC), you need to master the basic principles of writing architectural specifications. Specification writing skills are an essential element of becoming a professional consultant in today's construction industry. Architects will expect you to have mastered these skills when you work with them.

"Practice makes perfect," as the saying goes, and this course teaches students how to practice writing door, frame, and hardware specifications. Nearly two days of practical exercises are included in this course.

You will learn how to:

- Follow CSI SectionFormat™
- Use proper specification terminology and language
- Properly reference DIVISION 1 GENERAL sections
- Write clear, concise, correct, and complete specifications
- Identify methods of specification writing (e.g., descriptive, performance, proprietary, reference)

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ Catalogs or electronic files with technical information for hinges, mortise locks, door closers, fire exit hardware, panic hardware, protection plates, electrified hardware, hollow metal doors and frames, and flush wood doors

Electronic copies are allowed, however, we recommend you download the material on your computer.

COR153 INSTALLATION COORDINATION AND PROJECT MANAGEMENT

(2 Days) (16 CEPS)

RECOMMENDED PREREQUISITES:

COR103 – Understanding and Using Construction Documents

COR117 – Door, Frame, and Architectural Hardware Applications

Project management requires effectively working with contractors, installers, owners, and architects. Coordination of the installation of doors, frames, and architectural hardware is an essential element of a project manager's responsibilities. Pre-installation meetings with the installers increase their productivity, reduce installation errors, and ensure that the door assemblies will operate reliably for many years. Project managers must also be able to read and interpret contract documents, oversee projects with fast-track schedules, and maintain profitability—all of which requires disciplined attention to detail. This course teaches you how to coordinate installations and provides you with techniques to help you succeed as a project manager.

You will learn how to:

- Reduce callbacks and backcharges
- Present proper installation techniques
- Describe common installation problems
- Improve customer relationships and satisfaction
- Increase profitability on your projects
- Avoid common project management problems
- Improve customer relationships and satisfaction

STUDENT TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ Window and Door Manufacturers (WDMA) IS-1A (2013) Architectural Flush Woods Doors and IS-6A (2013) Architectural Stile and Rail Wood Doors

COURSE DESCRIPTIONS

COR160 MATERIAL PURCHASING CONCEPTS

(1 Day) (8 CEPs)

Once the shop drawings are approved and you move into the order processing stage of a project, you need to accurately and efficiently communicate the project's requirements with each of the manufacturers. Purchase orders need to be reviewed for accuracy, acknowledgements verified, and materials inspected upon receipt. In addition, everything must arrive on time and for the right price! This course teaches you how to communicate and coordinate your material purchases with the project and manufacturing schedules.

You will learn how to:

- Format purchase orders
- Confirm factory discounts
- Review acknowledgements
- Minimize freight charges
- Coordinate project and manufacturing schedule

COR163 DEVELOPING MASTERKEY SYSTEMS (formerly AHC200)

(1 Day) (8 CEPs)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

A solid knowledge base of master key systems is essential to all estimators, detailers, project managers, and consultants. This program covers all of the bases. Discover the different types and styles of cylinders and keys used in today's locks, understand industry-standard key-set symbols and terminology, and integrate mechanical cylinders and keying into access control and security systems. Learn to organize and conduct a successful keying meeting and how to relay the importance of key control and maintenance to your customers.

You will learn:

- Levels of Masterkeying
- Types of Keys used in Master Key Systems
- Limitations of Keying Systems
- Options for Keying Systems
- Key Control
- How to Hold Keying Meetings

DHT120 DHT EXAM PREP

(2 Days) (16 CEPs)

Students pursuing the Door Hardware Technician (DHT) designation will review material and complete in-class exercises that cover the 8 segments of the exam, Hardware, Doors & Frames, Electrified Hardware and Access Control, Keying, Project Management, Codes, Contract Documents, and Coordination, that are found on the DHT exam. You will leave this class with a firm understanding of what you need to know to be prepared for the DHT credentialing exam. Students are not required to have taken all of the review courses, attendees may have obtained this knowledge through other education or on the job training.

You will review material from the follow intermediate level courses:

- COR103 – Understanding and Using Construction Documents
- COR117 – Door, Frame and Architectural Hardware Applications
- COR123 – Using Door, Frame and Hardware Standards (formerly CDC300 Door and Frame Standards and ELT515 Using BHMA Product Standards)
- COR133 – Electrified Architectural Hardware

- COR140 – Using Codes & Standards
- COR146 – Introduction to Detailing Doors, Frames and Hardware (formerly CDC305 Detailing Doors and Frames)
- COR147 – Introduction to Specification Writing
- COR153 – Installation Coordination and Project Management
- COR163 – Developing Masterkey Systems (formerly AHC200 Masterkeying)
- DHC205 – Intermediate Detailing Doors, Frames and Hardware (formerly AHC205 – Detailing Hardware and CDC305 Detailing Doors and Frames)

DHC205 INTERMEDIATE DETAILING DOORS, FRAMES & HARDWARE (formerly AHC205 & CDC305)

(4 Days) (32 CEPs)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

COR140 – Using Codes and Standards

Perhaps the most necessary skill you can develop in our industry is learning how to properly create detailed hardware schedules. Coordinating the myriad hardware products with the project's requirements can be a daunting task. This course introduces you to the sequence and format of the hardware schedule through a series of in-class exercise as well as introduces students to the techniques and skills necessary to become a more precise detailer.

You will learn how to:

- Interpret plans and specifications
- Create door, frame, and hardware submittals
- Create proper headings for hardware sets
- Use sequence and format to list hardware items in the proper order
- Write detailed hardware sets
- Coordinate hardware with doors and frames
- Illustrate door opening details and elevations
- Coordinate hardware templating requirements

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ Catalogs or electronic files with technical information for hinges, mortise locks, door closers, fire exit hardware, panic hardware, protection plates, electrified hardware, hollow metal doors and frames, and flush wood doors
- ✓ Catalogs or electronic files for pivots, continuous hinges, concealed in the floor closers, door bolts, coordinators, overhead stops and holders and removable mullions, bored and mortise locks and latches, auxiliary locks, surface-mounted and overhead concealed door closers, low-energy door operators, door pulls, push bars, protection plates, Gasketing and thresholds, and door stops
- ✓ Catalogs or electronic files for electrified hardware (e.g. power supplies, card readers, key pads, motion detectors, power transfer devices)

Electronic copies are allowed, however, we recommend you download the material on your computer.

DHC307 ADVANCED DETAILING DOORS, FRAMES & HARDWARE (formerly AHC207 & CDC305)

(5 Days) (40 CEPs)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications

COR133 – Electrified Architectural Hardware

DHC205 - Intermediate Detailing Doors, Frames & Hardware (formerly AHC205 & CDC305)

COURSE DESCRIPTIONS

Building on the principles learned in the former AHC205 – Detailing Hardware, students are led through a series of challenging class exercises designed to develop their decision-making skills by selecting and detailing hardware products that meet the intended functions of door openings. Students will learn the step-by-step sequence employed by Architectural Hardware Consultants (AHCs) and Door + Hardware Specification Consultants (DHSCs) as they evaluate door openings and select hardware products to create door assemblies in accordance with applicable codes and standards.

You will learn how to:

- Identify intended functions of complex door openings
- Select hardware products for complex openings
- Create detailed hardware sets
- Include elevation diagrams for openings with electrified hardware

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ **Catalogs or electronic files with technical information for hinges, mortise locks, door closers, fire exit hardware, panic hardware, protection plates electrified hardware, hollow metal doors and frames, and flush wood doors**
- ✓ **Catalogs or electronic files for pivots, continuous hinges, concealed in the floor closers, door bolts, coordinators, overhead stops and holders and removable mullions, bored and mortise locks and latches, auxiliary locks, surface-mounted and overhead concealed door closers, low-energy door operators, door pulls, push bars, protection plates, Gasketing and thresholds, and door stops**
- ✓ **Catalogs or electronic files for electrified hardware (e.g. power supplies, card readers, key pads, motion detectors, power transfer devices)**

Electronic copies are allowed, however, we recommend you download the material on your computer.

DHSC310 WRITING DOOR AND FRAME SPECIFICATIONS (formerly CDC310)

(3 Days) (24 CEPs)

RECOMMENDED PREREQUISITES:

COR147 – Introduction to Specification Writing
COR123 – Using Door, Frame and Hardware Standards (formerly CDC300 and ELT515)

Door and frame specifications require as much attention to detail as other specification sections. Fire-rated openings (both neutral and positive pressure tested) require particular attention to construction, labeling requirements, reinforcements, hardware preparations, glazing, and frame anchors. These specifications must be carefully coordinated with other specifications to ensure that the proper materials are provided. This course teaches you how to write clear, concise, correct, and complete door and frame specifications using the Construction Specifications Institute's MasterFormat™ as a guide.

You will learn how to:

- Organize your specifications
- Use correct specification language
- Coordinate work in other sections
- Address product substitutions

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ **NFPA80, Standards for Fire Doors and Other Opening Protectives (2013 edition)**
- ✓ **NFPA101, Life Safety Code (2012 edition)**
- ✓ **ICC/ANSI A117.1, Accessible and Usable Building and Facilities (2009 edition)**
- ✓ **Catalogs or electronic files for standard and custom hollow metal doors and frames, architectural flush and stile and rail wood doors, and aluminum**

doors and frames.

ELECTRONIC COPIES ARE ALLOWED, HOWEVER, WE RECOMMEND THAT YOU DOWNLOAD THE MATERIALS ON YOUR COMPUTER.

DHSC315 WRITING HARDWARE SPECIFICATIONS (formerly AHC215)

(5 Days) (40 CEPs)

RECOMMENDED PREREQUISITES:

COR117 – Door, Frame, and Architectural Hardware Applications
COR133 – Electrified Architectural Hardware
COR140 – Using Codes and Standards
COR147 – Introduction to Specification Writing
DHC205 – Intermediate Detailing Doors, Frames & Hardware (formerly AHC205 & CDC305)
DHC307 – Advanced Detailing Doors, Frames & Hardware (formerly AHC207 & CDC305)

Architectural Hardware Consultants (AHCs) are required to master the skills and techniques of writing professional construction specifications. Architects rely on professional consultants for technical expertise and expect them to be proficient in writing specifications. This course teaches you how to write clear, concise, correct, and complete hardware specifications using the Construction Specifications Institute's (CSI) MasterFormat™ as a guide.

You will learn how to:

- Organize your specifications
- Use correct specification language
- Create hardware specification sets
- Write complete hardware specifications
- Coordinate work in other sections
- Address product substitutions
- Coordinate specifications for electrified hardware and access control systems

NOTE: Students taking this course must have expert-level hardware application and code and standard knowledge.

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ **Catalogs or electronic files with technical information for hinges, mortise locks, door closers, fire exit hardware, panic hardware, protection plates, electrified hardware, hollow metal doors and frames, and flush wood doors**
- ✓ **Catalogs or electronic files for pivots, continuous hinges, concealed in the floor closers, door bolts, coordinators, overhead stops and holders and removable mullions, bored and mortise locks and latches, auxiliary locks, surface-mounted and overhead concealed door closers, low-energy door operators, door pulls, push bars, protection plates, Gasketing and thresholds, and door stops**
- ✓ **Catalogs or electronic files for electrified hardware (e.g. power supplies, card readers, key pads, motion detectors, power transfer devices)**

AHC220 EXAM PREP

(3 Days) (24 CEPs)

Students pursuing the Architectural Hardware Consultants (AHCs) designation will complete in-class exercises designed to replicate exam conditions and better prepare them for the AHC exam. You will leave this class with a firm understanding of how to prepare for the formal AHC certification exam.

COURSE DESCRIPTIONS

You will be required to:

- Complete timed scheduling and specification exercises
- Complete timed written exam questions

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS:

- ✓ NFPA80, Standards for Fire Doors and Other Opening Protectives (2013 edition)
- ✓ NFPA101, Life Safety Code (2012 edition)
- ✓ ICC/ANSI A117.1, Accessible and Usable Building and Facilities (2009 edition)
- ✓ Catalogs or electronic files with technical information for hinges, mortise locks, door closers, fire exit hardware, panic hardware, protection plates, electrified hardware, hollow metal doors and frames, and flush wood doors
- ✓ Catalogs or electronic files for pivots, continuous hinges, concealed in the floor closers, door bolts, coordinators, overhead stops and holders and removable mullions, bored and mortise locks and latches, auxiliary locks, surface-mounted and overhead concealed door closers, low-energy door operators, door pulls, push bars, protection plates, Gasketing and thresholds, and door stops
- ✓ Catalogs or electronic files for electrified hardware (e.g. power supplies, card readers, key pads, motion detectors, power transfer devices)

Electronic copies are allowed, however, we recommend that you download the materials on your computer.

CDC315 CDC EXAM PREP

(2 Days) (16 CEPs)

This course walks you through the exercises required to complete the Certified Door Consultant (CDC) certification exam under exam-like conditions. You will leave this class with a firm understanding of how to prepare for the formal CDC certification exam.

You will be required to:

- Complete shop drawing and specification exercises
- Complete written exam questions

REQUIRED CLASS MATERIALS:

1. NFPA 80, Standard for Fire Doors and Other Opening Protectives (2013 edition)
2. NFPA101, Life Safety Code (2012 edition)
3. ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities (2009 edition)
4. Catalogs or electronic files for: standard and custom hollow metal doors and frames, architectural flush and stile and rail wood doors, and aluminum doors and frames

EHC400 ELECTRIFIED HARDWARE APPLICATIONS AND DOCUMENTATION

(4 Days) (32 CEPs)

RECOMMENDED PREREQUISITES:

- COR117 – Door, Frame, and Architectural Hardware Applications
- COR133 – Electrified Architectural Hardware
- COR140 – Using Codes and Standards
- DHC205 – Intermediate Detailing Doors, Frames & Hardware (formerly AHC205 and CDC305)
- DHC307 – Advanced Detailing Doors, Frames & Hardware (formerly AHC207 and CDC305)

One of the most important steps in detailing today's projects is creating the low voltage wiring drawings / diagrams and related documentation

for door openings with electrified hardware. In this course you will learn to use a free downloadable computer drawing program (Libre Office Draw) to create your drawings and will return to your workplace with the ability to create drawings for your projects. This course will teach you how to use correct industry recognized symbols and drawing techniques to help you communicate the project's requirements more effectively with the electrician, installer and systems integrators.

You will learn how to:

- Create electrified door elevation diagrams
- Create riser diagrams
- Create point-to-point wiring diagrams
- Use relays to control circuits

EHC433 ADVANCED ELECTRIFIED ARCHITECTURAL HARDWARE (formerly EHC405 & EHC410)

(5 Days) (40 CEPs)

RECOMMENDED PREREQUISITES:

- COR117 – Door, Frame, and Architectural Hardware Applications
- COR133 – Electrified Architectural Hardware
- COR140 – Using Codes and Standards
- DHC205 – Intermediate Detailing Doors, Frames & Hardware (formerly AHC205 & CDC305)
- DHC307 – Advanced Detailing Doors, Frames & Hardware (formerly AHC207 & CDC305)
- EHC400 – Electrified Hardware Applications and Documentation

Building upon the fundamentals that you learn in COR133, this class will teach you how to take the lead in coordinating electrified hardware devices that your company supplies, with all other low voltage electrified systems to be installed as part of the openings on a project. Coordination is critical in order to ensure a seamless, trouble free, product integration, and will substantially reduce call backs to the site. Through hands-on electrified hardware exercises, we will demonstrate how different systems work together to create secure, and fully functional electrified openings. After taking this course, whether you supply product, create drawings, run coordination meetings, or all of the above, you will develop a true consulting approach that can greatly impact your company's bottom line. As the hardware industry becomes more dependent on the versatility of electrified hardware, this curriculum will prepare you to communicate effectively with Architects, Owners, Contractors, and Subcontractors by teaching you the necessary skills to coordinate a project as an expert industry professional. By developing a concrete understanding of the systems involved in integrated openings, and an assurance that all code requirements for the project are satisfied, you can take your company to the next level.

STUDENTS ARE REQUIRED TO BRING A LAPTOP OR TABLET, AND A HANDHELD MOBILE DEVICE (CELLPHONE)

COURSE DESCRIPTIONS

EHC420 EHC EXAM PREP

(2 Days) (16 CEPS)

This course is designed to take you through the exercises required to complete the Electrified Hardware Consultant (EHC) certification exam under exam-like conditions. You will leave this class with a firm understanding of how to prepare for the EHC exam.

You will learn how to:

- Complete shop drawing exercises
- Complete written exam questions that cover topics such as access control systems, CCTV terminology, principles of low-voltage electricity, and specification writing

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS FOR DAI600:

- ✓ **NFPA 80, Standards for Fire Doors and Other Opening Protectives (2013 edition)**
- ✓ **NFPA101, Life Safety Code (2012 edition)**
- ✓ **ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities (2009 edition)**
- ✓ **Catalogs or electronic files for electrified hardware (e.g. power supplies, card readers, key pads, motion detectors, power transfer devices)**
- ✓ **Electronic copies are allowed, however, we recommend that you download the materials on your computer.**

DAI600 FIRE AND EGRESS DOOR ASSEMBLY INSPECTION

(3 days) (24 CEPS)

RECOMMENDED PREREQUISITES:

COR101 – Fundamentals of Architectural Doors & Hardware

COR102 – Introduction to Building Codes

COR117 – Door, Frame and Architectural Hardware Applications

COR140 – Using Codes & Standards

The DAI600 curriculum is focused on understanding the role and responsibilities of the fire and egress door inspectors as well as interacting with the building owner and the Authority Having Jurisdiction (AHJ). It is paramount to ensure that the respective parties clearly understand the inspection process and documentation and how to follow through with the necessary corrections to improve safety in their facilities.

This class will teach you how to perform and record these inspections, as well as provide tips for interacting with building owners and AHJs. It requires an intermediate level of understanding of door, frame, and hardware products and applications, and applicable code familiarity to conduct inspections.

Students of this course are recommended to have completed the specific DHI courses or have comparable knowledge or experience. The first critical course, *COR117- Door, Frame, and Architectural Hardware Applications*, is focused on products and their applications. If you have not taken this course but have significant experience in non-residential doors, frames, and hardware, a complimentary knowledge assessment exam is available to evaluate your readiness for the DAI 600 class. Because the DAI600 course is based heavily on understanding codes, which are updated every three years, we strongly suggest that the second course, *COR140 – Using Codes and Standards*, be taken prior to DAI600, and if not taken within the past three years, the DHI CEP code update classes also be taken.

For those that who do not work and/or are not directly related to the Door and Hardware Industry there are two excellent introductory courses—COR101 and COR102 - that should be completed prior to taking COR117, COR140 and ultimately DAI600. All 4 recommended courses are crucial in order to be successful in the DAI600 class and earn your FDAI credential.

You will learn how to:

- Perform visual inspections and conduct operational testing of swinging fire doors
- Authorize inspection reports for building owners and AHJ requirements
- Recommend corrective actions necessary in compliance with inspection requirements
- Interface with building owners and AHJs on inspection requirements and issues
- Understand NFPA 101 inspections, occupancy types, means of egress, special locking arrangements, capacity calculations, hazard contents, and perform egress inspections
- Provide Performance-Based option explanation and guidance
- Research manufacturers' labels and listings
- Provide instruction for the care and maintenance of components along with approved field modifications when necessary

After completing the DAI600 course, students may then register to take the FDAI certification computerized exam through Kryterion Testing Services at their convenience. Upon successful completion of DAI600 and the exam students will receive the credentials FDAI – Fire Door Assembly Inspector.

Students will receive the *Guide to Annual Inspections of Swinging Fire Doors and Field Reference Digest for Inspecting Swinging Fire Doors*, sample inspection reports, door gap gauge, and inspection magnet and mirror.

STUDENTS TO PROVIDE ADDITIONAL REFERENCE MATERIALS FOR DAI600:

- ✓ **NFPA 80, Standards for Fire Doors and Other Opening Protectives (2013 edition)**
- ✓ **NFPA101, Life Safety Code (2012 edition)**
- ✓ **ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities (2009 edition)**
- ✓ **NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives (2013 edition)**

Electronic copies are allowed, however, we recommend that you download the materials on your computer.

IMPORTANT TO NOTE

At this school we are offering DAI600 with exam options:

3-DAY DAI600

By selecting the 3-day DAI600 course you will attend a 3-day educational course. You will NOT take the FDAI Credentialing Exam onsite at the Technical School. You will take the Exam once you return home on a day and time that works best for you. You will receive information following the conclusion of the Technical School with instructions on making your appointment with Kryterion Global Testing Solutions.

4-DAY DAI600

By selecting the 4-day DAI600 course you will attend a 3-day educational course and on the 4th day take the FDAI Credentialing Exam onsite (1/2 day) at the Technical School.