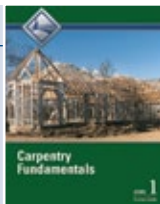




Carpentry

L1 CARPENTRY FUNDAMENTALS



LEVEL 1

Curriculum Notes

- 225 Hours (Includes 72.5 hours of Core Curriculum which is a prerequisite for Level 1 completion and must be purchased separately. See p. 10 for ordering information.)
- To Be Revised: Summer 2013, Fifth Edition
- Trainee Guide and individual trainee modules are full color.
- Instructor's Resource Card includes an access code to download detailed lesson plans, module exams, performance profiles and TestGen software.
- A Spanish translation of the fourth edition is available. Please see NCCER's online catalog for more information.

HARDCOVER ISBN
Trainee Guide: \$67 **978-0-13-340380-0**

PAPERBACK ISBN
Trainee Guide: \$65 **978-0-13-340237-7**
Instructor's Resource Card: \$65 **978-0-13-340401-2**
(also includes NCCERconnect access)

NCCERconnect **NEW!**
See page 8 for details. ISBN

Trainee Guide Hardcover + Access Card Package: \$92 **978-0-13-340940-6**
Trainee Guide Paperback + Access Card Package: \$90 **978-0-13-340939-0**
Access Card ONLY for Trainee Guide: \$67
(does not include print book) **978-0-13-340393-0**
ELECTRONIC Access Code ONLY for Trainee Guide: \$67
(must be ordered electronically via OASIS;
does not include print book) **978-0-13-340436-4**

MODULES

All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

Orientation to the Trade (5 Hours)
Trainee \$19 ISBN 978-0-13-340299-5
Instructor \$19 ISBN 978-0-13-340309-1
(Module ID 27101-13) Reviews the history of the trade, describes the apprentice program, identifies career opportunities for carpentry and construction workers, and lists the skills, responsibilities, and characteristics a worker should possess. Emphasizes the importance of safety in the construction industry.

Building Materials, Fasteners, and Adhesives (7.5 Hours)

Trainee \$19 ISBN 978-0-13-340300-8
Instructor \$19 ISBN 978-0-13-340310-7
(Module ID 27102-13) Introduces the building materials used in construction work, including lumber, sheet materials, engineered wood products, structural concrete, and structural steel. Also describes the fasteners and adhesives used in construction work. Discusses the methods of squaring a building.

Hand and Power Tools (7.5 Hours)

Trainee \$19 ISBN 978-0-13-340301-5
Instructor \$19 ISBN 978-0-13-340311-4
(Module ID 27103-13) Provides descriptions of hand tools and power tools used by carpenters. Emphasizes safe and proper operation, as well as care and maintenance.

Introduction to Construction Drawings, Specifications, and Layout (20 Hours)

Trainee \$19 ISBN 978-0-13-340302-2
Instructor \$19 ISBN 978-0-13-340312-1
(Module ID 27104-13) Covers the techniques for reading and using construction drawings and specifications with an emphasis on drawings and information relevant to the carpentry trade. Introduces quantity takeoffs.

Floor Systems (27.5 Hours)

Trainee \$19 ISBN 978-0-13-340303-9
Instructor \$19 ISBN 978-0-13-340313-8
(Module ID 27105-13) Covers framing basics and the procedures for laying out and constructing a wood floor using common lumber, as well as engineered building materials.

Wall Systems (20 Hours)

Trainee \$19 ISBN 978-0-13-340304-6
Instructor \$19 ISBN 978-0-13-340314-5
(Module ID 27111-13) Describes procedures for laying out and framing walls, including roughing-in door and window openings, constructing corners, partition Ts, and bracing walls. Includes the procedure to estimate the materials required to frame walls.

Ceiling Joist and Roof Framing (40 Hours)

Trainee \$19 ISBN 978-0-13-340305-3
Instructor \$19 ISBN 978-0-13-340315-2
(Module ID 27112-13) Describes types of roofs and provides instructions for laying out rafters for gable roofs, hip roofs, and valley intersections. Covers stick-built and truss-built roofs. Includes the basics of roof sheathing installation.

Basic Stair Layout (12.5 Hours)

Trainee \$19 ISBN 978-0-13-340306-0
Instructor \$19 ISBN 978-0-13-340317-6
(Module ID 27110-13) Introduces types of stairs and common building code requirements related to stairs. Focuses on techniques for measuring and calculating rise, run, and stairwell openings, laying out stringers, and fabricating basic stairways.

Introduction to Building Envelope Systems (12.5 Hours)

Trainee \$19 ISBN 978-0-13-340307-7
Instructor \$19 ISBN 978-0-13-340318-3
(Module ID 27109-13) Introduces the concept of the building envelope and explains its components. Describes types of windows, skylights, and exterior doors, and provides instructions for installation.

Ordering information for *Carpentry Level 1*, Fourth Edition, 2006:

HARDCOVER ISBN
Trainee Guide: \$67 **978-0-13-229268-9**

PAPERBACK ISBN
Trainee Guide: \$65 **978-0-13-228591-9**
Instructor's Guide: \$65 **978-0-13-228593-3**

NCCERconnect ISBN

Trainee Guide Hardcover + Access Card Package: \$92 **978-0-13-286942-3**

Trainee Guide Paperback + Access Card Package: \$90 **978-0-13-286941-6**

IG Paperback + Access Card Package: \$65 **978-0-13-286943-0**

Access Card ONLY for Trainee Guide: \$67
(does not include print book) **978-0-13-285976-9**

ELECTRONIC Access Code ONLY for Trainee Guide: \$67
(must be ordered electronically via OASIS;
does not include print book) **978-0-13-292117-6**

L2 CARPENTRY FRAMING & FINISHING

LEVEL 2

Curriculum Notes

- 215 Hours
- Optional Residential Path: 165 Hours
- Optional Commercial Path: 145 Hours
- Revised: 2007, Fourth Edition
- Trainee Guide and individual trainee modules are full color.
- Instructor's Guide includes access code to download TestGen software, module exams, and performance profiles from www.nccerirc.com.
- A revision is underway and due in stock Fall 2013.

HARDCOVER ISBN
Trainee Guide: \$96 **978-0-13-614410-6**

PAPERBACK ISBN
Trainee Guide: \$94 **978-0-13-228596-4**
Instructor's Guide: \$94 **978-0-13-228598-8**

NCCERconnect **NEW!**
See page 8 for details. ISBN

Trainee Guide Hardcover + Access Card Package: \$121 **978-0-13-287808-1**

Trainee Guide Paperback + Access Card Package: \$119 **978-0-13-287807-4**

IG Paperback + Access Card Package: \$94 **978-0-13-287805-0**

Access Code ONLY for Trainee Guide: \$96
(does not include print book) **978-0-13-285923-3**

ELECTRONIC Access Code ONLY for Trainee Guide: \$96
(must be ordered electronically via OASIS;
does not include print book) **978-0-13-292119-0**

Product Supplements

PowerPoint® Presentation Slides
ISBN 978-0-13-229138-5 **\$40**

Carpentry Level 2 (continued)

MODULES

All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

Commercial Drawings *Elective for Residential Path* (25 Hours)

Trainee \$19 ISBN 978-0-13-614477-9
Instructor \$19 ISBN 978-0-13-614455-7

(Module ID 27201-07) Describes the drawings prepared for commercial structures. Provides information about their format and content and their use in conveying specific construction requirements. Also describes the standard format for specifications. Includes one 11" x 17" construction drawing.

Roofing Applications *Elective for Commercial Path* (25 Hours)

Trainee \$19 ISBN 978-0-13-614478-6
Instructor \$19 ISBN 978-0-13-614456-4

(Module ID 27202-07) Covers materials used in residential and light commercial roofing, along with safety practices and application methods for these materials. Includes shingles, roll roofing, shakes, tiles, metal, and membrane roofs. Also discusses the selection and installation of roof vents.

Thermal and Moisture Protection (7.5 Hours)

Trainee \$19 ISBN 978-0-13-614479-3
Instructor \$19 ISBN 978-0-13-614457-1

(Module ID 27203-07) Covers the selection and installation of insulating materials in walls, floors, and attics. Describes the uses and installation practices for vapor barriers and waterproofing materials.

Exterior Finishing *Elective for Commercial Path* (35 Hours)

Trainee \$19 ISBN 978-0-13-614480-9
Instructor \$19 ISBN 978-0-13-614458-8

(Module ID 27204-07) Covers exterior siding used in residential construction and installation procedures, for wood, metal, vinyl, and cement board siding.

Cold-Formed Steel Framing (15 Hours)

Trainee \$19 ISBN 978-0-13-614481-6
Instructor \$19 ISBN 978-0-13-614459-5

(Module ID 27205-07) Describes types and grades of steel framing materials. Includes instructions for selecting and installing metal framing for interior walls, exterior nonbearing walls, and partitions.

Drywall Installation (15 Hours)

Trainee \$19 ISBN 978-0-13-614482-3
Instructor \$19 ISBN 978-0-13-614460-1

(Module ID 27206-07) Describes types of gypsum drywall, their uses, and the fastening devices and methods used to install them. Contains instructions for installing drywall on walls and ceilings using nails, drywall screws, and adhesives. Also covers fire- and sound-rated walls.

Drywall Finishing (12.5 Hours)

Trainee \$19 ISBN 978-0-13-614483-0
Instructor \$19 ISBN 978-0-13-614461-8

(Module ID 27207-07) Covers materials, tools, and methods used to finish and patch gypsum drywall. Describes automatic and manual taping and finishing tools.

Doors and Door Hardware (20 Hours)

Trainee \$19 ISBN 978-0-13-614484-7
Instructor \$19 ISBN 978-0-13-614463-2

(Module ID 27208-07) Covers the installation of metal doors and related hardware in steel-framed, wood-framed, and masonry walls, along with their related hardware, such as locksets and door closers. Also covers the installation of wooden doors, folding doors, and pocket doors.

Suspended Ceilings *Elective for Residential Path* (15 Hours)

Trainee \$19 ISBN 978-0-13-614485-4
Instructor \$19 ISBN 978-0-13-614499-1

(Module ID 27209-07) Describes the materials, layout, and installation procedures for suspended ceilings used in commercial construction. Covers ceiling tiles, drywall suspension systems, and pan-type ceilings.

Window, Door, Floor, and Ceiling Trim (25 Hours)

Trainee \$19 ISBN 978-0-13-614486-1
Instructor \$19 ISBN 978-0-13-614500-4

(Module ID 27210-07) Covers types of trim used in finish work. Focuses on methods for selecting, cutting, and fastening trim for a professional finished appearance.

Cabinet Installation (10 Hours)

Trainee \$19 ISBN 978-0-13-614487-8
Instructor \$19 ISBN 978-0-13-614501-1

(Module ID 27211-07) Provides detailed instructions for the selection and installation of base and wall cabinets and countertops.

Cabinet Fabrication (10 Elective Hours)

Trainee \$19 ISBN 978-0-13-614489-2
Instructor \$19 ISBN 978-0-13-614502-8

(Module ID 27212-07) Provides an introduction to the materials, tools, and methods used in cabinetmaking. Practice projects help the trainee learn the various joining techniques, while providing practice on stationary power tools.

Ordering information for *Carpentry Level 2, Fifth Edition*, due Fall 2013:

HARDCOVER ISBN
Trainee Guide: \$96 978-0-13-340465-4

PAPERBACK ISBN
Trainee Guide: \$94 978-0-13-340430-2
Instructor's Resource Card: \$94 978-0-13-340458-6

NCCERconnect ISBN
Trainee Guide Hardcover
+ Access Card Package: \$121 978-0-13-340942-0

Trainee Guide Paperback
+ Access Card Package: \$119 978-0-13-340938-3

Access Card ONLY for Trainee Guide: \$96
(does not include print book) 978-0-13-340394-7

ELECTRONIC Access Code ONLY for Trainee Guide: \$96
(must be ordered electronically via OASIS;
does not include print book) 978-0-13-340437-1

L3 CARPENTRY FORMS

LEVEL 3

Curriculum Notes

- 172.5 Hours
- Revised: 2007, Fourth Edition
- Trainee Guide and individual trainee modules are full color.
- Instructor's Guide includes access code to download TestGen software, module exams, and performance profiles from www.nccerirc.com.
- A Spanish translation is available. Please see NCCER's online catalog for more information.
- A revision is underway and due in stock Spring 2014.

PAPERBACK

ISBN

Trainee Guide: \$94 978-0-13-228600-8
Instructor's Guide: \$94 978-0-13-228603-9

NCCERconnect

NEW!

See page 8 for details.

ISBN

Trainee Guide Paperback
+ Access Card Package: \$119 978-0-13-302966-6

IG Paperback
+ Access Card Package: \$94 978-0-13-302959-8

Access Card ONLY for Trainee Guide: \$94
(does not include print book) 978-0-13-294904-0

ELECTRONIC Access Code ONLY for Trainee Guide: \$94
(must be ordered electronically via OASIS;
does not include print book) 978-0-13-302229-2

Product Supplements

PowerPoint® Presentation Slides

ISBN 978-0-13-229106-4 \$40

MODULES

All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

Rigging Equipment (10 Hours)

Trainee \$19 ISBN 978-0-13-614503-5
Instructor \$19 ISBN 978-0-13-614515-8

(Module ID 27301-07) Describes the use and inspection of basic equipment and hardware used in rigging, including slings, wire rope, chains, and attaching hardware such as shackles, eyebolts, and hooks, as well as rigging knots. Explains sling angles. Also covers tuggers, jacks, hoists, and come-alongs.

Rigging Practices (15 Hours)

Trainee \$19 ISBN 978-0-13-614505-9
Instructor \$19 ISBN 978-0-13-614516-5

(Module ID 27302-07) Describes basic rigging and crane hazards and related safety procedures. Provides an overview of personnel lifting and lift planning, and introduces crane load charts and load balancing. Includes instructions for rigging and lifting pipe.

Properties of Concrete (10 Hours)

Trainee \$19 ISBN 978-0-13-614506-6
Instructor \$19 ISBN 978-0-13-614517-2

(Module ID 27303-07) Describes the properties, characteristics, and uses of cement, aggregates, and other materials used in different types of concrete. Covers procedures for estimating concrete volume and testing freshly mixed concrete, as well as methods and materials for curing concrete.



Carpentry Level 3 (continued)

Reinforcing Concrete (15 Hours)

Trainee \$19 ISBN 978-0-13-614507-3
 Instructor \$19 ISBN 978-0-13-614518-9
 (Module ID 27304-07) Explains the selection and uses of different types of reinforcing materials. Describes requirements for cutting, bending, splicing, and tying reinforcing steel and the placement of steel in footings, columns, walls, and slabs.

Handling and Placing Concrete (22.5 Hours)

Trainee \$19 ISBN 978-0-13-614508-0
 Instructor \$19 ISBN 978-0-13-614519-6
 (Module ID 27305-07) Covers tools, equipment, and procedures for handling, placing, and finishing concrete. Describes joints made in concrete structures, the use of joint sealants, and form removal procedures. Emphasizes safety procedures for handling, placing, and finishing concrete.

Trenching and Excavating (10 Hours)

Trainee \$19 ISBN 978-0-13-614509-7
 Instructor \$19 ISBN 978-0-13-614521-9
 (Module ID 27306-07) Provides an introduction to working in and around excavations, particularly in preparing building foundations. Describes types and bearing capacities of soils; procedures used in shoring, sloping, and shielding trenches and excavations; trenching safety requirements, including recognition of unsafe conditions; and mitigation of groundwater and rock when excavating foundations.

Foundations and Slab-on-Grade (20 Hours)

Trainee \$19 ISBN 978-0-13-614510-3
 Instructor \$19 ISBN 978-0-13-614522-6
 (Module ID 27307-07) Covers basic site layout tools and methods; layout and construction of deep and shallow foundations; layout and forming of slabs-on-grade; and forms used for curbing and paving.

Vertical Formwork (27.5 Hours)

Trainee \$19 ISBN 978-0-13-614511-0
 Instructor \$19 ISBN 978-0-13-614523-3
 (Module ID 27308-07) Covers the applications and construction methods for types of forming and form hardware systems for walls, columns, and stairs, as well as slip forms, climbing forms, and shaft forms. Provides an overview of the assembly, erection, and stripping of gang forms.

Horizontal Formwork (22.5 Hours)

Trainee \$19 ISBN 978-0-13-614513-4
 Instructor \$19 ISBN 978-0-13-614524-0
 (Module ID 27309-07) Describes elevated decks and formwork systems and methods used in their construction. Covers joist, pan, metal deck, and flat slab systems and provides instructions for the use of flying forms, as well as shoring and reshoring systems.

Tilt-Up Wall Panels (20 Hours)

Trainee \$19 ISBN 978-0-13-614514-1
 Instructor \$19 ISBN 978-0-13-614490-8
 (Module ID 27310-07) Describes how tilt-up concrete construction is used and how tilt-up panels are formed, erected, and braced. It covers the installation of rebar and types of embedments used to lift and brace the panels. It also covers methods used to achieve architectural and decorative finishes.

L4 CARPENTRY ADVANCED

LEVEL 4

Curriculum Notes

- 186 Hours (161 required; 25 elective)
- Revised: 2008, Fourth Edition
- Instructor's Guide includes access code to download TestGen software, module exams, and performance profiles from www.nccerirc.com.

PAPERBACK

Trainee Guide: \$94 ISBN 978-0-13-614411-3
 Instructor's Guide: \$94 ISBN 978-0-13-614414-4

NCCERconnect

NEW!

See page 8 for details. ISBN
 Trainee Guide Paperback + Access Card Package: \$119 ISBN 978-0-13-303358-8
 IG Paperback + Access Card Package: \$94 ISBN 978-0-13-303357-1
 Access Card ONLY for Trainee Guide: \$94 (does not include print book) ISBN 978-0-13-296983-3
 ELECTRONIC Access Code ONLY for Trainee Guide: \$94 (must be ordered electronically via OASIS; does not include print book) ISBN 978-0-13-302231-5

Product Supplements

PowerPoint® Presentation Slides ISBN 978-0-13-605532-7 \$40

MODULES

All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

Site Layout One—Distance Measurement and Leveling (22.5 Hours)

Trainee \$19 ISBN 978-0-13-603824-5
 Instructor \$19 ISBN 978-0-13-603833-7
 (Module ID 27401-08) Covers the equipment, principles, and methods used to perform distance measurement and leveling. Also covers the layout responsibilities of surveyors, field engineers, and carpenters; interpretation and use of site/plot plan drawings; and methods used for on-site communication.

Site Layout Two—Angular Measurement (30 Hours)

Trainee \$19 ISBN 978-0-13-603825-2
 Instructor \$19 ISBN 978-0-13-603834-4
 (Module ID 27402-08) Covers the principles, equipment, and methods used to perform site layout tasks that require angular measurements. Tasks include laying out building foundation lines and determining elevations by trigonometric leveling. The use of laser instruments, transits, theodolites, electronic distance measurement, and total stations are covered. Reviews trade mathematics needed to perform calculations related to angular measurements.

Advanced Roof Systems (20 Hours)

Trainee \$19 ISBN 978-0-13-603826-9
 Instructor \$19 ISBN 978-0-13-603835-1
 (Module ID 27403-08) Covers commercial roofing materials and structures and describes the procedures for installing commercial roofing such as standing seam, lap seam, and built-up roofs.

Advanced Wall Systems (25 Hours)

Trainee \$19 ISBN 978-0-13-603827-6
 Instructor \$19 ISBN 978-0-13-603836-8
 (Module ID 27404-08) Covers installation of a variety of finishing materials, including paneling and wainscoting. Also covers installation of curtain walls and fire-rated commercial construction.

Advanced Stair Systems (25 Hours)

Trainee \$19 ISBN 978-0-13-603828-3
 Instructor \$19 ISBN 978-0-13-603837-5
 (Module ID 27405-08) Provides extensive coverage of the materials and techniques used in finishing wooden staircases. Also covers a variety of stair systems used in commercial construction.

Introduction to Light Equipment (10 Hours)

Trainee \$19 ISBN 978-0-13-603829-0
 Instructor \$19 ISBN 978-0-13-603839-9
 (Module ID 27406-08) Introduces light construction equipment, including the aerial lift, skid steer loader, trencher, electric power generator, compressor, compactor, and forklift. An overview of general safety, operation, and maintenance procedures is provided.

Cabinetmaking



30 Hours
 Revised: 2007
 Module ID 27501-07

PAPERBACK ISBN

Trainee Guide: \$22 ISBN 978-0-13-614788-6
 Instructor's Guide: \$22 ISBN 978-0-13-614789-3

This module expands on the basic skills introduced in the *Core Curriculum* and previous *Carpentry* modules and examines in greater detail the tools used in cabinet construction and the joining techniques used in cabinetry. A color insert illustrates examples custom-built cabinetry.

From the Ground Up



Revised: 2006, Second Edition

PAPERBACK ISBN

Workbook: \$22 ISBN 978-0-13-229164-4
 Instructor's Package: \$22 ISBN 978-0-13-229165-1

Includes workbook plus Instructor's Module with answers to review questions and exercises, cross-references to NCCER performance tests, and numerous teaching tips.

Carpentry Level 4 (continued)

Welding (25 Elective Hours)

Trainee \$19 ISBN 978-0-13-603830-6
Instructor \$19 ISBN 978-0-13-603840-5
(Module ID 27407-08) Introduces the equipment, procedures, and safety practices used in cutting steel with oxyfuel equipment, as well shielded metal arc welding, gas-tungsten arc welding, and gas metal arc welding. Labs include practice in cutting and welding techniques.

Commercial Finish Work (5 Hours)

Trainee \$19 ISBN 978-0-13-603831-3
Instructor \$19 ISBN 978-0-13-603841-2
(Module ID 27408-08) Introduces specialized finish materials used on interior and exterior walls, ceilings, and floors of commercial buildings.

Site Preparation (7.5 Hours)

Trainee \$19 ISBN 978-0-13-603832-0
Instructor \$19 ISBN 978-0-13-603842-9
(Module ID 27409-08) Covers the planning process that precedes the start of work on a construction site, including environmental considerations, personnel issues, access roads, traffic control, permits, site safety, utilities, and crane-related concerns.

Introductory Skills for the Crew Leader

(16 Hours)
Trainee \$40 ISBN 978-0-13-103593-5
Instructor \$40 ISBN 978-0-13-103594-2
(Module ID 27410-08) Along with the principles of project planning, scheduling, estimating, and management, this module introduces the basic skills required for supervising personnel. Several case studies are included.