

Agenda

Presented by JD White

Overview of Major Changes in 2020 National Electrical Code

Fault current references	Definition statements
Alignment of GFCI requirements	Equipment grounding conductor
Ampacity of conductors	

New Articles for the 2020 NEC

242 Overvoltage protection	311 Medium voltage conductors
337 Type P cable	800 Gen requirements for communication systems

Chapter 1: NEC General, Articles 100 – 110

Definitions
Electrical connections
Identification of disconnecting means
Space about electrical equipment

Chapter 2: Wiring and Protection, Articles 210 – 250

Grounded conductors	Branch circuits
Feeder circuits	Services
Overvoltage protection	Grounding and bonding

Chapter 3: Wiring Methods, Articles 300 – 370

Conductors for general wiring	Medium voltage cable
Conductor volume calculations	Type P cable
Multi-outlet assembly	

Chapter 4: Equipment for General Use, Articles 400 – 490

Switches	Receptacles
Luminaries	Appliances
Motor circuits	

Chapter 5: Special Occupancies, Articles 500 – 590

Classified locations	Commercial garages
Motor fuel dispensing facilities	Assembly occupancies
Agricultural buildings	RV parks
Marinas and docks	Temporary installations

Chapter 6: Special Equipment, Articles 600 – 695

Electric signs	Elevators and lifts
Electric vehicles	Pools and fountains
PV systems	Fire pumps

Chapter 7: Special Conditions, Articles 700 – 770

Emergency systems	Interconnected power production
Critical operations power systems	Fire alarm systems
Optical fiber cables	

Chapter 8: Communications Systems, Articles 800 – 840

General requirements	Communications circuits
Powered broadband systems	

Chapter 9: Tables and Informative Annexes

Tables	Annex C raceway fill
Annex D examples	Final notes

National Electrical Code 2020

Columbus, OH - Friday, July 31, 2020

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PO Box 278
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Learning Objectives

You'll be able to:

Explain new articles on overvoltage protection, medium voltage conductors and communication systems in the 2020 National Electrical Code.

Discuss dwelling service disconnect requirements, required surge protection, and other major changes to the brand new 2020 National Electrical Code.

Understand the limited access working space requirement and short-circuit current documentation.

Learn about GFCI protection for non-dwelling units and single phase dwelling services and feeders.

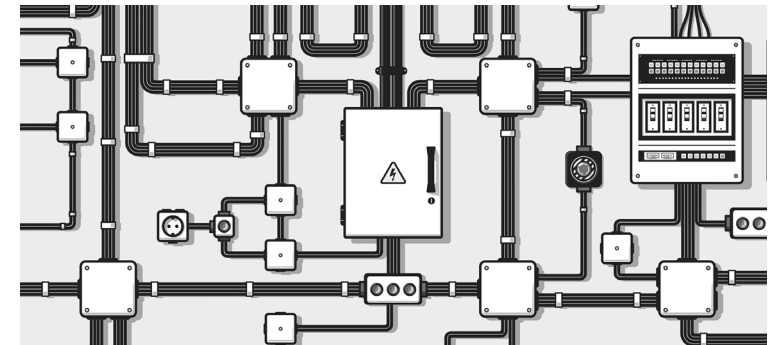
Identify requirements for emergency systems, fire alarm circuits and communications circuits.



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National Electrical Code 2020

Columbus, OH - Friday, July 31, 2020



Discuss major changes in the brand new 2020 National Electrical Code

Learn in-depth, chapter-by-chapter specifics of the 2020 National Electrical Code

Get an overview of new 2020 NEC Articles

Analyze wiring and protection, grounding and bonding, and wiring methods and materials

Explore equipment for general use, special occupancies, and special equipment

Learn about special conditions and communication circuits, and review NEC tables

Continuing Education Credits

Professional Engineers
7.0 CPD Hours/PDHs

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Architects
7.0 HSW Continuing Ed. Hours
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International Code Council
.7 CEUs (Electrical)



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Faculty

JD White *Consultant at Freelance Electrical System Design and Drafting*

Mr. White’s past ten years with CSCC as its Skilled Trades Program Coordinator, has provided him with insights beyond teaching, such as providing oversight of 144 apprenticeship courses and 28 open enrollment courses covering Construction, Carpentry, Electrical, Plumbing, and Welding. He helped personally write some of these new courses. Mr. White helped craft 15 Plans for Study for various certificates, AAS majors, and ATS majors. He has been an active part of articulation agreements, with various vocational career programs and apprenticeship programs. He started a new open enrollment program in June of 2007, which had over 200 active students and filled 28 course sections per term, prior to handing it over to a new faculty member. Mr. White is presently working with 10 Apprenticeship Partnerships with annual enrollment of 1,500 students. He has oversight of five labs, equipment, and materials and lab personnel.

Seminar Information

Crowne Plaza Columbus North - Worthington 6500 Doubletree Avenue Columbus, OH 43229 (614) 885-1885	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:30 pm	Lunch (On your own) 12:30 - 1:30 pm Afternoon Session 1:30 - 5:00 pm
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Tuition
\$299 for individual registration
\$279 for three or more simultaneous registrations.

Included with your registration: *Complimentary continental breakfast and printed seminar manual. Registration does not include a copy of the Code itself.*

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

Additional Learning

Webinar Series

Structural Forensic Engineering

- **Overview of the Role of Forensic Engineering**
Thurs., April 16, 2020, 11:00 - 12:30 PM CDT
- **Forensic Engineering Process and Forensic Engineering Report**
Thurs., April 16, 2020, 1:00 - 3:00 PM CDT
- **Causes of Structural Failures**
Fri., April 17, 2020, 11:00 - 12:30 PM CDT
- **Forensic Examination of Structures and Use in Litigation**
Fri., April 17, 2020, 1:00 - 3:00 PM CDT

Water Conservation

- **Reviewing the Owner’s Commitment to Water Conservation and Applicable Codes and Standards**
Thurs., April 23, 2020, 11:00 AM - 12:30 PM CDT
- **Assessing the Building Site**
Thurs., April 23, 2020, 1:00 - 2:00 PM CDT
- **Conserving and Reducing Water Use**
Fri., April 24, 2020, 11:00 AM - 1:00 PM CDT
- **Onsite Water Recycling and Minimizing Water Use**
Fri., April 24, 2020, 1:30 - 3:30 PM CDT

For more information and other online learning opportunities visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This seminar is open to the public and offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects in most states, including Ohio. Educators and courses are not subject to preapproval in Ohio.

The American Institute of Architects Continuing Education System has approved this course for 7.0 LU|HSW (Sponsor No. J885). Visit www.halfmoonseminars.org for complete AIA/CES information under this course listing. Only full attendance is reportable to the AIA/CES.

Engineers and architects seeking continuing education credit in other states will be able to claim the hours earned at this seminar, in most cases. Refer to specific state rules to determine eligibility.

HalfMoon Education has applied to the Ohio Construction Industry Licensing Board for course approvals for electrical contractors, which is pending. Updates are available at www.halfmoonseminars.org under this seminar listing.

The International Code Council has approved this event for .7 CEUs in the specialty area of Electrical. (Preferred Provider No. 1232).

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at \$279. This learning method does not qualify for the continuing education requirements of Ohio engineers, AIA members or BPI members. No contractor credit available. Please allow five weeks from the seminar date for delivery.

Registration

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<h3>How to Register</h3> <div><p>Online: www.halfmoonseminars.org</p><p>Phone: 715-835-5900</p><table><tr><td>Fax: 715-835-6066</td><td>Code:</td></tr></table><p>Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278</p><p>Complete the entire form. Attach duplicates if necessary.</p></div>	Fax: 715-835-6066	Code:	<h3>Registrant Information</h3> <p>Name: _____</p> <p>Company/Firm: _____</p> <p>Address: _____</p> <p>City:_____State: _____ Zip_____</p> <p>Occupation: _____</p> <p>Email: _____</p> <p>Phone: _____</p> <p>Additional Registrants:</p> <p>Name: _____</p> <p>Occupation: _____</p> <p>Email: _____</p> <p>Phone: _____</p> <p>Name: _____</p> <p>Occupation: _____</p> <p>Email: _____</p> <p>Phone: _____</p> <p><small>Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.</small></p> <p>() I need special accommodations. Please contact me.</p>
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