

ONSITE

ENGINEERING

LUCAS R. CHOUDEK

Electrical Engineer

- Education:** BS in Electrical Engineering
Computer Science - Minor
Energy Engineering - Minor
Applied Mathematics - Minor
University of Minnesota, Duluth, MN
- Certifications:** Certified Vehicle Fire Investigator (CVFI)
Certified Fire and Explosion Investigator (CFEI)
- Continuing Education:** Hazwoper Refresher Training 29 CFR.1910.120 Class, 11/23, 8 Hours
- Hazwoper Refresher Training 29 CFR.1910.120 Class, 11/22, 8 Hours
- Hazwoper Refresher Training 29 CFR.1910.120 and Confined Space Entry Training 29 CFR.1910.146 11/21, 8 Hours
- University of Minnesota's 65th Annual Institute for Building Officials – Electrical, 1/21, 16 hours
- Hazwoper Refresher Training 29 CFR.1910.120 Class, 12/19, 8 Hours
- Whitemore Fire Consultants “A Look Under the Covers” Seminar, 11/19, 6 Hours
- South Dakota Claims Seminar, 5/19
- Iowa – Nebraska Chapter International Association of Special Investigation Units 22nd Annual Training Seminar & Annual Meeting, 4/19

Minnesota Chapter of IAAI “Fire & Arson Investigation”
Conference, 3/19

Whitemore Fire Consultants “Warning! This is a Test”
Seminar, 10/18

NAFI “International Symposium on Fire Investigation
Science & Technology”, 9/18, 3 days

Minnesota Chapter of IAAI “Fire & Arson Investigation”
Conference, 3/18

City of Aurora, CO Public Safety Training Center,
“Advanced Principles of Fire Dynamics”, 2/18, 24 Hours

Hazwoper Refresher Training 29 CFR.1910.120 Class,
11/17, 8 Hours

1st Aid, CPR, BBP and AED training, 11/17

Asbestos Awareness Training, 11/17

Confined Space Entry & Rescue Training, 11/17

NSPE-MN “OSHA & NFPA70E Based Electrical Safety in
the Workplace”, 2 hours, 11/17

Whitemore Fire Consultants “Handling 1st & 3rd Party
Subrogation & Liability Claims” Seminar, 9/17

Minnesota Chapter of IAAI “Fire Investigation”
Conference, 3/17

“Alternative Fuel Vehicles Safety Training” NFPA/IAAI
training program, 8 hours, 3/17

IAAI webinar “One Dimensional vs Two Dimensional
Fire Investigation Experts”, 2/17

Hazwoper Certification, 40 hours, 10/16

Minnesota Fire Service Certification Board, NFPA 1001
Fire Fighter I – 2013 and Fire Fighter II – 2013, 10/16

NAFI’s International Symposium on Fire Investigation
Science & Technology Conference, 9/16

Whitemore Fire Consultants “In the Beginning...Building a Subrogation Case” Seminar, 7/16

Wisconsin Chapter of IAAI’s Annual Fire and Arson Investigative Conference “Annual Spring Seminar”, 20 hours, 6/16

Scott County NFPA 1001 Fire Academy, Certificate of Completion, 3/16
Minnesota Chapter of IAAI “Fire & Arson Investigation” Conference, 20 hours, 3/16

Emergency Medical Responder Training, 2/16
Nebraska Chapter of IAAI’s, Annual Fire and Arson Investigative Conference “Return to the Basics”, 20 hours, 10/15

Wisconsin Chapter of IAAI’s Annual Fire and Arson Investigative Conference “Annual Fall Seminar”, 20 hours, 10/15

Iowa Chapter of IAAI’s Annual Fire and Arson Investigative Conference, 19.25 hours, 9/15

“A Ventilation-Focused Approach to the Impact of Building Structures and Systems on Fire Development”, IAAI’s CFI Trainer course, 4 Hours

“Arc Mapping Basics”, IAAI’s CFI Trainer course, 4 Hours

“Digital Photography and the Fire Investigator”, IAAI’s CFI Trainer course, 4 Hours

“Documenting the Event”, IAAI’s CFI Trainer course, 4 Hours

“Effective Investigation and Testimony”, IAAI’s CFI Trainer course, 3 Hours

“Electrical Safety”, IAAI’s CFI Trainer course, 3 Hours

“Evidence Examination: What Happens at the Lab?”, IAAI’s CFI Trainer course, 4 Hours

“Fire Dynamics Calculations – Version 2.0”, IAAI’s CFI Trainer course, 4 Hours

“Fire Protection Systems”, IAAI’s CFI Trainer course, 3 Hours

“Introduction to Fire Dynamics and Modeling”, IAAI’s CFI Trainer course, 4 Hours

“Investigating Motor Vehicle Fires”, IAAI’s CFI Trainer course, 4 Hours

“Physical Evidence at the Fire Scene”, IAAI’s CFI Trainer course, 4 Hours

“Postflashover Fires”, IAAI’s CFI Trainer course, 4 Hours

“Process of Elimination”, IAAI’s CFI Trainer course, 3 Hours

“The Scientific Method for Fire and Explosion Investigation”, IAAI’s CFI Trainer course, 3 Hours

“Using Resources to Validate your Hypothesis”, IAAI’s CFI Trainer course, 2 Hours

Whitemore Fire Consultants “Back to the Basics” Seminar, 5/15

Minnesota Chapter of International Association of Arson Investigators -Fire and Arson Investigation Conference, 4/15

MN Electrical Association Grounding & Bonding, Overcurrent & Motors, 16 Hours, 4/15

Institute of Electronics and Electrical Engineers - Power and Energy Society Transmission & Distribution Conference & Exhibition, Chicago, IL, 4/14
North Central Engineers Conference, Hinckley, MN, 2014

49th Annual Minnesota Power Systems Conference, Brooklyn Center, MN, 11/13

Experience:**6/14 to Present OnSite Engineering & Forensic Services, Inc.,
Prior Lake, MN***Forensic Electrical Engineer*

Perform failure analysis and evaluation of electrical service installations, underground and overhead service failures, electrical distribution equipment failures, and transformer failures. Identify installation deficiencies of electrical installations in commercial, industrial, and residential structures. Testing and evaluation of battery charging systems, thermal testing of products and appliances.

**7/15 to 3/18 Prior Lake Volunteer Fire Department,
Prior Lake, MN***Fire Fighter*

Provided emergency disaster management and planning, fire suppression, rescue, prevention, code enforcement and public education.

5/13 to 6/14 Dakota Electric Cooperative, Farmington, MN*Electrical Engineer/Distribution Engineer*

Worked to improve the safety, reliability and overall economics of the electrical distribution system. Developed engineering studies, material specifications and applied construction and technical standards. Developed, designed, implemented and analyzed changes to the distribution system. Investigated new technologies.

**1/05 to 5/13 OnSite Engineering & Forensic Services, Inc.,
Prior Lake, MN***Engineering Intern and Inventory Manager*

Support engineers with site investigation and laboratory examinations. Designed and conducted experiments, recover artifacts from loss site, research failure of products, prepare reports. Database Management and evidence collection, and company vehicle maintenance.

Presentations: Presentation: "Why and When to Utilize Multi-Disciplined Forensic Investigations in Your Subrogation Claim" to National Association of Subrogation Professional conference, co-presenter, 11/23

Instruction “Building Electrical and Fuel Gas Systems” to MN IAAI Fire Investigation Technician program, co-presenter, 6/23

Instruction “Electricity and Fire, Appliances, Building Construction” to MN IAAI Fire Investigation Technician program, co-presenter, 6/22

Presentation “Water: The New Fire” to Iowa-Nebraska Chapter International Association of Special Investigation Units, co-presenter, 4/22

Presentation “Utilizing Multi-Disciplined Forensic Investigations in Your Defense or Subrogation Claims” to Iowa-Nebraska Chapter International Association of Special Investigation Units, co-presenter, 8/21

Presentation “Electricity and Fire”, Basic Fire Investigation class to Hennepin County, MN Fire Investigation Team, 9/20

Presentation “Forensic Electrical and Mechanical Vehicle and Property Investigations” to South Dakota Claims Seminar, co-presenter, 5/19

Presentation on OnSite Engineering to Iowa – Nebraska Chapter International Association of Special Investigation Units 22nd Annual Training Seminar & Annual Meeting, 4/19, 9 Hours

Presentation “It’s Electrifying...Why an Electrical Engineer” to Whitmore Fire Consultants Seminar, co-presenter, 10/18

Presentation “Electrical aspects of Fire Investigation” at Nebraska Chapter IAAI, co-presenter, 10/15

Presentation “Electricity and Fire” at Science Night-Prior Lake High School, co-presenter, 3/14

**Professional
Affiliations:**

Member International Association of Arson Investigators
Member International Association of Arson Investigators
– Minnesota, Iowa, Nebraska and Wisconsin chapters
Member National Fire Protection Association

Member Institute of Electrical and Electronic Engineers
Member National Association of Fire Investigators -
International