Peter D. Marxhausen, M.S., PE., F. SEI
dux Forensics, LLC
Director of Forensic Engineering
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SUMMARY

Peter Marxhausen is a highly accomplished professional with extensive experience in structural, civil, and forensic engineering. Currently serving as the Director of Forensic Engineering at dux Forensics, LLC in Denver, Colorado, Mr. Marxhausen specializes in forensic analysis, structural failure investigation, and expert testimony for both plaintiffs and defendants in various legal contexts. He has provided trial testimony in local, District, and Federal courts and testified in both civil and criminal cases. He holds an advanced degree in Civil Engineering with a focus on structural engineering and is a Fellow of the Structural Engineering Institute. With over three decades of experience, he has investigated over 10,000 buildings and served as the engineer of record for several thousand building repairs and several hundred new buildings. He has been a trusted expert in building code analysis, construction defect evaluations, and structural rehabilitation projects. His academic contributions include teaching positions at the University of Colorado Denver, where he is a Senior Instructor non-tenure professor for graduate and undergraduate courses related to timber, concrete, and masonry design, senior design, and civil engineering fundamentals. Peter is also an accomplished author and speaker, having published research in peer-reviewed journals and presented at numerous professional conferences and seminars. He is a licensed Professional Engineer in multiple states and holds certifications in welding, thermography, and roof inspection, among others. Recognized for his leadership and expertise, he has received accolades such as the SEI Fellow distinction and Educator of the Year award from the National Society of Professional Engineers Colorado Chapter.

EDUCATION

- Master of Science in Civil Engineering with an emphasis in Structural Engineering.
  2004, the University of Colorado at Denver, Denver, Colorado
    - The thesis research and text incorporated full-scale destructive testing of timber-framed stud walls to determine the adequacy of conventional sheathing materials to resist weak-axis compression buckling.
- Bachelor of Science in Civil Engineering.
  1998, Colorado State University, Fort Collins, Colorado
- Associates of Applied Science in Construction Technology: Studies included those emphasizing in welding, plumbing, and electrical design/installation. Nine credits remained when the program was administratively terminated by the college in 2013.
  Red Rocks Community College, Lakewood, Colorado
- Certificate in Professional Home Inspection.
  1998, The School of Home Inspection, Atlanta, Georgia

- Mr. Marxhausen has accumulated over 2,300 hours of continuing education since 1999. His complete list of continuing education is listed below.

REGISTRATIONS

- Registered Professional Engineer - State of Colorado, No.: 37585
- Registered Professional Engineer - State of Nebraska, No.: E-11261
- Registered Professional Engineer - State of Wyoming, No.: 10328
- Registered Professional Engineer - State of New Mexico, No.: 16830
- Registered Professional Engineer - State of Arizona, No.: 41855
- Registered Professional (Structural) Engineer - State of Utah, No.: 5841150-2203
- Registered Professional (Civil) Engineer – State of Nevada, No.: 021929
- Registered Professional Engineer - State of Texas, No.: 112152
- Registered Professional Engineer - State of North Dakota, No.: 10788
- American Welding Society (AWS) GMAW certified welder, No.: 594478L1
- HAAG Residential Roof Inspector - ID No.: 201010132 (website fee not maintained)
- HAAG Commercial Roof Inspector - ID No.: 201010132 (website fee not maintained)
- Level 1 Certified Thermographer - Infrared Training Center/Flir, No.: 150860
- Safety Assessment Program Evaluator (SAP Cal OES) – ID No.: 82514

PROFESSIONAL AFFILIATIONS

- ASCE - American Society of Civil Engineers, Professional Member
- AWC – Educator Member of the American Forest & Paper Association American Wood Council
- BECC - Building Enclosure Council of Colorado
- CAGE - Colorado Association of Geotechnical Engineers, Professional Member
- Chi Epsilon - National Civil Engineering Honor Society (Initiated as a Member in 2003)
- ICC - International Code Council, Professional Member
- NAFE - National Academy of Forensic Engineers, Member
- SEAC - Structural Engineers Association of Colorado, Professional Member
- SEI - Structural Engineering Institute, Fellow

EMPLOYMENT HISTORY

Dux Forensics, LLC, Director of Forensic Engineering – Principal and Co-Founder, March 2025 – Present

Professional Engineer in the field of engineering forensics related to structural, civil, and geotechnical engineering systems. Mr. Marxhausen has testified and been accepted as an expert in engineering and construction in local, district, and federal court cases. For cases that involve sworn testimony, Mr. Marxhausen has testified nearly half for Defendants and nearly half for Plaintiffs. He has also served as a nominated and court-appointed arbitrator and umpire in insurance appraisal matters.

- Typical assignments include technical investigations of building collapses, structural damage, engineering failures, leaks, incidents, accidents, injuries, fatalities, wrongful death matters, construction defects, code-deficient design, deterioration, plumbing/electrical issues, and improper construction.
- Characteristic investigations include evaluation, assessment, and determination of damage from fire, flooding, snow loads, hail, soil movements, wind, tornados, earthquakes, vehicle/equipment/tree impact, deterioration, construction defect, design defect, insects, rodents, and vandalism.
- Investigations involve losses related to residential, commercial, industrial, and historic structures. Fieldwork commonly includes evaluations related to moisture intrusion, building envelope analysis, condensation, roof assessment, insulation, and cladding attachments.
- Inspection services include various types of construction and materials, including timber framing, masonry, steel, and concrete. Inspections related to failure have included all types of structural systems, earth retention structures, vehicles, machinery, construction equipment, safety devices, shoring, site work/grading, utilities, welds, and miscellaneous proprietary systems.
- Mr. Marxhausen has been retained as an expert for the evaluation of professional negligence claims.
- Responsibilities frequently include design, implementation, and inspection of repairs to damaged structures and engineering systems. Work also includes the development of designs and specifications for the rehabilitation of structures.

University of Colorado Denver, Civil Engineering Department: Senior Instructor, Non-Tenure Professor

Non-tenure Professor and Instructor at the University of Colorado Denver, College of Engineering, Civil Engineering Department. Mr. Marxhausen is the course instructor for three undergraduate classes, two graduate classes, and a guest lecturer in other graduate and undergraduate courses. He is a Graduate Faculty Appointment for reviewing graduate school thesis subject matter in the Civil Engineering Department. He is also a regular guest lecturer for infrastructure failure and forensic engineering topics in ENGR 3400, Engineering Technology and Culture.

- Course instructor for CVEN 1067, Introduction to Civil Engineering. The CVEN 1067 course serves as a primer for freshmen admitted into the Civil Engineering program at UCD. The course covers topics related to structural, environmental, drainage, hydrology, transportation, construction, surveying, and geotechnical disciplines. Classroom topics also include ethics, leadership, teamwork, insurance, management, engineering history, project deliverables, computing software, project funding, employment, and proposals.
- Course instructor CVEN 4067, Senior Design. Senior-level civil engineering students, under the supervision of Mr. Marxhausen, work in teams and are assigned significant open-ended design problems requiring the synthesis of engineering material learned in previous engineering courses to develop a solution for real-world clients. Civil Engineering Senior Design projects include structural, environmental, drainage, hydrology, transportation, construction, and geotechnical disciplines. As part of the classroom portion of the course, Mr. Marxhausen lectures on various topics, including ethics, laws, rules, licensure, insurance, cost estimation, engineering/construction standard of care, engineering history, and the professional practice of Civil Engineering.
- Course instructor for CVEN 4565, Timber Design. The timber design course curriculum includes instruction on the design of wood-framed structures. The course covers the analysis and design of floor systems, beams, columns, trusses, diaphragms, connections, glued-laminated members, and plywood. Course topics also include concrete foundation design for non- to low-expansive soil types, building envelope considerations, exterior wall cladding, insulation, constructability, roof covering systems, and standard of care. The class projects include the structural design of both commercial and residential buildings.

- Course instructor for CVEN 5540, Masonry Design. Graduate-level structural design course focused on the structural analysis and design of masonry structures, combining both theoretical principles of mechanics and applied structural engineering. Topics include: historical background, materials, assemblages, beams and lintels, columns, walls, and lateral design. Related topics include building loads, interfaces with other structural features, architectural issues, and construction issues. The class also involves prestressed concrete design, open web joists/metal deck, and foundations on expansive soils.
- Course instructor for CVEN 5565, Timber Design. Graduate-level timber design course. Similar to CE 4565, Advanced Timber Design is intended for graduate students pursuing advanced engineering degrees. Advanced Timber Design includes additional topics on research, writing, ethics, and commercial building design.
- Course instructor at CU South for CU's Mini-Engineering School, directed toward non-credit-seeking professionals seeking to enhance their professional or personal level of civil engineering. Sessions taught included civil engineering, structural engineering, ethics, and laws.
- Served on the Master Degree's Thesis and Report Committees for the following Research Topics:
    - Progressive Collapse and Human Error, Mr. Nicholas Bass, E.I., 2023
    - Short-Term Moisture Effects on Untreated Wood Flexural Strength, Mr. Tyler W. Fauth, P.E., 2023
    - Comparison Of Strength Capacities Of Wooden Nails And Metal Framing Nails In Light-Framed Construction Connections And Determination Of Appropriate End Grain Adjustment Factor For The Wooden Nails, Ms. Elise J. Harrison, 2023
    - Open-Source Technology In Structural Engineering, Mr. Xavier J. Montoya, P.E., 2023
    - Investigation of Gas Metal Arc Welding and Flux-Cored Arc Welding of Historical Wrought Iron, Mr. Kyle O'Hearn, 2021
    - Sun Camber in Precast Concrete Double Tees, Mr. Jesse Hanson, 2021
    - A Case Study of Utilizing Rockfall Mitigation Mesh, Mr. Piotr Gibala, 2021
    - Laser Welded Connections, Mr. Ryan Paige, 2018
    - Characterizing the Structural Response of Wood Baseball Bats, Mr. Michael Negler, 2018
    - Development of Light Transmitting Mortar, Mr. Jason Lampton, 2017

- Alternate Methods for Testing Shear Strength at a Bonded Concrete Interface, Ms. Anne Swan, 2016
- Study of Wind Loads Applied to Solar Panels on Flat Rooftops, Ms. Rachelle Plas, 2015
- Pressure Safety Valve Discharge Forces on Pipe Rack Structures for Industrial Facilities, Mr. Reed Newcomer, 2015
- Study of Full Scale Rooftop Solar Panels Subject to Wind Loads, Ms. Erin Andolsek, 2013

Unified Building Sciences & Engineering, Inc., Director of Engineering – Denver/Forensic Structural Engineer, March 2020 – March 2025

Professional Engineer in the field of engineering forensics related to structural, civil, and geotechnical engineering systems. Mr. Marxhausen has testified and been accepted as an expert in engineering and construction in local, district, and federal court cases. For cases that involve sworn testimony, Mr. Marxhausen has testified nearly half for Defendants and nearly half for Plaintiffs. He has also served as a nominated and court-appointed arbitrator and umpire in insurance appraisal matters.

- Typical assignments include technical investigations of building collapses, structural damage, engineering failures, leaks, incidents, accidents, injuries, fatalities, wrongful death matters, construction defects, code-deficient design, deterioration, plumbing/electrical issues, and improper construction.
- Characteristic investigations include evaluation, assessment, and determination of damage from fire, flooding, snow loads, hail, soil movements, wind, tornados, earthquakes, vehicle/equipment/tree impact, deterioration, construction defect, design defect, insects, rodents, and vandalism.
- Investigations involve losses related to residential, commercial, industrial, and historic structures. Fieldwork commonly includes evaluations related to moisture intrusion, building envelope analysis, condensation, roof assessment, insulation, and cladding attachments.
- Inspection services include various types of construction and materials, including timber framing, masonry, steel, and concrete. Inspections related to failure have included all types of structural systems, earth retention structures, vehicles, machinery, construction equipment, safety devices, shoring, site work/grading, utilities, welds, and miscellaneous proprietary systems.

- Mr. Marxhausen has been retained as an expert for the evaluation of professional negligence claims.
- Responsibilities frequently include design, implementation, and inspection of repairs to damaged structures and engineering systems. Work also includes the development of designs and specifications for the rehabilitation of structures.

Michael Higgins & Associates, Inc., Senior Staff Engineer/Forensic Structural Engineer

Professional Engineer in the field of engineering forensics related to structural, civil, geotechnical, and plumbing engineering systems. While with Michael Higgins & Associates, Inc., Mr. Marxhausen testified as an expert in engineering and construction in local, district, and federal court cases. For matters that involved sworn testimony, Mr. Marxhausen testified nearly half for Defendants and nearly half for Plaintiffs. He also served as an umpire in insurance appraisal matters.

- Fieldwork included evaluations related to moisture intrusion, building envelope analysis, condensation, roof assessment, and cladding attachments.
- Completed engineering investigations of building collapses, structural damage, leaks, incidents, accidents, injuries, fatalities, construction defects, engineering failures, code-deficient design, deterioration, and improper construction. Investigations have involved losses related to residential, commercial, industrial, and historic structures.
- Characteristic investigations included evaluation, assessment, and determination of damage from fire, flooding, snow loads, hail, soil movements, wind, tornados, earthquakes, vehicle/equipment/tree impact, deterioration, construction defect, design defect, insects, rodents, and vandalism.
- Inspection services included various types of construction and materials, including timber framing, masonry, steel, and concrete. Inspections related to failure have included all types of structural systems, earth retention structures, vehicles, machinery, construction equipment, safety devices, shoring, site work/grading, utilities, welds, and miscellaneous proprietary systems.
- Responsibilities included design, implementation, and inspection of repairs to damaged structures and engineering systems. Work also included designs for the rehabilitation of structures.

City and County of Denver Building Department, Board of Appeals, 2013-2015, 2017-2020, 2015-2017

Appointed to the Denver Board of Appeals by Mayor Michael Hancock and served three consecutive three-year terms, which is the maximum length of an appointment. The Denver Board of Appeals is responsible for reviewing appeals of administrative decisions of the Building Department; evaluation of new methods and/or products; and review of plan correction notices, written orders, and opinions of a Building Code official made by the Building Department regarding the Building Code. The Board of Appeals is allowed to grant or deny requests for variances from the terms of the building code.

Oculus Group, LLC & Edisum Consulting, LLC, Owner, 2015-2024 & 2004-2014, Respectively

Sole proprietor of a civil and structural engineering firm that focused on a combination of charitable work as well as consulting and designing new residential and commercial construction. Projects included both residential and commercial buildings. The value of the construction projects ranged between $5,000 and $4,000,000. Projects were constructed across Colorado on a variety of soil types and challenging terrain.

Brian Seyferth & Associates, Inc., Staff Engineer/Structural Engineer

Design team member of a structural, architectural, and mechanical design firm. Designed and provided construction supervision of new residential, commercial, municipal, and industrial facilities. Work also included rebar, steel, and concrete shop drawing preparation, shoring plans, monument design, retaining wall design, fixture and signage analysis and design, cellular transmission tower analysis, cellular technology site implementation, lift rigging, and construction inspection. The earlier portion of his employment focused on the architectural and structural aspects of new buildings and facility construction. The latter portion of his employment emphasized fire-damage repair, foundation repair, analysis of claims, repair of distressed buildings, FEMA audits, and structural failures. Performed studies and wrote expert opinions involving structural-related problems and/or failures.

City of Loveland, Assistant to the City Traffic Engineer Internship, 1998 - 1999

Monitored city-wide traffic safety, compiled and investigated occurrences of traffic accidents, coordinated public awareness of traffic improvements, performed traffic counts, and utilized modern software to establish city-wide traffic signal timings.

Engineering Research Center at Colorado State University, Engineering Laboratory Assistant, 1997-1999

Monitored city-wide traffic safety, compiled and investigated occurrences of traffic accidents, coordinated public awareness of traffic improvements, performed traffic counts, and utilized modern software to establish city-wide traffic signal timings.

Adolfson & Peterson, Inc., Construction Management Internship and Field Engineer (E.I.), 1998

Worked as an assistant to the project manager on medium- to large-scale commercial projects, including schools, municipal maintenance facilities, and lower downtown lofts. Routinely involved with the preparation of construction bids, material take-offs, selection of subcontractors, field operations, and construction labor. Reviewed project shop drawings and submittals for technical accuracy and compliance with construction specifications.

Goodson & Associates, Inc., Material and Geotechnical Field Engineer, 1997

Geotechnical investigations included field sampling, drill rig operation, soil sample testing and evaluation, and preparation of written geotechnical recommendations for residential and commercial structures. Laboratory work also included destructive testing of concrete and asphalt for compliance with construction specifications. Fieldwork included construction management, field engineering, and physical labor in Colorado coal mines and an EPA-mandated clean-up of an oil collection network in southern California.

CONSTRUCTION/FIELD EXPERIENCE

- Adolfson & Peterson, Inc., Field Engineer, 1998
- Colorado State University, Facility Management (athletic events), 1996-1998
- Laster Storm, Arena Fabricator, 1995-1997
- Computer Sites, Computer Floor/Access Floor Installer, 1995
- Self-Employed, Home Inspections, Home Repairs, and Playground Assembly, 1992-2001
- Oakley Carpentry, Framer/Carpenter/Summer Laborer, 1989-1992

AWARDS

2021 SEI Fellow, Structural Engineering Institute (SEI). The SEI Fellow (F.SEI) grade distinguishes members as leaders and mentors in the structural engineering profession.

2017 Colorado University Educator of the Year, National Society of Professional Engineers (NSPE) Colorado

2013 Footsteps of the Founder Award, Boy Scouts of America, Denver Area Council

In recognition of the significant time investment made for the betterment of youth

Structural Engineering Institute (SEI/ASCE) Student Structural Design Competition, Second place, Faculty Advisor, 2012

Excellence in Teaching Award, Department of Engineering, University of Colorado, 2010-2011

Structural Engineering Institute (SEI/ASCE) Student Structural Design Competition, Second place, Faculty Advisor, 2011

2009 Quality Based Selection Award (QBS Colorado), Person of the Year

In recognition of efforts to educate students on the importance of QBS while emphasizing professional ethics.

Chi Epsilon Membership (National Civil Engineering Honor Society), 2003

Eagle Scout Award (Boy Scouts of America), 1992

APPRAISAL/UMPIRE EXPERIENCE

- Nance v. Foremost Insurance (court-appointed Umpire). July 2024
- Howard v. Spinnaker Insurance Company (court-appointed Umpire). March 2024
- Kahn Nguyen vs. American Family Mutual Insurance Company (Umpire). May 2021
- Patsy Garcia vs. American Family Mutual Insurance Company (Umpire). January 2021
- Windom Peak Apartments vs. Travelers Insurance (Umpire). January 2021
- Fitzgerald vs. Travelers Insurance (court-appointed Umpire). December 2020
- Dianna Gibson vs. Auto-Owners Insurance (Umpire). March 2020
- Mark Butman vs. Auto-Owners Insurance (Umpire). January 2020
- Mark Ebeling vs. American National Property and Casualty (Umpire). January 2020
- Robert Wilson vs. USAA Casualty Insurance Co. (court-appointed Umpire). October 2019
- Robb Street Terrace vs. American Family Insurance (Umpire). September 2018
- Bullock vs. Country Financial Insurance Company (Umpire). October 2017
- Baker/Townley vs. Country Financial Insurance Company (Umpire). October 2017
- Ly vs. State Farm Insurance Company (Umpire). August 2017
- Gillette vs. State Farm Insurance (Umpire). April 2017
- Guinn vs. California Casualty Indemnity Exchange (Appraiser). March 2017
- Lamb vs. Depositors Insurance Company (court-appointed Umpire). March 2016
- Mill Creek Homes Association vs. Seneca Insurance (court-appointed Umpire). June 2015
- Siefkes vs. Farmers Insurance Company (Hired jointly by both appraisers). June 2015
- Dworkin vs. California Casualty Indemnity Exchange (Appraiser). May 2015
- Sapuppo vs. Allstate Ins. (Hired jointly by both appraisers). February 2014
- Antonoff & Co./El Rancho vs. Travelers Insurance (Umpire). January 2014
- Horrigan vs. Encompass Ins. (Hired jointly by both appraisers). December 2013
- Fantz vs. Colorado Farm Bureau (Appraiser). December 2013
- Greenbrooke Condominium HOA vs. Travelers Insurance (Appraiser). December 2011
- Rodwell vs. Travelers Insurance (Appraiser). March 2011

- Swindle vs. Travelers Insurance (Appraiser). February 2011
- Sebald vs. American Family Insurance (Appraiser). May 2010

PUBLISHED WORKS

Marxhausen, Peter D. “Investigating a Collapse.” STRUCTURE Magazine May 2024: 27-29

Marxhausen, Peter D. “Can an Intense Fire Damage a Poured Concrete or Slab Foundation?” The Journal of Light Construction November/December 2023: 9-10

Marxhausen, Peter D. “Engineering Evaluation of Fire Damage to Concrete Foundations.” STRUCTURE Magazine August 2014: 57-59

Marxhausen, Peter D. and Henley, Dave. “Increasing Overhead Capacity.” Modern Steel Construction September 2009: 32-34

Marxhausen, Peter D. “Axial Buckling Strength of Conventionally Sheathed Stud Walls.” Wood Design Focus, A Journal of Contemporary Wood Engineering. Spring 2009, Volume 19, Number 1: 12-18

Marxhausen, Peter D. and Henley, Dave “Strengthening of Existing Steel Joist Framing Systems - Vulcraft’s Field-Bolted Spliced Open Web Joist Solution.” Structural Engineer Magazine. Gostructual.com/Stagnito Media. June 2009 <http://www.gostructural.com/article.asp?id=3854>.

Marxhausen, Peter D. and Henley, Dave “Strengthening of Existing Steel Joist Framing Systems - Vulcraft’s Field-Bolted Spliced Open Web Joist Solution.” CENews. CENews.com/Stagnito Media. June 2009. <http://www.cenews.com/magazine-article-gostructural.com-june-2009-strengthening_of_existing_steel_joist_framing_systems_mdash;vulcraft_rsquo;s_field_bolted_spliced_open_web_joist_solution-6588.html>.

Marxhausen, Peter D. and Lancaster, David. “Consulting to Insurance Companies.” STRUCTURE Magazine November 2008: 20-25

Structural Engineers Association of Colorado (SEAC), (2007). 2006 Survey of Colorado Building Departments. Prepared and Published by the Structural Engineers Association of Colorado, Colorado. (Contributing author)

Marxhausen, Peter D. and Bagley, Aaron. “Understanding Geotechnical Factors of Safety in the Design of Foundations.” STRUCTURE Magazine June 2006: 47-50

Marxhausen, Peter D. and Stalnaker, Judith J. “Buckling of Conventionally Sheathed Stud Walls.” Journal of Structural Engineering, Volume 132, Number 5 (May 2006): 745-750

Marxhausen, Peter D., (2004). Column Action Buckling of Conventionally Sheathed Walls. MS thesis, University of Colorado at Denver, Denver.

Marxhausen, Peter D. "Loveland Traffic Presents: Modern Roundabouts." City of Loveland Traffic Engineering Department. 1999. (Public Awareness Informational Brochure)

PRESENTATIONS AS SPEAKER

"Engineering Ethics," National Council of Structural Engineers Associations (NCSEA) 2024 Structural Engineering Summit, Las Vegas, NV. November 8, 2024 1.0 hours.

"Distinguishing Between Morals, Ethics, and Laws," American Society of Civil Engineers and Colorado Association of General Contractors, Colorado School of Mines, Student Chapter, Golden, CO. August 23, 2024, 1 hour.

"Forensic Engineering," American Society of Civil Engineers, University of Colorado, Denver, Student Chapter, Denver, CO. November 7, 2022, 1.5 hours.

"You Snooze, You [could] Lose: Timing Issues for Construction Defect Claims," presented by Cozen O'Connor with co-presenters Mr. Ben Migliorino, Esq. and Ms. Susie Lloyd, Esq., Webinar. September 7, 2023, 1.0 hours.

"New ASCE Guidance for Engineering Ethics," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. April 6, 2023, 1.0 hours.

"Forensic Engineering," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. October 27, 2022, 1.5 hours.

"Engineering Ethics Jeopardy," American Society of Civil Engineers, Northern Colorado (ASCE-N Co), Fort Collins, CO. October 13, 2022, 1.25 hours.

"Forensic Engineering, Ethics, and Laws," Structural Engineers Association of Nebraska (SEAN) Meeting, Omaha, NE. October 6, 2022, 1.5 hours.

"Engineering Ethics Jeopardy," Structural Engineers Association of New Mexico (SEANM) Annual Convention, Albuquerque, NM. July 22, 2022, 1.25 hours.

"Ethics Related to Property Claim Evaluation," Silver Boot Series of Continuing Education, sponsored by UBSE, Inc., Arlington, TX. June 15, 2022, 2 hours.

"Engineering Ethics," American Society of Civil Engineers and Colorado Association of General Contractors, Colorado School of Mines, Student Chapter, Golden, CO. March 4, 2022, 1 hour.

"Forensic Structural Engineering," Structural Engineers Association of Oklahoma (SEANoO) Annual Convention, Oklahoma City, OK. May 13, 2021, 1.25 hours.

"Building Occupancy and Fire Safety Issues for Structural Engineers," Structural Engineers Association of New Mexico (SEANM) Annual Convention, Albuquerque, NM. April 28, 2021, 1.25 hours.

"Laws and Ethics Applicable to Colorado Engineers," American Society of Civil Engineers, Northern Colorado (ASCE-NCo), Fort Collins, CO (presented via live webinar). November 12, 2020, 1.0 hour.

"Client Communication Related to Structural Engineering Issues," Structural Engineers Association of Colorado (SEAC) Annual Convention, Denver, CO. (presented via live webinar). October 8, 2020, 0.75 hours.

"Ethics Applicable to Colorado Engineers," American Society of Civil Engineers, Young Members Group (ASCE-YMG), Denver, CO. February 5, 2020, 1.0 hour.

"Laws and Ethics Applicable to Colorado Engineers," Structural Engineers Association of Colorado (SEAC), Lakewood, CO. May 16, 2019, 1.0 hour.

"Past, Present, and Future of Civil Engineering," American Society of Civil Engineers western regional conference. Awards dinner keynote Speaker. Westminster, CO. April 6, 2019, 1.0 hours.

"New Directions in Civil Engineering," American Society of Civil Engineers, University of Colorado, Student Chapter, Boulder, CO. October 19, 2017, 1.0 hours.

"Past, Present, and Future of Civil Engineering," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. October 19, 2017, 1.0 hours.

"Forensic Structural Engineering," American Society of Civil Engineers, Colorado Section, Denver, CO. April 20, 2017, 1.0 hour.

"Tools to be used by Investigating Engineers," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. March 30, 2017, 1.25 hours.

"Tools to be used by Investigating Engineers," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. November 10, 2016, 1.25 hours.

"Forensic Engineering – Tools to be used by Investigating Engineers," Structural Engineers Association of New Mexico (SEANM) Annual Convention, Albuquerque, NM. July 15, 2016, 1.25 hours.

"Forensic Engineering – Fails, Falls, and Fatalities," American Society of Civil Engineers, Northern Colorado Branch, Fort Collins, CO. May 12, 2016, 1.0 hour.

"Undergraduate Senior Design Program Objectives," National Society of Professional Engineers (NSPE), Denver, CO. February 25, 2016, 0.5 hour.

"Ethics and Laws Applicable to Structural Engineers," Structural Engineers Assoc. of New Mexico (SEANM) Annual Convention, Albuquerque, NM. July 24, 2015, 1.25 hours.

"Engineering Evaluation of Fire Damage to Residential and Commercial Buildings," Delta Disaster Services annual convention, Golden, CO. March 13, 2015, 1.0 hour.

"Changes to the 2012 International Building Code and 2012 National Design Specification" (wood code and wood design provisions) Structural Engineers Assoc. of New Mexico (SEANM) Annual Convention, Albuquerque, NM. July 25, 2014, 1.0 hour.

"Evaluation of Building Code Upgrades," Amica Insurance, Englewood, CO. May 14, 2014, 1.25 hours.

"Forensic Engineering – A Case Study," American Society of Civil Engineers, University of Colorado Denver, Student Chapter, Denver, CO. November 20, 2013, 1.0 hour.

"Ethics and Laws Applicable to Civil Engineering," American Society of Civil Engineers and Colorado Association of General Contractors, Colorado School of Mines, Student Chapter, Golden, CO. September 13, 2013, 1 hour.

"Changes to the 2012 International Building Code and 2012 National Design Specification" (wood code and wood design provisions) Structural Engineers Association of Colorado (SEAC), Denver, CO. March 21, 2013, 1.0 hour.

"Failures and Forensics," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. October 24, 2012, 1.25 hours.

"Forensic Engineering – A Case Study," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. October 18, 2012, 1.25 hours.

"Structural Systems, Wall Cladding, and Roofing Systems," Nationwide/Allied Insurance, Denver, CO. March 8, 2012, 2.0 hours.

"Ethics and Laws Applicable to Civil Engineering," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. October 6, 2011, 1.25 hours.

"Ethics and Laws Applicable to Civil Engineering," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. October 4, 2011, 1.25 hours.

"Past, Present, and Future of Civil Engineering," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. March 10, 2011, 1.0 hour.

"Putting Engineering Experts to Work," Auto-Owners Insurance, Westminster, CO. March 7, 2011, 0.75 hours.

"Past, Present, and Future of Civil Engineering," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. September 22, 2010, 1.0 hour.

"Effective Management of Engineering Experts," Rocky Mountain Property Claims Association, Denver, CO. January 15, 2010, 1.0 hour. (Craig Nuss, Esq., co-presenter).

"Engineering Evaluation of Tornado-Damaged Buildings," American Society of Civil Engineers, Colorado State University, Student Chapter, Fort Collins, CO. October 20, 2009, 1.25 hours.

"Engineering Evaluation of Tornado-Damaged Buildings," American Society of Civil Engineers and Colorado Association of General Contractors, Colorado School of Mines, Student Chapter, Golden, CO. October 9, 2009, 0.75 hours.

"Engineering Evaluation of Tornado-Damaged Buildings," American Society of Civil Engineers, University of Colorado, Boulder, Student Chapter, Boulder, CO. September 23, 2009, 1.25 hours.

"Engineering Evaluation of Tornado-Damaged Buildings," American Society of Civil Engineers, Colorado Section Chapter, Denver, CO. February 19, 2009, 1.25 hours.

"Post-Disaster Engineering Evaluation of Buildings Damaged by the May 2008 Windsor, Colorado Tornado," American Society of Civil Engineers, Northern Colorado Chapter, Fort Collins, CO. January 15, 2009, 1.25 hours.

SERVICE ACTIVITIES

NSPE (National Society of Professional Engineers) Order of the Engineer – Link Coordinator and Contact – Link No. 76, 2020 - Current

SEAC (Structural Engineers Association of Colorado) Director Position (member-elected position), 2025 – 2027 (three year term)

SEAC (Structural Engineers Association of Colorado) Colorado Ethics and Legislative Committee, Chair, 2016 - Current

SEAC (Structural Engineers Association of Colorado) Scholarship Committee, 2012 – 2014, Member - 2015 – 2020, Secretary

SEAC (Structural Engineers Association of Colorado) Education Committee, 2011 – Current, Student Outreach Member

SEAC (Structural Engineers Association of Colorado) Colorado Building Department Survey Committee, 2006 - 2008

"Introduction to Civil, Structural, and Forensic Engineering" Presentation

Chaparral High School, Pre-Engineering Curriculum, Parker, CO.

- January 23, 2012, 1.0 hour
- February 4, 2011, 1.0 hour
- February 10, 2010, 1.0 hour

"Forensic Structural Engineering" Presentation

Chaparral High School, Pre-Engineering Curriculum, Parker, CO.

- March 6, 2017, 1.0 hour
- February 25, 2015, 1.0 hour
- March 3, 2014, 1.0 hour
- February 11, 2013, 1.0 hour

ACEC (American Council of Engineering Companies) - Education Committee 2008 – 2012

"Forensic Structural Engineering" Presentation

Lutheran High School, Pre-Engineering Curriculum, Parker, CO.

- May 10, 2023, 1.0 hour
- May 27, 2022, 1.0 hour
- May 12, 2021, 1.0 hour
- April 29, 2020, 1.0 hour
- May 3, 2019, 1.0 hour
- April 23, 2018, 1.0 hour
- April 20, 2017, 1.0 hour

"Introduction to Civil, Structural, and Forensic Engineering" Presentation

Highlands Ranch High School, Pre-Engineering Curriculum, Littleton, CO.

- January 22, 2016, two 1.25-hour presentations

"Introduction to Civil, Structural, and Forensic Engineering" Presentation

Bollman Technical Education Center, Pre-Engineering Curriculum, Thornton, CO.

- April 9, 2012, 1.0 hour
- March 12, 2012, 1.0 hour

“Introduction to Engineering” Presentation Saddle Ranch Elem. School, Highlands Ranch, CO.

- October 10, 2012, two 45-minute presentations
- April 29, 2015, two 1-hour presentations

“Forensic Structural Engineering” Presentation

ThunderRidge High School, Career Exploration, Highlands Ranch, CO.

- October 25, 2022, 0.5 hour

Introduction to Engineering Presentation, Morey Middle School Career Day – 2010

Special Olympics Winter Race Coordinator – 2013, 2014

Junior Achievement Classroom Presenter, February 28, 2014

Panelist, 2023 Structural Engineering Association of Colorado Young Members Group (SEAC YMG) Mentorship Panel, Colorado School of Mines - October 2023

Panelist/Judge, 2023 Engineering Excellence Awards (EEA) competition, sponsored by the American Council of Engineering Companies of Colorado (ACEC Colorado) - September 2023

Panelist/Judge, 2011 Galvanizing Awards American Galvanizers Association - May 2011

University of Colorado Boulder ASCE student chapter professional advisor 2009 - 2013

Structural Designs for Habitat for Humanity of Denver 2006 - 2013

Scouts BSA Leader 2008 – 2022. Various positions held in both Cub Scouts and Scouts BSA related to both male and female troops. Served as Assistant Scoutmaster and Committee Member. Responsible for high-adventure outings. Red Cross CPR and Wilderness First-Aid trained.

WORK ASSIGNMENT BREAKDOWN

For the time period of 2020 to 2025, Mr. Marxhausen's work assignments, by project count, can be summarized as follows:

Design of Repairs:	42% (mitigation of fire, explosion, vehicle impact, storm, building leaks, foundation movement, tree impact, tornado, and earthquake damage)
Litigation Support/Expert Witness:	35% (construction defect, personal injury, wrongful death, contract dispute, liability, and professional negligence)
First-Party Claim Assessment:	20%
New Construction:	2%
Appraisals:	1%