

MATTHEW A. HAWKS, PE, SE

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4513 Rockwood Drive | Raleigh, NC 27612



National Award-Winning Professional Structural Engineer | Innovative Designer | Homesteader

Education

- North Carolina State University** | Raleigh, NC 2021 – Present
PhD in Design Student | 4.0 / 4
- University Graduate Fellowship; Graduate School Summer Fellowship
- Georgia Institute of Technology** | Atlanta, GA 2010 – 2011
Master of Science in Civil Engineering | 3.60 / 4
- Structural Engineering Mechanics and Materials (Course-based Study)
- Virginia Polytechnic Institute and State University** | Blacksburg, VA 2003 – 2007
Bachelor of Science in Civil Engineering, Cum Laude | 3.48 / 4
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Teaching Experience

- ARC 523: Building Energy Modeling & Simulation** | NCSU Fall 2022
Instructor
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Sustainability Experience

- Co-Proprietor** 2019 – Present
Hawks Homestead | Raleigh, NC
- *Holistic Design & Construction*: Designed whole-system, bottom-up design of homestead, including permaculture, nutrient cycling, gardening flow, and egress.
 - *Resource Cycling*: Milled trees from the property into dimensional lumber, graded, and air-dried for fencing and structures. Reused concrete from demolished driveway for recycled-concrete foundation walls and other uses.
 - *Horticultural Design*: Designed vegetable garden, food forest and mini-orchard, including considerations of plant selection, companion planting, and crop rotation.
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Industry Experience

- Senior Associate** 2014 – 2019
Uzun+Case | Raleigh, NC
- *Structural Design & Project Management*: Led structural design teams for over 40 successful projects ranging from small retail RTU upfits to a 22-story, mixed-use tower built on top of an existing five-story parking structure.
 - *Leadership & Business Development*: Implemented the strategic business venture of launching a branch office. Grew office staff by 300% in four years and developed a regional reputation for excellence in the construction industry.
 - *Research of New Construction Materials & Practices*: Investigated new construction materials and methods to ascertain suitability, costs, and best practices. Led effort of implementation and verification of design methods.
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Industry Experience (continued)

Construction Project Manager 2013 – 2014
RCG Ventures | Atlanta, GA

- *Capital Expenditure Projection & Tracking:* Budgeted, tracked, and managed construction for all major capital improvement projects and tenant build-outs in a portfolio of 70 anchored retail shopping centers. Estimated annualized total construction expenditure of \$10 million for year 2014.
- *Investigative Due Diligence:* Performed assessments of properties prior to closing to identify needed expenditures for purposes of budgets and offer negotiations.

Structural Engineer 2011 – 2013
Uzun+Case | Atlanta, GA

- *Problem Solving & Mitigation:* Designed timely solutions to in-field errors and unforeseen issues. Examined the entire project cycle to reduce potential issues.
- *Project Coordination:* Coordinated with architects, other design professionals, and contractors to ensure proper design and construction team communication.
- *Engineering Analysis & Design:* Performed in-depth, high-level analyses and research. Used peer review and cross-analysis to validate input and model parameters to ensure accuracy of design and output.

Design Engineer 2007 – 2010
SKA Consulting Engineers | Greensboro, NC

- *Investigative Analysis & Structural Design:* Performed analysis and design for a wide range of existing buildings and new projects.

Licensing

Professional Engineer 2013 – Present
State of North Carolina | License No. 041638

Structural Engineer 2013 – Present
State of Illinois | License No. 081007539

Industry Awards

Green Building Initiative 2020
Green Globes Honorable Mention

Structural Engineers Association of North Carolina 2019
Excellence in Structural Engineering Award

American Institute of Architects 2016 | 2016 | 2018 | 2020 | 2021
Design Excellence Award | Honor Award | Design Merit Award | Interior Architecture Award

Engineering News-Record Southeast 2016 | 2020
Award of Merit

American Concrete Institute 2014 | 2015 | 2015 | 2015 | 2017
1st Place Award | Award of Excellence | Outstanding Achievement Award

Georgia Engineering Alliance 2014
Engineering Excellence Grand Award

Honors and Personal Development Awards

Chi Epsilon Honor Fraternity Inducted	2005
Eagle Scout	2001

Certifications and Training

No-Dig Gardening Charles Dowding Somerset, UK	2020
Natural Building Immersion Mud Dauber School of Natural Building Snow Camp, NC	2020
Permaculture Design Certification Wild Abundance Weaverville, NC	2019

Skills

EnergyPlus	OpenStudio	Python
Revit	ETABS	3D Printing
SketchUp	RAM Structural System	Carpentry
AutoCAD	RAM Elements	GIS
Fusion360	Microsoft Office Suite	Seed Saving

Presentations

501 Fayetteville Street – FNB Tower Structural Study Presented to the City of Raleigh Planning and Development Department	2018
Lunch & Learn Presentations Over 30 Presentations on Various Topics for Architectural Clients	2014 – 2018
<ul style="list-style-type: none"> Architecturally Exposed Structural Steel (AESS), Existing Building Codes, Existing Building Codes, Concrete Systems for Architectural Designers 	

Professional and Community Organizations

American Society of Heating, Refrigeration, and Air Conditioning Engineers	2022 – Present
Olympic Mountain Earthwisdom Circle Committee Member	2020 – Present
Carolina Farm Stewardship Association	2018 – Present
Innovate Raleigh Summit Advocacy Team Member	2017
Raleigh Chamber Young Professionals Network Member, Programs Committee	2014 – 2018
Structural Engineers Association of North Carolina Professional Member	2014 – Present
American Society of Civil Engineers Professional Member	2008 – Present