

Course Developer

## Charles Nganga SE (M.S.)

Licensed Structural Engineer (California) || Masters in Structural Engineering  
(Cal poly, San Luis Obispo, CA) || Certified Residential Plans Examiner (ICC)



I am a structural engineer with over a decade of experience in building code compliance consultancy. Over the years, I have reviewed thousands of residential and commercial building designs for compliance with building codes prior to permit issuance and construction. My work involves close collaboration with building officials, designers, and property owners to ensure that proposed designs meet the essential requirements for structural integrity and life safety.

In addition to my consulting work, I am deeply committed to education within the building and construction industry. I have developed and delivered engaging training courses on structural engineering principles and building code requirements (details below).

Through extensive interactions with designers, homeowners, inspectors, and building officials, I've identified a critical need for a comprehensive and systematic training package to demystify complex building code provisions—especially in conventional construction as laid out in the International Residential Code. This realization inspired me to create in-depth structural design and plan-check courses based on conventional construction provisions of the [International Residential Code](#).

These courses aim to inform, equip, and empower both licensed and unlicensed designers with the knowledge and tools necessary to confidently develop code-compliant structural designs. By bridging the gap between complex code provisions and practical application, these courses are designed to enhance the confidence and competency of professionals in the industry.

## My Courses and Past Training Engagements

My commitment to this industry is demonstrated by my input in the following engagements.

### My Courses

#### *Design Courses - [Home](#)*

1. [IRC Roof Framing \(Design\)](#)
2. [IRC Wall and Foundation \(Design\)](#)
3. [IRC Floor & Deck Framing \(Design\)](#)
4. [IRC Wall Bracing - 1 \(Design\)](#)
5. [IRC Wall Bracing - 2 \(Design\)](#)

#### *Plan check Courses [Codex PCA](#)*

1. IRC Roof Framing (Plan Check (PC))
2. IRC Wall & Foundation (PC)
3. IRC Floor & Deck Framing (PC)
4. IRC Wall Bracing (PC)
5. CRC Roof Framing (PC)
6. CRC Wall and Foundation (PC)
7. CRC Floor & Deck Framing (PC)
8. CRC Wall Bracing (PC)

Check out [codexpca.com](#) for my plan check courses.

### Trainer, ICC Chapters

1. ICC Napa/Solano Chapter, 11/18/2020, Via Zoom (2019 CRC) - CRC Wall Bracing.
2. ICC San Joaquin Chapter, 6/14/2017, Hanford CA - CRC Wall Bracing - CRC Wall Bracing.
3. ICC Sacramento Valley (SVABO) Minstitute, 5/3/2017, Citrus Heights CA - CRC Wall Bracing.
4. ICC Redwood Empire Chapter, 4/18/17, Santa Rosa CA - CRC Wall Bracing.
5. ICC Napa/Solano Chapter, 3/14/2017, Fairfield CA - CRC Wall Bracing.
6. ICC Shasta Cascade Chapter, 1/19/2017, Redding, CA - CRC Wall Bracing.
7. ICC Yosemite Chapter, 11/15/2016, Merced CA - CRC Wall Bracing.

### Trainer, Others

1. City of Los Angeles, 3/20/2024 - Zoom. (ICC / SK Ghosh & Associates) - Topic: LABC Chapter 16.
2. City of Sacramento, 10/26/2023, Sacramento CA - CRC Wall Bracing.
3. County Building Officials Association of California (CBOAC), 5/2/2018, San Rafael - CRC Wall Bracing.
4. City of Sacramento (Past) - Sacramento CA - Structural Plan Review of Concrete Tilt-up buildings.