Sabit Timilsina, E.I.T.

(225) 220-9884 | sabittimilsina@gmail.com | LinkedIn | Baton Rouge, LA (Open to relocate)

Education

Louisiana State University **Jan 2025 - Dec 2026 (expected)**
Master's in Civil Engineering (Structural), CGPA: 4.14/4.30 *Baton Rouge, LA*

- Relevant coursework: Structural Dynamics (in progress), Advanced Bridge Engineering, Prestressed Concrete, Advanced Concrete Theory, Advanced Mechanics of Materials.

Pulchowk Campus, Tribhuvan University **2018 - 2023**
Bachelor's in Civil Engineering *Lalitpur, Nepal*

- Relevant coursework: Design of RCC Structures, Design of Steel and Timber Structures, Design of Bridge, Theory of Structures, Indeterminate Structures.

Academic Projects

Seismic Design and Nonlinear Analysis of a 3-Story RC Moment Frame Building | *ETABS, OpenSees* **2025**

- Performed seismic analysis and design of an RC special moment frame per ASCE 7-22 and ACI 318-19; evaluated Immediate Occupancy, Life Safety, and Collapse Prevention criteria per ASCE 41 using nonlinear pushover analysis.

Horizontal Shear Design of Composite Prestressed Beams | *ACI 318-19, AASHTO LRFD* **2026**

- Designed horizontal shear transfer at the interface of a precast prestressed girder and cast-in-place topping slab, evaluating composite behavior, interface shear resistance, and shear tie detailing per ACI 318-19 and AASHTO LRFD.

Dynamic Analysis of an Offshore Structure Under Wind and Wave Loading | *MATLAB* **2025**

- Computed wind and wave loading using Kaimal spectrum and Morison equation to evaluate offshore structure response.

Bridge Approach Alignment and Roadway Design | *Total Station, Civil 3D* **2022**

- Conducted a Total Station survey to develop base mapping and terrain surfaces; designed roadway geometry and drainage for the bridge approach in Civil 3D and prepared quantity takeoffs and a cost estimate.

Residential Building Drawing Set and Cost Estimation | *AutoCAD, Excel* **2021**

- Prepared a complete architectural drawing set (plans, elevations, sections, and location plan) with 3D visualization in AutoCAD; performed quantity takeoff and cost estimation of a typical floor using manual methods and Excel.

Experience

Louisiana State University **Jan 2025 - Present**
Graduate Research Assistant; Graduate Teaching Assistant - CE 3400 Mechanics of Materials *Baton Rouge, LA*

- Conduct experimental testing of UHPC and underwater concrete to evaluate mechanical properties, bond performance, permeability, and fresh-state behavior; use molecular dynamics simulations to investigate polymer interactions with cementitious materials.

Pulchowk Campus, Tribhuvan University **Apr 2024 - Jul 2024**
Research Assistant *Lalitpur, Nepal*

- Conducted porous-concrete mix design and laboratory testing, including compressive strength, UPV, and permeability; developed a MATLAB workflow to quantify pore structure and correlate it with measured performance.

Licenses & Certifications

Engineer-in-Training (EIT) | *Maryland State Board for Professional Engineers* **Oct 2026**
Registered Civil Engineer | *Nepal Engineering Council (NEC)* **Dec 2023**

Skills

Structural Analysis & Design: Familiarity with ETABS, STAAD.Pro, OpenSees, Abaqus
Structural Systems: Reinforced concrete, prestressed concrete; structural steel and timber (coursework)
Design Codes: ASCE 7, ACI 318, ASCE 41, AASHTO LRFD
Drafting & BIM: AutoCAD, Civil 3D, Revit (basic)
Software & Programming: Microsoft Office Suite (Excel, Word, PowerPoint), Python, MATLAB, QGIS, LaTeX

Honors, Publications & Activities

APTEC Gulf Coast Polymer Conference | *Organizing Committee* **May 2026 - Present**
Poster Presentations | *ACI Concrete Convention, Atlanta, GA; LSU Graduate Research Conference* **2026**
Merit Scholarship | *Full tuition; ranked 158 of 14,000 in national engineering entrance exam* **2018**
Publications | *Co-author,* Soft Matter *(2025) and SEM Proceedings (in review) (2026)*