

Macenzie A. Ceglar

(814)-935-8110

mac5676@gmail.com

Objective

To acquire a full time structural engineering position in which I will be able to practice analysis and design, contribute my knowledge and skills to better the company, and have the opportunity to learn from experienced engineers.

Education

The Pennsylvania State University University Park, PA
Integrated Bachelor/Master of Architectural Engineering - Structural Option 2009-2014
Five year professional degree – ABET accredited **GPA: 3.94/4.00**
EIT Status upon graduation in May 2014

Work Experience

The Pennsylvania State University, Grader for Building Structural Systems **December 2013-May 2014**

- ♦ Created solutions for assignments involving the analysis/design of steel and concrete

The Pennsylvania State University, Teaching Assistant for Steel and Wood Design **August 2013-December 2013**

- ♦ Guided student's progress in redesigning a multi-story concrete structure using steel
- ♦ Reviewed periodic team submissions and provide feedback on proposed design concepts

Greenwood Pools – Altoona, PA; Sales and Retail, Lab Technician **Summer 2007-Summer 2013**

- ♦ Observed the structural design and construction of swimming pools
- ♦ Aided clients in conceptualizing in ground swimming pool designs
- ♦ Developed excellent communication skills via in-person, over the phone, and written conversations
- ♦ Trained entry level employees in all technical aspects of water chemistry and pool retail

Relevant Course Work

Design of Steel and Structures I & II	Design of Concrete Structures I & II	Indeterminate Structures
Design of Wood and Masonry Structures	Analysis and Design of Steel Connections	Geotechnical Engineering
Computer Modeling of Building Structures	Building Performance Failures and Forensics	Historical Methods of Structural Analysis

Course Projects

Architectural Engineering Senior Thesis

- ♦ Completed an analysis of the structure of the New Library at the University of Virginia's College at Wise
- ♦ Redesigned the existing composite steel framing using a conventionally reinforced two-way concrete flat slab
- ♦ Determined the practicality of a post-tensioned slab
- ♦ Performed a cost and schedule analysis to determine the feasibility of a concrete structural system
- ♦ Investigated the drainage system and water proofing required for the building's foundation system
- ♦ Final project was chosen as one of the top two senior thesis projects for the structural option

Design of Steel and Wood Structures

- ♦ Worked with a team to redesign a two-story wood structure using steel, and a two story steel structure using wood
- ♦ Focus was on understanding why one structural material may be chosen over another

Architectural Design Studio

- ♦ Worked with a team to design a mixed-use complex that would provide luxury hotel rooms, retail/food, and underground cinemas and parking in downtown State College for returning Penn State alumni.
- ♦ Designed preliminary exposed upper steel structure using basic span-to-depth ratios.
- ♦ Final project was awarded second place in final four project competition.

Computer Skills

RAM Concept SAP2000 ETABS RISA Revit 2013 Revit Architecture Excel PowerPoint

College Honors & Activities

Student Society of Architectural Engineers	Structural Engineers Association	E-house Social Committee
Alpha Lambda Delta Honor Society	Dean's List, Fall 2009 – Fall 2013	Golden Key Honor Society

Hobbies & Interests

Fantasy football, fantasy hockey, hunting, video games, and Dungeons and Dragons