

Civil Engineering - Volunteer

Impact on Catholic Engineering Corps' (CEC) mission + vision

The volunteer will have the opportunity to powerfully impact the work CEC as well as the entire international development community does in bringing sustainable engineering projects to communities in need by helping on real projects which serve the least of these (Mat 25:40). We are looking for a Civil Engineer to assist with engineering projects. In this role you'll be a key contributor to the expansion of CEC, which is dependent on engineering to thrive, and to the assessment, design, implementation, monitoring and learning from projects and partnerships. To do this successfully, you'll need to employ creativity, engineering skills and follow through.

Description + Responsibilities

Intern to focus on improving what CEC offers communities in working on quality engineering projects.

- Complete hydrological models of water systems using EPA-NET or similar software.
- Developing AutoCAD or similar drawings for water, sanitation and hygiene (WASH) projects.
- Reviewing and creating structural engineering requirements for water tanks and latrine slabs.
- Work directly on WASH and other infrastructure projects throughout the world.
- As volunteer resources allow, travel on a trip to work first-hand on engineering projects.
- Collect data and complete research on technical resources, lessons learned, etc.
- Support educational and training activities for CEC members in workshops and webinars.
- Do administrative work: copying, proofreading, and other basic duties may be required on an as-needed basis.

Qualifications + Requirements

- Must be enrolled as an undergraduate or graduate student in course of study in engineering or similar area; or have work experience in the field.
- Preferably know EPA-NET, AutoCAD or equivalent or aptitude for learning new software.
- Preferably be a registered engineer in training, with experience in: construction engineering, construction safety, energy, structures, sanitation or water supply and treatment.
- Experience implementing infrastructure projects in developing communities is preferred.
- Ability to handle and prioritize multiple projects.
- Excellent organizational skills and ability to work under deadlines.
- Be confident, professional, enthusiastic and completely ethical.
- Have a highly developed ability to work independently within a strong teamwork ethos, as well as collaboratively with colleagues to achieve common goals.
- Excellent interpersonal communication skills, both verbal and written.
- Ability to work effectively and independently in a fast-paced environment.
- Proficiency in data entry using Excel, Word and Power Point (or equivalent) & Internet fluency.
- Experience with the CEC project model strongly preferred.

Who am I accountable to? Who is accountable to me?

The volunteer will be accountable to Joshua Knight, P.E., Ph.D., CEO.

Financial Commitment

Volunteers are strongly encouraged to attend international projects they help with. Typical costs

incurred by the member include travel, accommodations, meals, visa, vaccinations, etc., usually \$2,500-\$4,500. We do have a fundraising platform and can assist you in this effort if you would like to raise funds from family and friends for the trip.

Time Commitment

Minimum of 8 hours/ week, 120-hour minimum (duration can match semester/summer length)

Commitment Duration

Duration can be from 8 weeks to 20 weeks, depending on time availability of the volunteer.

Location

While it is ideal for the intern to be located in Metro Denver for regular meetings, a remote location could work with a highly self-motivated intern.

Application

To apply, please send the following to: info@CatholicEngineeringCorps.org.

1. Your resume
2. Your cover letter
3. Copy of your qualifications (If applicable)

In your mail, please:

1. Put "**Civil Engineer**" as the subject line
2. Specify the dates you would be available to volunteer (starting date and length), as well as hours commitment per week.
3. At the end of the email, copy-paste the link of the ad you are responding to

If the application includes all of these, we will get back to you in a maximum of 48 hours.