



Build Change, Revit/Robot Student Expert Internship

Project location: Port-au-Prince, Haiti

Proposed start and end date: June 1 - August 31, 2017, any 10-12 week period within these dates. Earlier start date is also possible.

Brief Description of your organization

Build Change is an award-winning international non-profit social enterprise based in Denver, Colorado which has been in operation since 2004. Build Change saves lives in earthquakes and typhoons by empowering people in emerging nations to build homes and schools that will protect their families and children. Build Change works to strengthen buildings before and after natural disasters strike in Colombia, Guatemala, Haiti, Indonesia, the Philippines, Nepal, and formerly China. Over 26,600 people have been trained on disaster-resistant design and construction who have in turn built more than 166,000 safer buildings. In the process, Build Change has created more than 12,500 jobs and more than 250,000 people are living in safer houses and learning in safer schools. Please visit our [website](#) for further information.

Project Description

Build Change is implementing a project to retrofit and build hundreds of houses in Port-au-Prince, Haiti, using a homeowner-driven model. The Build Change architect and design engineer develop architectural designs, technical studies and qualitative evaluations for each family. The design includes solutions that respond to the family's immediate retrofit needs as well as to the broader shared space and public infrastructure improvement objectives. Build Change's program team produces technical evaluations including adaptations to the soil and retaining walls systems, detailed inventory of materials needed, and cost estimates. In collaboration with the team's socio-economist, the architect and the design engineer will ensure the compatibility of project cost with the investment capacities of the families.

About this Internship Project

The objective for the intern is to support the retrofit and new construction by building the capacity of the in-country engineering team **to utilize Autodesk Revit more skillfully** to more efficiently and professionally deliver program objectives. For this internship, you will gain hands-on, real-world experience by:

- Deepening and applying your knowledge of the existing Revit model to understand the structural system and requirements for retrofit design.
- Creatively applying your Revit knowledge to develop and adapt tools for building modeling, construction document development, detailing for rebar etc, and material quantity and cost estimation.

- Training Build Change's Haitian engineers to model reinforcing bars, wood frame structures and truss, confined masonry.
- Assisting the country engineering team in developing new models, specifically for confined masonry, para-cyclonic houses, and wood truss roofs, and then teaching and sharing your model(s) with the Haitian engineers.
- Training engineers to export Revit model into robot analysis.

Qualifications, Skills & Experience

The ideal candidate should possess the following:

- Enrollment in the [Autodesk Student Expert](#) program prior to the internship commencing is **required**. *Please provide documentation if you are already enrolled in the program.*
- Experience using Autodesk Revit software for building modeling, construction document development, detailing, and material quantity and cost estimation. Some knowledge in Robot structural analysis.
- Bachelor-level degree in civil or structural engineering.
- Recent graduates and Master's candidates are also encouraged to apply.
- Interest in post disaster response, reconstruction and disaster mitigation.
- Interest in instruction and teaching.
- Have a previous experience abroad (academic or professional) for at least 2 months.
- Self-motivated and organized.
- Good communication skills and excellent teamwork abilities.
- Valid passport.
- No ego, drama, or pessimism; the successful candidate will be flexible, humble, patient, and have a good sense of humor.
- Proficiency in French required (at a level to be able to train in French); proficiency in English preferred.
- Women are encouraged to apply.

What's in it for you

- Gain valuable training experience, deepening and expanding your current skills with Autodesk programs.
- Learn how to develop tools and implement them in a real-world context.
- Experience another culture first-hand.
- Know that you are providing a valuable service to build professional capacity in a crucial sector, helping Build Change's team grow stronger and more able to promote good building practices.
- Paid compensation with housing, food and transportation provided.

Please submit your resume and a cover letter to Trena Moya at trena@buildchange.org by 30 April 2017 and include **Revit/Robot Internship** in the subject line. Applications will be reviewed as they are received and interviews may be scheduled prior to the closing date.