

## Engineering Focused Internship Opportunities

<i>Engineering Internship</i>	
<b>Job Title</b>	Engineering Intern
<b>Internship Focus</b>	Sustainable Housing and Infrastructure
<b>Community Partner</b>	Masaya Sin Fronteras (MASINFA)
<b>Location</b>	Masaya, Nicaragua
<b>Partner Profile</b>	<p>MASINFA strives to promote sustainable development through education, health care, sound agriculture, and civic participation. MASINFA provides technological, practical education to low-income residents of Masaya and offers health care and education through prevention programs. MASINFA works to conserve the environment through the facilitation of sustainable practices in agriculture and increasing food security. They also provide small loans and promote housing development and community involvement.</p> <p>MASINFA is composed of three main areas:</p> <ol style="list-style-type: none"> <li>1. A technical continuation school (NAMBUE)</li> <li>2. A cancer prevention and healthcare center (Programa Salud – CIPO)</li> <li>3. A housing and local development arm that elaborates home construction and infrastructure projects (Programa Desarrollo Local Sostenible -DLS) incorporating microfinance</li> </ol> <p>An overarching objective of the organization’s upcoming Strategic Plan is to emphasize the importance of proper nutrition and physical activity for long-term health and disease prevention through a multidisciplinary approach, targeting the youth population, pregnant women, and parents.</p>
<b>Internship Description</b>	<p>As part of the long-term objectives for NAMBUE and DLS, MASINFA is involved in two large-scale building projects in need of planning, design, funding, logistics, and implementation. MASINFA is looking for an intern with experience in civil engineering, finance, and/or business to assist in the development of these projects at different stages of planning, design, and implementation. The intern will work with their supervisor at MASINFA to develop a work plan to help execute the internship program. The intern will have the opportunity to participate in developing one of two infrastructure projects:</p> <ol style="list-style-type: none"> <li>1. An outdoor recreational space for students and community to gather for the purpose of reinforcing appreciation for the natural environment through the planting and caring for trees and gardens; instilling the values of physical activity in health through walking paths and a playground; and an appreciation for traditional cultural activities.</li> <li>2. A backpacker’s hotel whose proceeds would be invested back into the school where students of accounting, tourism, and English would participate in the operation of the hotel as part of an internship program.</li> </ol>

<i>Environmental Management Internship</i>	
<b>Job Title</b>	Environmental Management Internship
<b>Internship Focus</b>	Water, Sustainable Agriculture

<b>Community Partner</b>	St. Charles Kyabakuza Primary School
<b>Location</b>	Masaka, Uganda
<b>Partner Profile</b>	St. Charles Lwanga Kyabakuza Primary School was founded to fight illiteracy. It was started as a church school to educate children and community members about religion and literacy skills. The institution has grown and turned into a Government Aided Primary School with an enrollment of 500 children. The institution also gets funding from parents, and local NGOs. The school strives to provide quality education with self-sustainable skills for citizens.
<b>Internship Description</b>	One of St. Charles Primary's biggest challenges is harvesting water during the wet seasons to use during the dry seasons. The rainfall can be very rough and destroys plants and cause erosion. St. Charles Primary would like an intern to help design and develop a water harvesting project that can be shared with the community to address this problem. Primary responsibilities will include managing a water harvesting project; conducting community outreach; and assisting in developing water distribution systems in the community surrounding the school. We are looking for an engineering student with interest/experience in environmental issues; interest in public health issues; and organizational and communication skills.

<i>Agricultural and Environmental Engineering Internship</i>	
<b>Job Title</b>	Agricultural and Environmental Engineering Intern
<b>Internship Focus</b>	Water, Sustainable Agriculture
<b>Community Partner</b>	La Casa de los Niños
<b>Location</b>	Cochabamba, Bolivia
<b>Partner Profile</b>	The Casa de los Niños was established in 2008 and is essentially a small, self-contained community with 90 families. Its mission is to assist, support, and provide education to children with disadvantages who might otherwise be abandoned due to economic or family circumstance by providing support to their families through housing, job support, and a welcoming community, etc. Among the 90 families more than 15 of them have a father or a mother with HIV, and there are also 15 children with HIV. A large number of children in the community also deal with severe physical disabilities or chronic medical conditions. There is also a school within the community where about 140 attend, 90% of them being from the community and 10% coming from outside. It is essentially a small, self-contained community that seeks to provide support in any number of ways to its community members.
<b>Internship Description</b>	The intern will work with the Casa on their community garden and other environmental concerns they are facing (contaminated water, pollution, recycling, etc). The community is always looking to improve/expand the garden, as it is used to feed the children at the school, as well as consumed by the families themselves. Much of the water used by the Casa for agriculture and consumption is contaminated and handled improperly. Trash contaminates the grounds/garden.  The intern would work on the improvement of the garden or on projects to improve other environmental concerns, including designing engineering interventions to improve production and water sanitation.

<i>Solar Energy Evaluation Engineering Internship</i>	
<b>Job Title</b>	Solar Energy Evaluation Engineering Intern
<b>Internship Focus</b>	Solar Energy

<b>Community Partner</b>	CARITAS
<b>Location</b>	Jinja, Uganda
<b>Partner Profile</b>	CARITAS is a social services and development organization. Its mission is to build and strengthen the capacities of communities and partner organizations through proven and effective management practices.
<b>Internship Description</b>	CARITAS is working with a solar company to promote solar as a renewable energy. The organization needs follow-up support on how the current system of promoting solar works and the monitoring of the current performance. The intern project will explore the current solar technology and new better approaches for spreading the technology in the community. The intern will work with their supervisor at CARITAS to develop a work plan to help execute the evaluations of current solar instruments and develop a plan for expansion. Included in the work plan will be coordinating logistics and performing community assessment to understand how to best approach the implementation of solar energy within the community context.

<i>Agriculture and Sustainable Farming Engineering Internship</i>	
<b>Job Title</b>	Agriculture and Sustainable Farming Engineering Intern
<b>Internship Focus</b>	Sustainable Agriculture
<b>Community Partner</b>	Association for Equitable Economic Development (Alternativa)
<b>Location</b>	Masaya, Nicaragua
<b>Partner Profile</b>	<p>Alternativa's vision is to be a real alternative: promoting small business competitiveness, creating a financial resource base by providing loans and organizing communal banks and cooperatives, leading financial training workshops, and conducting outreach to the most vulnerable sectors of the population. Alternativa currently serves 1,200 clients through loans and other services. About 75 percent of Alternativa's clients are women and the organization reflects a strong commitment to women's rights and sustainable economic development.</p> <p>The programs provided to community members form a three-pronged initiative for education and empowerment in the areas of micro-enterprise, economic stability and sustainability, and community development. The programs include Urban and rural micro-credit, Microfinance marketing and strategic management, conglomerates and cooperatives, youth education and community development.</p>
<b>Internship Description</b>	<p>In the rural communities served by the vast and varied services of Alternativa, has several opportunities for an Agriculture and Sustainable Farming Intern to complete project work towards improving the quality of life of families, individuals, and livestock through the following objectives and/or activities:</p> <ul style="list-style-type: none"> <li>• Many rural constituents who may own a small piece of land are not necessarily using their land for food and/or income production purposes. These communities would benefit greatly from programs/workshops/campaigns teaching successful and sustainable farming methods, crop selection and rotation strategies, etc.</li> <li>• Developing appropriate technological solutions for crop management and sustainable farming</li> <li>• Workshops focusing on proper care and utilization of livestock in sustainable farming methods</li> </ul>