

**JOB DESCRIPTION**

**Job Title:** CHARTERED STRUCTURAL DESIGN ENGINEER (VOLUNTEER)

**Reports to:** BeehiveDirector of Design and Construction / Krizevac Managing Director

**Pay Grade:** Voluntary

**Duration:** Minimum 6-months

**Start Date:** July 2023

**Locations:** MALAWI -MQoP Catholic University Campus (Chilomoni Ring Road, Blantyre)

**Provisions:** 1 x return flight from London Heathrow to Blantyre Malawi

1 x TEP (Temporary Employment Permit) for Malawi to cover the duration of your stay

 Medical fees, medical vaccinations and Malaria medication costs

 Sharded private accommodation and basic board for the duration of your stay

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**OVERVIEW:**

This is an exciting opportunity for an experienced Chartered Structural Design Engineer to live and volunteer in Malawi, South-East Africa, and truly make a positive impact on a hard working but incredibly poor community. The successful applicant will be responsible for developing the structural design concepts for several buildings on a new University Campus, which will provide quality educational facilities to thousands of adults and young adults.

**RESPONSIBILITIES:**

**MQoP Catholic University**

* To communicate and coordinate with the remote Engineering Team in the UK on the structural design of a second building on the MQoP University Campus, with a view to commencing construction in late-2024
* To progress the structural design concepts for the second building on the MQoP University Campus, with a particular focus from the outset on confirming the optimal approach to façade treatment, and be able to deliver an assessment of how the necessary structural frame, project budget, project programme, material procurement and site supervision will be affected by the recommended approach to façade
* To consider and critique the seismic design principles set-out by the Engineering Team in the UK during all structural design development activities
* To work closely with the Construction Manager and Foremen in Malawi to gain a solid understanding of how structures are built in Malawi
* To regularly communicate with the Architectural design team in Malawi to ensure that Engineering design requirements are well-balanced with Architectural design requirements
* To liaise with the Local Structural Engineer, and other local construction experts, to ensure that vernacular engineering design principles and methods are being considered in the design of the second building on the MQoP University Campus
* To discuss any site queries which may arise during design development with the Construction Manager, Director of Design and Construction, or Local Structural Engineer, and agree on a resolution
* To contribute to discussions on procurement, and visit local suppliers, to better understand the sizes / types of products available in Malawi, so as to inform Engineering specifications and procurement strategies being recommended for structural elements for the second building on the MQoP University Campus
* To oversee a ‘Tolerance Study’ of the Beehive buildings completed to date, to inform how future buildings on the University campus are engineered
* To offer other general advice / guidance, both conceptual and physical, on developing structural aspects of the MQoP University Campus masterplan (eg. access roads, revetment walls, water towers, etc.)

**MQoP Student Accommodation**

* To advise, where required, on general structural engineering aspects of new Student accommodation blocks at Beehive’s ‘Mitsidi’ site, which will likely comprise a series of simple, low-rise, masonry buildings

**General Commitments:**

* To attend weekly / fortnightly in-house team meetings on Construction / Procurement / Design, and to contribute meaningfully to those meetings
* To attend fortnightly Design Team meetings with the wider Design and Engineering team, and to contribute meaningfully to those meetings
* To be dressed in the appropriate PPE at all times when on site, and to request new / additional PPE as required
* To be aware of the location of the site First Aid Kit / Fire Safety equipment, in the event of an accident
* To be on site during the working hours agreed with the Director of Design and Construction
* To ensure that any annual leave, absences, etc, are agreed with and approved by the Director of Design and Construction in advance

**PERSON SPECIFICATION:**

* A strong Degree in Civil or Structural Engineering
* A minimum of 5 years structural design experience
* Experience of site inspection essential
* Experience with working on Commercial buildings preferred
* Experience with developing and outputting structural design packages essential
* Experience with designing and developing façade systems a bonus
* Solid understanding of seismic design principles essential
* A resourceful approach to finding alternatives to details and methods of construction used in the UK
* Expert knowledge of UK design standards and regulations
* Strong communication skills, both written and verbal
* A positive, supportive and cheerful team member with a flexible approach to problem-solving
* Chartered with ISTructE or ICE