PHD SCHOLARSHIP

The School of Civil Engineering at The University of Queensland (Brisbane, Australia) is offering a PhD scholarship for a motivated student to contribute to research being undertaken within the Transport Research Group. The successful student will be funded within the UQ – Port of Brisbane Partnership for the project “Modelling freight transport and optimising intermodal infrastructure for improving the competitiveness of the Port of Brisbane”. Potential students with an interest in network modelling and optimization are strongly encouraged to apply. The scholarships will be for three (3) years and valued at $26,288AUD per year. Top-up scholarships and international student fee-waivers are also available to exceptional candidates.

PROJECT INFORMATION

Modelling freight transport and optimising intermodal infrastructure for improving the competitiveness of the Port of Brisbane

This project proposes the development, formulation and implementation of freight transport models at both the demand and the network level with the aim of responding to the questions from the Port of Brisbane about (i) analysing the national supply chain to support marketing more trade through the Port of Brisbane, (ii) understanding the competitive threat posed by mega intermodal and distribution facilities planned in Sydney, and (iii) providing a solution for the intermodal infrastructure for Fisherman Island.

This project exploits synergies with current postdoctoral and doctoral studies that focus on modelling the choice behaviour of transport mode and vehicle type from the port by shippers and carriers, with an outlook towards the future option of incrementing coastal shipping. Starting from the understanding of the economics of road vs. rail vs. sea, this project aims at looking at (i) the choice of optimal location and size of distribution centres, (ii) the choice of routing within the supply chain, and (iii) the optimisation of the intermodal infrastructure for Fisherman Islands. In addition, this project offers the opportunity to work directly with one of Australia’s fastest growing container ports during a period of major regional infrastructure improvement and provides a highly stimulating and relevant research environment as well as open future research opportunities.

We are looking for a motivated student with background in network modelling and optimisation that would like to work in a young and vibrant research group at UQ and interact with decision makers at the Port of Brisbane in order to solve key future challenges facing the port industry.

QUALIFICATIONS

Candidates must hold a relevant undergraduate or Master’s degree in civil engineering, transport engineering, logistics, mathematics or statistics. Candidates with skills or interest in network modelling and optimisation are strongly encouraged to apply.

HOW TO APPLY

Interested candidates should submit their scholarship application on the Application for school-based PhD or MPhil scholarship form, together with your supporting documents on the RHD online application system.

Details on the application for admission and scholarship process can be found at http://www.civil.uq.edu.au/RHD-application-apply.

For further details on the scholarship project, please contact Prof. Carlo G. Prato at c.prato@uq.edu.au. Submission due by 11/07/2016.