Become a global leader. Innovate and prevent an environmental catastrophe.

Global Innovation Program 2021

USA – Australia – Bosnia & Herzegovina

Host institution: La Trobe University, Melbourne, Australia

Host Lab: La Trobe Innovation & Entrepreneurship Foundry (LIEF)

Host Academics: Dr. Eddie Custovic & Dr. Damir Mitric

Travel to Australia and work with peers from La Trobe University in Melbourne to tackle important environmental issues facing Bosnia and Hercegovina using design thinking methodology and applied engineering principles.

Travel with your Australian project team to Bosnia and Hercegovina to further develop your innovative product, build your prototype and ground your research in real life global contexts.

Background

The Global Innovation Program (GIP) is a unique inter-disciplinary project-based learning subject which utilizes design thinking methodology to task you with developing and conceptualizing a detailed design of a product/service, which benefits Bosnia and Herzegovina's post conflict society.

You will learn about the theory and application of innovation and the design thinking process, allowing you to discover and define problems with empathy and human centric design in mind, capture primary research, generate ideas, design concepts, rapidly prototype, evaluate and analyze your innovation. You will subsequently gain insight into innovation by developing a detailed product/service.

You will learn to consider the societal, legal and environmental impacts of your innovation, work in teams and learn how to best leverage from individual strengths. You will also embrace marketing principles, stakeholder engagement, presentations and pitching of ideas during the design process to understand the communication required to get your innovation to the intended audience.

The Problem, Research & Development

The problem you will be tacking is a major environmental catastrophe which is being faced in what is called "No Man's Land" or in this context, a waterway which is being disputed by two countries. The Drina river separates Bosnia & Herzegovina and Serbia and has in the past 10 years heavily polluted. We believe that Cooper Union students, La Trobe University students and students from the Bosnia & Herzegovina Futures Foundation can help solve this problem by developing an autonomous garbage collection barge. There are number of matters that need to be researched thoroughly prior to the design of the barge and finally the build and test phase in Bosnia & Herzegovina.

Structure

USA (1 June – 5 June)

Cooper Union students engage in self-paced pre-departure activities as well as an online webinar to prepare for their trip to Australia.

Australia (6 June – 29 June)

Project teams are formed and introduced to this year's challenge which will focus on the widespread pollution of Bosnia's waterways and its environmental and economic impact on the country.

Teams engage in a three-week blend of online and face to-face development program at the La Trobe University Melbourne campus.

Figure 1 - Melbourne, Australia

Bosnia & Herzegovina (30 June – 21 July)

Teams travel to Bosnia. They spend two weeks building the prototype they have developed.

One week is dedicated to cultural immersion activities, including travel, which will help foster key global soft skills.

(Students can also opt into a one-week intensive industrial robotics & automatization training program at the DKR – German Robotics Centre in Tuzla.)

Figure 2 - Mostar, Bosnia & Herzegovina

Teaching philosophy

This subject helps you prepare to live and work effectively and ethically in the global "super-complex" world of today. This is a world of unpredictability, uncertainty and ongoing change and negotiation.

Our curriculum places you at the centre of the action – not as a proxy who learns in the traditional sense, but as a co-creator, co-navigator and co-negotiator of this "super-complexity". Students and teachers are therefore transformed into partners who together navigate and make sense of the learning.

By fostering such partnership we simulate the realities of modern working life and in the process help you develop your own professional identity. This ultimately supports your transition from higher education to employment.

Industrial robotics & automation training

This program offers you a unique opportunity to learn industrial robotics automation, programming and operation from world leading German industrial robotics & automation experts, while in parallel, developing crucial enterprise skills, which will make you highly employable.

Costs

Flights

New York – Melbourne – Sarajevo – New York

Approximately – **US$2,400**

(Students will be responsible to book their own flights)

Australia

Accommodation – A$800

Food – A$500

Bosnia

Accommodation – A$1,000

Food – A$500

Transport – A$150

Materials – A$250

TOTAL – US$2,600

(US Dollars)

(Excludes flight)

Optional

Robotics training **– US1,000**

The team

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Figure 5 -Eddie Custovic

Figure 3 - Damir Mitric

Figure 4 - Daniel Hook