

# **Department of Economics**

## **EC981 Dissertation Proposal**

Family Name: Qu

Given Name: Gavin

Registration Number: 2310773

Degree Program: MSc Economics

### **Names of your preferred supervisors**

First Choice: David Zentler-Munro

Second Choice: Quentin Lippman

*Please note it is not always possible to assign you to either of your choices, in which case we will assign a supervisor based on the area you wish to write your dissertation.*

### **Proposed title and area of your dissertation (as detailed as possible):**

#### **Proposed Title: Unveiling Income Dynamics: Machine Learning Insights from Marital Status-Based Matching Analysis**

I will be using machine learning techniques such as Logit and Random Forest to compute the lagged variable's effect on the propensity score, which will be used to match individuals in the UKHLS dataset to study the causal effect of marital status on income growth, I can further demonstrate the gender dynamics of this outcome. Essentially, I will attempt to answer this question: why do people get married in cases where their income is negatively affected?

Relevant field: Labor Economics, Causal Inference.

**Please upload this form to FASER by noon on Friday, March 22.**