

The Conference  
Board of Canada

# Project Proposal Directed Course

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# Project Proposal

## Project overview

During this directed course, the student will work on using statistical methods (time series econometrics, machine learning, etc.) to produce detailed labour market forecasts for the Canadian economy.

## Project details

**Background** – The Conference Board of Canada (CBoC) produces high resolution forecast of the Canadian labour market. This model named the Model of Occupations, Skills and Technology ([MOST](#)), uses several sources (public and proprietary including CBoC's own industry forecast), to predict employment levels at the same level of resolution as the Canadian Census – by Province/Territories, 5-digit NOC and 4-digit NAICS. Because both historical time series (such as the Labour Force Survey) and forecasts (such as CBoC's forecast at the 2-digit industry level) vary at a far more aggregated level, a key component of the model is to translate these data to a more detailed breakdown.

**Project** – The goal of the project is to use statistical methods (econometrics, machine learning, etc.) to perform disaggregation of the data used by model. In coordination with the lead economist and data scientist maintaining the model, the student will be invited to explore a set of possible statistical tools and compare the performance of such methods against the current deterministic method.

**Student's profile** – the work can be performed in both French and English but the student should be comfortable enough with English in order to navigate available resources. An interest in econometrics and/or labour economics, as well as knowledge of R and/or Python would be nice to have.



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