

## CAUSAL THINKING (MATH-352)

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

### Midterm exam

Date: 17.11.2025

Name: \_\_\_\_\_

SCIPER: \_\_\_\_\_

#### INSTRUCTIONS TO CANDIDATES

- This exam will contribute 20% to your final grade. To obtain the maximum number of points you should be clear about your reasoning and present your arguments explicitly. You have **1.5 hours** to complete the exam.
- All that can be used for this exam is a pen. No notes, books, summaries, formula collections or calculators are allowed. All questions should be answered.
- The finest enumerated item in each question will be marked on a scale of 0–2 points, indicating an incorrect, partially correct and completely correct answer respectively (half-points are not given). **The exam has 2 questions with a total of 26 points.**
- **Write the answer to every question in the booklet.** Scrap paper will be provided for rough work, but only answers written in the booklet will be marked.

Mark question 1 (TOT: 12 points):

Mark question 2 (TOT: 14 points):

## VARIABLE DEFINITIONS

The following variable definitions and supports apply throughout every question of the examination:

- $A \in \{0, 1\}$  is a treatment variable.
- $Y \in \mathbb{R}$  is an outcome variable.