



Essentials for Hospitality and Business Studies

MATH TRACK

Course Overview

During the course, students will learn essential concepts such as algebra, basics of statistics and also transfer this to calculations in software like Excel. The course focuses on motivating students to see math as a tool with important use in (business) life. The course emphasizes the development of intuition and logic.

Learning Outcomes

- Translate simplified real-life problems in mathematical expressions and equations
- Break down quantitative problems into several solution steps
- Mathematically solve a problem by choosing appropriate formulas and tools
- Input and handle data in Excel for simple mathematical problems
- Interpret and evaluate the various results obtained (analytically and graphically)

Course Plan

The Math track is designed as a 12-week program, offered on-site at Lausanne campus. All activities are supported by individual practice exercises, with feedback provided by professor, student peers and self-assessment. Practice exercises are ungraded. No asynchronous lessons are planned.

WEEK 1 - 3

Intuition and mathematical logic

- Formulate equations to capture real-life problems
- Link independent variables to business actions and dependent variables to business outcomes
- Interpret graphs, growth numbers, percentages

WEEK 5 - 7

Solving mathematical problems

- Capture data in software such as Excel
- Insert formulas in Excel cells
- Follow basic rules such as Order of operations

WEEK 9 - 12

Expanding tool and formula skills

- Calculate growth rates on multi-year time-series
- Calculate averages and standard deviations on historic data, and understand conditions of applicability
- Calculate non-linear operations such as square root, exponential, and understand conditions of applicability