Dear Admissions Committee,

I am writing to provide a brief supplementary statement in support of my application to the **Master in Advanced Mathematics**. My **long-term goal is to pursue a PhD in operations research or computational social science**. Through my studies and research in economics, I have come to realize that the kind of **computational and decision-oriented work** I hope to pursue in the future requires a **deeper and more systematic mathematical foundation** than my current training alone has provided.

For this reason, I have been seeking programs that could prepare me for this next stage. I am particularly glad that the University of Barcelona offers both the **Master in Advanced Mathematics** and the **Master in Fundamental Principles of Data Science**, since together they reflect the combination of **theoretical depth and computational training** that I hope to develop over the long term. Within this broader plan, the Master in Advanced Mathematics is especially important to me because it would provide the **rigor and analytical foundation** I still need for future PhD study.

As my CV shows, my academic background is in **economics**. To prepare for further study, I have worked to strengthen my mathematical foundation beyond my undergraduate coursework in **statistics, calculus, linear algebra, and probability**. As part of this effort, I completed **MIT's Math Boot Camp for Engineers** and systematically studied **real analysis, discrete mathematics, Fourier analysis, and complex analysis** through online coursework. This preparation has given me greater confidence in my ability to undertake **rigorous graduate study in mathematics**.

In this context, I am especially drawn to the program's strengths in **probability and statistics**, as well as selected courses in **dynamical systems and applied mathematics**. Courses such as **Probability Theory, Statistics, Stochastic Calculus, Functional Analysis and Calculus of Variations, Partial Differential Equations, Discrete Dynamical Systems, and Simulation Methods** would provide rigorous preparation for future work in **stochastic modeling, optimization, and computational social science**.

I recognize that I am applying from a **non-traditional mathematics background**, and I have approached this transition with **seriousness and initiative**. I sincerely hope the Committee will consider both my efforts to build this foundation and my previous **research and computational experience**, and give me the opportunity to continue along this path.

Thank you very much for your consideration.

Sincerely,
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