To Whom It May Concerns

My interest in mathematics took root when I was a young e-gamer contemplating how the computer processed large datasets to run my games. I learned to code through a Python book someone gifted but quickly got stuck on the workings of numerically complex algorithms, so I enrolled in a Pre-Engineering Maths track in high school. The struggle over time turned into fascination, pushing me to enroll in a Maths bachelor's to cement that foundation. Best of all, in my university projects, I could incorporate newly learned mathematical techniques like optimization with my core interests in applied mathematics and computational modeling. Through the degree, I became more aware of mathematical problem-solving and performed well at Pakistan's premier university.

Concurrently, I have worked on various mathematical projects, which, together with my bachelor's mathematical modeling, numerical analysis, and applied mathematics modules, pushed my interest towards a career in applied mathematics and its real-world applications. At the Erasmus Mundus and consortium-based master's programs in mathematics, I would enjoy courses related to differential equations, dynamical systems, and scientific computing to build a foundation for modern mathematical methodologies. Specifically, research in applied mathematics, computational techniques, and mathematical physics shares my curiosity.

I would thrive with the Erasmus Mundus and consortium-based programs' strong focus on EDI and a multitude of student clubs. I can improve my language skills, participate in e-gaming leagues, and share my passion for mathematics, space, and the wonder of mathematical discoveries with others. Additionally, this presents an opportunity to step out of my comfort zone—learning about the world through opportunities for interdisciplinary learning and cultural exchange at partner universities, delving into the mathematical and academic heritage of different countries, and feeling a sandy beach under my feet for the first time.

I plan to utilize these programs' expertise in mathematical modeling, computational methods, and numerical simulations to develop scalable and effective solutions. This course fits well into my long-term objective of being a mathematician, allowing me to make useful contributions in areas such as engineering, physics, and technology, where advanced mathematical techniques are essential to drive innovation and optimization.

To summarize, I am excited to join the Erasmus Mundus and consortium-based master's programs in mathematics for an enriching experience to better understand advanced mathematics and its real-world applications. The multicultural environment at partner universities will allow me to connect with people from diverse backgrounds and make lifelong connections. I am eager to get international exposure, live independently, and, with it, continually self-reflect and improve. This is not just personal learning but reciprocally acting as a part of these programs' family during my degree and beyond.