## NATIONAL TECHNICAL UNIVERSITY OF ATHENS



SCHOOL OF APPLIED MATHEMATICAL AND PHYSICAL SCIENCES

INTER-DISCIPLINARY POSTGRADUATE STUDIES PROGRAM

Mathematical Modeling in Modern Technologies and

Financial Engineering

## **Interdisciplinary Postgraduate Program**

## "Mathematical Modeling in Modern Technologies and Financial Engineering"

## CALL FOR APPLICATIONS ACADEMIC YEAR 2025-2026

The Schools of Applied Mathematical and Physical Sciences (coordinating), Electrical and Computer Engineering, Chemical Engineering, Rural and Surveying Engineering – Geoinformatics Engineers, and Naval Architecture and Marine Engineering of the National Technical University of Athens (NTUA), offer the Interdisciplinary Program of Postgraduate Studies "Mathematical Modeling in Modern Technologies and Financial Engineering" and call all those interested in attending the MSc Program, to submit their application by the 22<sup>nd</sup> of June 2025\*.

The MSc Program "Mathematical Modeling in Modern Technologies and Financial Engineering" has been included in the internationalization project of NTUA postgraduate studies [the project "Support of internationalization actions of the postgraduate studies of the National Technical University of Athens" is co-financed by Greece and the European Union (European Social Fund) through the Operational Program "Human Resources Development, Education and Lifelong Learning"], with the aim to promote study opportunities for international students, along with research and educational activities at NTUA. In this context, the language of instruction will be English.

This Postgraduate program is designed for graduates of Natural Sciences, Economics, and Engineering disciplines, providing them the opportunity—after acquiring in-depth knowledge of mathematical modeling tools and techniques—to specialize in one of the following three distinct directions:

- Direction "Modern Technologies"
- Direction "Mathematics of Data Science"
- Direction "Financial Engineering"

Eligible applicants include graduates of Higher Education Institutions (HEIs) in Greece, as well as graduates of equivalent and officially recognised institutions abroad. In particular, the programme is open to graduates of Departments of Mathematics, other Departments within the Physical Sciences, Schools of Engineering, polytechnic universities,





Departments of Economics, and the Military Academies of Greece. It should be noted that award of the postgraduate degree (MSc) does not confer a basic degree from the National Technical University of Athens (NTUA). Subject to the same condition, applications may also be considered from holders of degrees from other academic fields, in accordance with the provisions set out in the applicable regulations.

Final-year undergraduate students from the above-mentioned categories who are accepted into the programme must provide official proof of graduation (degree or diploma) in order to finalise their enrolment.

The selection of postgraduate students will be made mainly on the basis of the following criteria:

- the overall grade of the diploma/degree,
- the ranking of the diploma/degree grade in relation to the grades of other graduates in the same School/Department in the year of graduation.
- grades in the undergraduate courses that are relevant to the M.Sc. programme,
- grade of the undergraduate diploma thesis, where applicable,
- any other postgraduate degrees related to the subject of the M.Sc. programme,
- research, professional or technological activities of the candidate,
- curriculum vitae and statement of purpose.
- recommendation letters,
- personal interview,
- the level of command of English language,
- computer literacy,
- if the applicant is employed, consideration will be given to the needs of their organisation and the applicant's future professional prospects.

A solid background in mathematics and proficiency in English are essential.

The interviews of the candidates, who will qualify during the first selection phase, will take place very shortly after the applications' deadline. The schedule of interviews will be announced on the website of the program

(https://mathtechfin.math.ntua.gr/?page id=3661&lang=en  $\rightarrow$  CANDIDATES ) and of the School of Applied Mathematical and Physical Sciences (www.semfe.gr), in Announcements for postgraduate studies.





International students are welcome. Starting in 2023, non-EU students will have to pay tuition fees of 500 Euros per semester.

All candidates are invited to submit their application online at <a href="mailto:pgradsemfe@mail.ntua.gr">pgradsemfe@mail.ntua.gr</a>
<a href="mailto:until Sunday June 22nd">until Sunday June 22nd 2025</a> by sending the following documents:

- Application Form, available:

   a) on the website of the Interdepartmental Graduate Program
   https://mathtechfin.math.ntua.gr/?page id=3661&lang=en → CANDIDATES and
   b) on the website of the School of Applied Mathematical and Physical Sciences (SEMFE) of NTUA: www.semfe.ntua.gr
- 2. Copy of Degree or Diploma, or documentation indicating the expected date of graduation.
  For the acceptance of degrees from foreign institutions, the institution must be listed in the National Registry of Recognized Foreign Higher Education Institutions (<a href="https://www.doatap.gr/home\_english/">https://www.doatap.gr/home\_english/</a>) At this stage, and in order to certify that the degree of graduates from foreign institutions is included in the above National Registry, it is required to submit a screenshot displaying the relevant information.
- 3. Copy of the Official Transcript of Records.
- 4. Certificate of graduation rank (ranking certificate) for the year of graduation.
- 5. Curriculum Vitae (CV), including full details of academic studies, high school diploma grade, degree grade (or expected grade), any research and/or professional experience, scientific publications (if any), and other relevant information.
- 6. Statement of purpose.
- 7. Proof of Proficiency in English (Level B2 / C1 / C2). A basic knowledge of Greek language is recommended for international candidates.
- 8. Copy of Passport or National Identity Card.
- 9. Up to two (2) Letters of Recommendation (from a professor and/or employer), Form, available:
  - a) on the website of the Interdepartmental Graduate Program

    <a href="https://mathtechfin.math.ntua.gr/?page\_id=3661&lang=en">https://mathtechfin.math.ntua.gr/?page\_id=3661&lang=en</a> → CANDIDATES and

    b) on the website of the School of Applied Mathematical and Physical Sciences

    (SEMFE) of NTUA: <a href="www.semfe.ntua.gr">www.semfe.ntua.gr</a> which must be sent directly by the referees to the following email: <a href="mail.ntua.gr">pgradsemfe@mail.ntua.gr</a> with the <a href="mail.gr">subject</a>:

    "LETTER OF RECOMMENDATION MTF (APPLICANT'S FULL NAME)".

Submit all documents by email to: <a href="mailto:pgradsemfe@mail.ntua.gr">pgradsemfe@mail.ntua.gr</a>





 $\textbf{Subject line} \hbox{: "APPLICATION MTF-(CANDIDATE'S NAME)"}$ 

Application deadline: Sunday, June 22nd, 2025

More information: http://www.mathtechfin.math.ntua.gr

or contact A. Katzilieri at +30 210-7724190.

\* In the case that the allocated positions are not filled a second round of applications may be announced.

Athens, 20th May 2025

Director of the Postgraduate Programme

S. Lambropoulou, Professor, NTUA



