

SCHOOL OF ENGINEERING

CALL FOR DOCTORATE APPLICATIONS FOR THE ACADEMIC YEAR 2025-2026

The School of Engineering invites applications for its PhD Program in Mechanical Engineering for the Academic Year 2025-2026.

Deadline for submission of applications: Monday 15th September 2025

PhD Program in Mechanical Engineering

All positions fall within the broad field of **mechanical engineering-related disciplines** in multi-disciplinary areas, including the following domains:

Num.	Domain
1.	Electric vehicle crashworthiness
2.	Design of smart road restraint systems
3.	Modelling and simulation of manufacturing and 3D-printing processes and lightweight structures
4.	CAD/CAM Systems and CNC Machine tools
5.	Modelling and simulation of manufacturing and 3D-printing processes and lightweight structures
6.	Aircraft Design, Aerodynamics, Performance, Flight Dynamics
7.	Unmanned Aerial Vehicle (UAV) Design and Autonomous Flight
8.	Energy Systems
9.	Oil & Gas Engineering
10.	Thermo-economic optimization
11.	Energy Markets
12.	Energy Strategy
13.	ICE with the aid of CFD (two-phase flow, combustion)
14.	Sustainability Assessment of the built environment

15.	Experimental and Numerical Thermofluids applied to the built environment
16.	Hydrogen RES-Storage
17.	Optimization and inverse problems using neural networks
18.	Thermal Tomography
19.	Personalized SPECT imaging
20.	Manufacturing medical phantoms/devices (3d printing, molding, automation)
21.	Simulate radiation penetration in structures (nuclear protection/accidents etc.)
22.	SLAM: Simultaneous Localization and Mapping (autonomous control method).
23.	Satellite Attitude Determination and Control Systems (ADCS)
24.	Engineering Economics
25.	Sustainable Blue Economy
26.	Operations Management

Doctoral Program Director: Professor Varnavas Serghides, Email: eng.sv@frederick.ac.cy

Admissions Requirements

Eligible applicants must hold a Bachelor's degree in any scientific discipline (such as, Business Administration, Accounting, Finance, Economics, Maritime, Engineering, Law, Life Sciences, Social Sciences), obtained from an institution recognized in the country where it operates. A Master's degree relevant to the proposed research area of PhD studies is also required. Applicants who do not hold a relevant Master's degree may be also considered under special circumstances.

The PhD Program is based on the European Credit Transfer and Accumulation System (ECTS). The award of the PhD degree requires the completion of 180 ECTS.

All candidates must have a very good knowledge of the English language.

For more information visit the University's web site (HERE).

Applications

Each application for admission must include:

- A completed Application Form, available online (HERE).
- An up-to-date Curriculum Vitae.
- A Personal Statement (1-2 pages), outlining the candidate's professional and research interests and future plans, their suitability to the PhD program and the reasons for applying.
- A Preliminary Research Proposal (approximately 1500 words), briefly describing the proposed area in which the candidate is interested in conducting research.
- Certified copies of all relevant Degrees and Transcripts.
- Copies of any other supporting material, such as, exams, awards, etc.
- Two (2) Letters of Recommendation, at least one from an academic referee
- Proof of English Language proficiency, such as, TOEFL, IELTS, IGCSE, Cambridge Certificate of Proficiency in English or any other equivalent language examination. Candidates, who have completed an undergraduate or graduate program where the language of instruction was English, satisfy the proof of English language proficiency requirement.

All application material must be submitted in English.

Candidates who meet all the admissions criteria may be invited for an interview.

Tuition Fees

Tuition fees and program-specific scholarships are published on the Frederick University website (<u>HERE</u>). Further special tuition waiver leading up to 90% tuition funding may be available.

For more **information**, please contact:

• The Admissions Office, Frederick University, Nicosia: Tel. +357 22394394,

Limassol: Tel. +357 25730975 E-mail: adminfo@frederick.ac.cy