

Fully-Funded Ph.D. Students – NYU Energy and Propulsion Laboratory

Coursework and Ph.D. Degree from NYU New York Research at NYU Abu Dhabi

The Energy and Propulsion Laboratory (<https://wp.nyu.edu/jryu>) in the Division of Engineering, New York University (NYU) Abu Dhabi, seeks to recruit multiple Ph.D. students to work on aerospace propulsion and energy systems. These positions will be fully-funded under the Global PhD Fellowship program: (<https://nyuad.nyu.edu/en/academics/graduate/global-phd-student-fellowship-in-mechanical-engineering.html>).

This Fellowship is a unique opportunity to pursue advanced research across the two exciting campuses in New York and Abu Dhabi. Students who receive the Fellowship complete all graduate coursework at the NYU Tandon School of Engineering, Brooklyn, New York, spend subsequent years working at the Energy and Propulsion Laboratory in NYU Abu Dhabi, UAE, and receive the Ph.D. degree from the NYU Tandon School of Engineering upon graduation. The main features of the Global PhD Student Fellowship are:

- NYU Tandon School of Engineering Ph.D. degree upon graduation
- Graduate coursework at the Tandon School of Engineering in New York
- Cutting-edge research opportunities (<https://nyuad.nyu.edu/en/research.html>)
- Tuition, fees, and health insurance provided throughout the program
- Competitive stipend while in New York
- Competitive stipend, with additional housing support and home-travel allowance, while in Abu Dhabi
- Assistance for degree-related travel between Abu Dhabi and New York
- Conference travel support and career development support at NYU Abu Dhabi

The successful applicants will drive a fascinating project on aerospace propulsion and energy systems. Our research interests include high-performance computing, computational fluid dynamics, multi-physics computation, and experiments to understand reactive flows, fuel chemical kinetics, combustion, detonation, and hypersonics for future energy and propulsion systems. Qualifications and preferred skills/experience are:

- M.S. degree is required.
- B.S. and/or M.S. degrees in Aerospace Engineering, Mechanical Engineering, Chemical Engineering, Nuclear Engineering, or related fields.
- Experience in at least one of the following: reacting flow multi-physics computation, computational fluid dynamics (CFD), machine learning, artificial intelligence, data-driven modeling, combustion experiment with diagnostic techniques, or propulsion systems
- All the requirements of the Ph.D. application for the NYU Tandon School of Engineering (an applicant who can't meet a criterion below may still be considered if she/he demonstrates other strengths)
 - GPA: $\geq 3.0/4.0$ for B.S. and $3.5/4.0$ for M.S.
 - TOEFL: ≥ 90 (or IELTS ≥ 7.0 overall)
 - GRE: Optional

How to apply: Interested students should email Prof. Je Ir Ryu at jryu@nyu.edu with a CV, contact information for 2-3 references, copies of publications (if any), and transcripts of the B.S. and M.S. courses, all in PDF format, and apply to the Department of Mechanical and Aerospace Engineering, NYU Tandon School of Engineering (<http://engineering.nyu.edu/admissions/graduate>) by Dec 1, 2022. You should indicate your campus preference as Abu Dhabi and your academic advisor preference as Prof. Je Ir Ryu in your statement of purpose. If you have any questions, please email Prof. Ryu at jryu@nyu.edu.

جامعة نيويورك أبوظبي



About NYUAD:

NYU Abu Dhabi is a degree-granting research university with a fully integrated liberal arts and science undergraduate program in the Arts, Sciences, Social Sciences, Humanities, and Engineering. NYU Abu Dhabi, NYU New York, and NYU Shanghai, form the backbone of NYU's global network university, an interconnected network of portal campuses and academic centers across six continents that enable seamless international mobility of students and faculty in their pursuit of academic and scholarly activity. This global university represents a transformative shift in higher education, one in which the intellectual and creative endeavors of academia are shaped and examined through an international and multicultural perspective. As a major intellectual hub at the crossroads of the Arab world, NYUAD serves as a center for scholarly thought, advanced research, knowledge creation, and sharing, through its academic, research, and creative activities.