Queen Mary
University of London

PhDs in Physics and Astronomy

The School of Physical and Chemical Sciences offers PhD research opportunities in a wide range of areas of physics and astronomy and has a large and thriving community of postgraduate research students.

Research Areas

Astronomy and Astrophysics
This group is at the forefront of research in cosmology, planetary formation and dynamics, space and solar plasma physics, and survey astronomy.

Condensed Matter Physics
This research focuses on understanding the fundamental physical properties of condensed matter phases. It overlaps with work in biology, materials science, and chemistry.

Particle Physics
A leading group in major international experiments, including ATLAS at the CERN LHC and a range of neutrino experiments (DUNE, NOvA, ANITA, MINERvA), and the development of new radiation sensors (silicon, organic semiconductors, diamond).

Theoretical Physics
This group has a record of pioneering work in quantum field theory and string theory. Major topics include scattering amplitudes, black holes, dualities, supersymmetry, and applications of topology, combinatorics and machine learning.

Funding

- Queen Mary Postgraduate Research Studentships
- Engineering and Physical Sciences Research Council Studentships (UK residents only)
- Science and Technology Facilities Council Studentships (UK residents only)
- China Scholarship Council Programme
- Specific International scholarships schemes for Mexico, Colombia, Chile, Egypt and Commonwealth nations.

More information on each scheme can be found at **qmul.ac.uk/postgraduate/research/funding_phd/**

Contact for PhD enquiries:
Rob Miles,
r.miles@qmul.ac.uk

Application process

1. **Identify supervisor and project.**
   Applicants are encouraged to contact potential supervisors.
2. **Submit an Online application.**
   This will include a personal statement.
3. **Interview.**
   Applicants with supervisory interest will be invited for a formal interview.
4. **Liaise with funding agencies**
   Supervisors will guide successful applicants on QMUL studentships. External funding (e.g. CSC or CONACyT) should be applied for by the student. Unconditional offers will not be made until you have demonstrated how you plan to fund your studies.

More information can be found at **qmul.ac.uk/spcs/phdresearch/application-process/**

Entry requirements

- Bachelors degree 2:1 or higher
- Master degree in a relevant subject (not essential)
- IELTS 6.5 with 6.0 in writing

Further details can be found at **qmul.ac.uk/englang-reqs**

Application deadlines

September 2024 entry

- China Scholarships Council, Engineering and Physical Sciences Research Council (EPSRC), QM Principal Science and Engineering and BAME Studentships: **31st January 2024**
- Self-funders can inquire with prospective supervisors throughout the year.

NOTE: Some external funding bodies require a separate application, with different deadlines.

Please check here for information: **qmul.ac.uk/scholarships/database**

Project list

Please check **qmul.ac.uk/ spcs/phdresearch/ phd-projects/** to review our project ideas.

Student profile

YHaowei Zhang, PhD in Physics (2021-2025)

Haowei is researching materials sciences in he Centre for Condensed Matter Physics group under the supervision of Professor David Dunstan. He is from China and is at Queen Mary after being awarded a China Scholarship Council (CSC) PhD studentship.

"Since my childhood I have had an adventurous outlook and dreamed of studying abroad. On completion of my master degree, I was offered a place at Queen Mary and funded by China Scholarship Council to study for a Ph.D. in Physics. I cannot explain how happy this made me feel and my time at QM has been a joy. I admire my Prof. David Dunstan and he has passed down to me his love and knowledge of Physics and Science. He respects my fields of research for my Doctoral Projects which are the Size Effects of Copper Tubes in Torsion and The Mechanical Properties of Graphene, inspired by my pure scientific curiosity. Studying at QM is an invaluable experience which I thoroughly enjoy. QM is situated in a vibrant diverse neighborhood of London, I have the time to organize my life, walk through London City or have coffee by the canal which round through the campus and think about Life and my Future."