Further information
monash.edu/physics

Future student enquiries
Australian Citizenship, permanent residents
Tel: 1800 MONASH (668 274)
Email: future@monash.edu

International students
Australia Freecall Tel: 1300 181 838
Tel: +61 3 9903 4788 (outside Australia)
Email: study@monash.edu

Monash Science
WeChat: MonashUniShuo
Youku: Monash 蒙纳士

You may be eligible for a range of scholarships to support you with your Master’s studies. The School of Physics and Astronomy offers the J. L. Williams Master’s scholarships – named after a leading scientific instrument maker. Monash University also provides many scholarship opportunities for students from disadvantaged groups and Indigenous backgrounds.

For more information:
monash.edu/study/fees-scholarships

COURSE STRUCTURE

▪ Computational astrophysics (compulsory)
▪ Exoplanets, stars and stellar processes, high energy astrophysics
▪ General relativity and cosmology, Advanced cosmology
▪ Magnetohydrodynamics I and II
▪ Digital image processing, data science
▪ Quantum mechanics, Advanced quantum mechanics
▪ Quantum fluids and many body theory
▪ Quantum field theory I and II, quantum physics, classical electrodynamics
▪ Quantum information and quantum computing
▪ Condensed matter physics, and D statistical mechanics
▪ Advanced statistical mechanics and critical phenomena
▪ X-ray optics, atom and quantum optics
▪ Advanced statistical mechanics and critical phenomena

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The degree offers a wide choice of advanced coursework units and a research project.

Coursework units can be chosen from:

▪ Computational astrophysics (compulsory)
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▪ Condensed matter physics, and D statistical mechanics
▪ Advanced statistical mechanics and critical phenomena
▪ X-ray optics, atom and quantum optics

For more information:
monash.edu/study/find-a-course/2019/science-s6000

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youtube.com/user/ScienceMonashUni

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For more information:
monash.edu/study/find-a-course/2019/science-s6000
MASTER OF SCIENCE IN ASTROPHYSICS

Follow your passion for understanding the Universe with our new, specialised Master of Science in Astrophysics degree. This two-year program comprises advanced coursework and a research project leading to a major thesis in: observational astronomy, computational astrophysics, experimental physics, computational or theoretical physics.

Future-proof your career - graduates with a Master's degree in astrophysics are skilled in empirical reasoning, computational and theoretical modelling, problem-solving, analytical thinking, information handling, and written and spoken communication. They have advanced knowledge of machine learning, scientific visualisation and big data analytics. These skills are highly sought by employers in a broad range of areas - from fundamental research to the industry sector, and even to be used as banking, finance and patent law.

Astrophysicists use their knowledge and training in diverse careers including medical imaging, synchronisation science, design of advanced photonic devices, managing astronomical observatories, climate modelling and meteorology, medical and scientific instrumentation, the energy industry, solar power, industrial product development, science teaching, and science communication.

CAREER OPPORTUNITIES

Our graduates find employment in industry, hospitals and scientific organisations. Alumni include: Agilent, Optiscan, the Alfred Hospital, the Australian Synchrotron, the Australian Antarctic Division, CSIRO, the Australian Nuclear Science and Technology Organisation, managing astronomical observatories, the EPA, and many other organisations.

Many of our Master's graduates proceed to further study, enrolling in a research Doctorate.

FURTHER STUDY - RESEARCH PROJECTS

An important feature of the Master's degree is the research project, which extends over two years and leads to exploring in-depth a contemporary topic in observational astronomy, computational astrophysics, experimental physics, or computational/theoretical physics. For a full list of research projects visit: monash.edu/science/schools/physics/masters/masters-project

COURSE STRUCTURE

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ENTRY REQUIREMENTS

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**International students**

International students

monash.edu/study/courses/find-a-course/2019/science-s6000?international=true#entry-requirements-2

Domestic students

monash.edu/study/courses/find-a-course/2019/science-s6000?domestic=true#entry-requirements-2

**English requirements (Domestic)**

Applicants must also meet the English language requirements.

**English entry requirements (International)**

<table>
<thead>
<tr>
<th>Level A</th>
<th>IELTS (Academic English Only)</th>
<th>TOEFL (Internet-based)</th>
<th>Pearson's Test of English (PTE)</th>
<th>Cambridge Certificate of Proficiency in English (CPE) &amp; Cambridge Certificate in Advanced English (CAE)</th>
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<td>6.5 Overall (no band lower than 6.0)</td>
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<td>58 Overall (no band lower than 55)</td>
<td>176 Overall (no band lower than 169)</td>
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*Test taken from January 2015 and onwards.

**Fees**

International students

monash.edu/study/courses/find-a-course/2019/science-s6000/Internationalstudy/entry-requirements-2

Domestic students

monash.edu/study/courses/find-a-course/2019/science-s6000/Domesticstudy/entry-requirements-2