

Bachelor of Science (Biomolecular Physics)

CAMPUS	DURATION	ATAR - SR	IB	UAC	CRICOS	STARTS IN
W Wollongong	3yrs/4yrs	78/95 ADV*	28/37 ADV*	757661/757609 ADV	031274F/085500K ADV	Session 1 (February) Session 2 (July)

ADV Advanced option available

*This rank is the minimum ATAR - SR or IB required for consideration and does not provide guaranteed entry

Biomolecular Science helps us understand the machinery of human cells and how diseases work.

Biomolecular physicists work closely with other scientists to develop a better understanding of diseases and improve treatment, diagnosis and recovery for a range of medical conditions. They also work on developing new methods and technologies to assist with better food processing and preservation.

Biomolecular physicists are integrated across a wide range of careers, including commercial bio-medicine, instrumentation and biotech companies (eg Sigma and Life Technologies). They assist in developing molecular diagnostic instrumentation for government and institutional research laboratories. They also work with beamline scientists at National Research Facilities (eg ANSTO and the Australian Synchrotron).

THIS DEGREE

This degree will contribute to developing knowledge of visualising and understanding molecules to develop new treatments and therapies to combat disease. This degree will excite and challenge students with an aptitude for physics and mathematics with an interest in biology and chemistry.

WHAT YOU WILL STUDY

In the Bachelor of Science (Biomolecular Physics) you will complete subjects in physics, mathematics, chemistry, biological science and statistics. You will also study specialist subjects in the following areas:

- Biochemical physics
- Biology and medicine
- Nanotechnology
- Neutron imaging and analysis
- Soft matter structure and dynamics
- Synchrotron x-ray
- Biology at the nanoscale

Students studying the Advanced option will participate in various enrichment activities and work alongside a member of the Faculty's research teams.

Students who achieve an 80% average in the three-year Bachelor of Science program may apply to transfer into the Advanced program.

ACCREDITATION

All UOW physics degrees are fully accredited by the Australian Institute of Physics.



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For more information visit
go.uow.edu.au/bsci-biophys

Why choose this course

LEARN FROM THE BEST

When you study at UOW you join a vibrant community made up of leading fundamental physics and medical radiation physics researchers and teachers. You'll be part of the highly regarded UOW School of Physics that is ranked "above world standard performance" by Excellence in Research for Australia (ERA) in Condensed Matter Physics and Medical Radiation Physics. UOW collaborates widely with Australian and international science communities including other universities, CSIRO, ANSTO, federal and state government. They also have close partnerships with the European Council for Nuclear Research (CERN), in Switzerland.

SET UP FOR SUCCESS

Molecular life sciences are at the forefront of scientific discovery, unlocking the innermost secrets of the cell and developing new ways to detect and attack disease. UOW's new \$80 million research centre Molecular Horizons houses two cryo-electron microscopes: the three-metre tall, one tonne Titan Krios - the world's most powerful high-resolution electron microscope, and the slightly smaller Talos Arctica.

UOW is also home to the Illawarra Health and Medical Research Institute (IHMRI) which fosters world-class research into prevalent and chronic lifestyle-related diseases, cancer, mental health and ageing diseases, including dementia.

ENTRY REQUIREMENTS

Assumed Knowledge: Any 2 units of English, HSC Mathematics (not Mathematics General 2).

Recommended Studies: HSC Mathematics extension 1, Biology, Chemistry, Physics. (Bridging courses in Chemistry and Physics are held in February each year).

CAREERS

- Biomolecular Physicist
- Biophysicist
- Biotechnologist
- Clinical researcher in hospitals
- Laboratory technician
- Researcher
- Sales

BELONG TO ONE OF THE BEST

1st in NSW

UOW Science and Mathematics ranked number 1 university in NSW for overall quality of educational experience in the Good Universities Guide 2020.

Top 175

In the 2020 Times Higher Education (THE) World University Rankings, UOW ranked in the 151-175 band for physical sciences.



Learn highly transferable skills that enable analysis and optimisation across many fields. You'll learn problem-solving, critical thinking and analytical skills that are in demand across government and private sectors.

Key dates

UOW Early Admission Apps open	20 Jul - 14 Aug
UOW Virtual Open Day	8 Aug
UAC Early Bird Applications close	30 Sep
UAC December Round 2 offers close	17 Dec

Learn more

go.uow.edu.au/bsci-biophys



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