Bachelor of Science (Dean’s Scholar)(Honours)

This selective-entry, research-oriented, four-year honours program is designed for capable and highly motivated students who want experience with hands-on involvement in research projects.

You have the opportunity to major one of the following areas:
- biology
- biotechnology
- chemistry
- physics.

You can tailor your program through elective courses, allowing you the flexibility to combine a major field of study with a variety of other science courses.

The program also offers opportunities for you to engage with research groups and get involved in their research projects. It is also a pathway into higher degrees by research such as a PhD.

Industry connections
You will have the opportunity to work on research projects and practical activities, often undertaken in collaboration with industry.

The final year Science Project will also provide you with the opportunity to develop an independent research project, which can involve an industry partner.

Career outlook
Graduates will be qualified to work in a government, industry or academic research laboratory or continue studying in a higher degree program. Graduates will be prepared with the research skills and advanced knowledge needed to solve real-world problems.

Professional recognition
Depending on their chosen major, graduates can apply for professional membership of:
- Australian Institute of Biology (AIB)
- The Australian Society for Microbiology (ASM)
- The Australian Society for Biochemistry and Molecular Biology (ASBMB)
- Royal Australian Chemical Institute (RACI)
- Australian Institute of Physics (AIP).

International opportunities
RMIT partners with over 150 organisations around the world to provide you with with global work and study opportunities. You could spend a semester studying abroad, take part in a study tour or complete an international internship.

Pathways
If you have completed the first year of the Bachelor of Science (Applied Science) program or an equivalent program with a grade point average (GPA) of at least 3.5 out of 4.0, you will be eligible to apply for transfer into the second year of the Bachelor of Science (Dean’s Scholar) (Honours) program.

This program is a preferred pathway into higher degrees by research such as the PhD program.

Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 25 in one of Mathematical Methods (CAS) or Specialist Mathematics; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

Additional information
Non-Year 12 applicants may submit additional information if they would like it to be considered. For semester 1 intake, this can be completed through the VTAC Personal Statement online. For semester 2 intake, this can be completed through the personal statement in the Apply Direct application.
Program structure

During this program you'll develop a strong background in the basic knowledge of your major discipline.

**Year 1**
You'll study foundation courses in biology, chemistry, physics and maths, and be introduced to scientific skills and communication. You will also start studying courses from your chosen major.

**Year 2**
During second year, you will have the opportunity to take part in two research projects. You will be mentored by a staff member and may have the chance to carry out work that contributes to the project. You will also continue to study courses from your chosen major.

**Year 3**
You will study more advanced courses from you chosen major.

The Science Project course gives you the opportunity to work on a small research project under the supervision of an academic staff member. You may have the opportunity to collaborate with an external organisation on this project.

**Year 4**
You will plan and initiate a specific research project in your chosen major, in consultation with your supervisor.

In addition to the research project, you will learn the skills to develop a research proposal and in experimental design and data analysis.

### Biology major course examples
- Introduction to Microbiology, Immunology and Genetics
- Animal Structure and Function
- Plant Structure and Function
- Genetics and Molecular Biology
- Ecotoxicology

### Biotechnology major course examples
- Microbiology
- Food Microbiology
- Bioinformatics
- Industrial Microbiology
- Gene Technologies

### Chemisty major course examples
- Analytical Spectroscopy
- Analytical Science
- Instrumental and Environmental Analysis
- Advanced Instrumental Analysis
- Advanced Spectroscopic Analysis

### Physics major course examples
- Optics and Radiation Physics
- Thermodynamics and Electromagnetism
- Materials and Thermal Physics
- Quantum and Statistical Physics
- Solid State Physics

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<th>Biology or Cell Structure and Function or Earth's Life Support Systems</th>
<th>Chemistry of Materials 1 or Chemistry Principles</th>
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**Compulsory courses**  **Major courses**  **University electives**

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This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing. For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit [www.rmit.edu.au](http://www.rmit.edu.au).