Pharmaceutical Science: The job-ready science degree
Pharmacists are health professionals who are medicines experts, and work with patients and healthcare teams.

Medicines are the essence of our field.

Pharmaceutical Scientists make medicines. They advance the science of new and existing medicines.
Pharmacy or Pharmaceutical Science

Why consider?

You could be a good fit if you:

• Are comfortable with maths, chemistry or biology
• Want to work in healthcare
• Are interested in treatments and cures for disease
• Want to work in an industry that is essential and evolving
• Want to study a course with clear graduate direction
• Want to help people and make a difference to society.
Our reputation

1st In Australia and Asia-Pacific

1st Worldwide for academic reputation

1st Worldwide in overall category
    #2 Harvard
    #3 Oxford

Top 10 Worldwide (average 2011 – 2022)
Faculty-wide commitment to innovation in education

Active learning
- Theatres
- Workshop spaces
- Laboratories

Employability
- Networking
- Interviewing
- Presentation skills

Experiential learning
- Early
- Enhanced

Skills coaching
- Individualised feedback
- Focused team meetings
The Parkville Campus

Established 1881 ... rich and deep history

Single purpose campus; strong community

Melbourne’s Medical and BiotechPrecinct

Part of Monash, a global top100 university
Student life at Parkville

• Close to the Melbourne CBD and public transport
• Make friends easily; you’ll have a peer mentor from Day 1
• Dedicated Clubs and Societies located on campus
• 24 hour security and study spaces
• International student body - 30%~
What is Pharmaceutical Science & why does it matter?

Pharmaceutical science is all about advancing the science of new and existing medicines.

New diseases are emerging all the time, and existing diseases evolve. We need pharmaceutical scientists to find treatments and cures for disease.

Pharmaceutical scientists are also found in a wide range of allied industries. The knowledge, skills and instrumentation techniques they learn are highly transferable.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Basic research to identify drug target</td>
<td>The early stage of drug discovery, focusing on understanding disease targets.</td>
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<td>Drug compound discovery chemistry to address that target</td>
<td>Developing chemical compounds that can interact with the identified target.</td>
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<td>Understanding how to develop a formulation to make a drug stable, safe and effective</td>
<td>The process of formulating the drug product for clinical use.</td>
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<td>Clinical evaluation in humans to confirm safety and efficacy</td>
<td>Evaluating the drug's safety and efficacy in human subjects.</td>
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<td>Product development, registration</td>
<td>The final stage, involving manufacturing and regulatory approval.</td>
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**The Drug Discovery Pipeline: Journey of a medicine and a product**

**Drug Discovery Biology**  →  **Medicinal Chemistry**  →  **Formulation Science**
Focus on skills

Cognitive
- Critical thinking
- Problem solving

Communication
- Written
- Oral
- Visual

Teamwork
- Interpersonal
- Social

Scientific enquiry
- Experiment design
- Data documentation, analysis and presentation

Laboratory
- Practical techniques
- Instrument operation
- Safety procedures
## Course options

<table>
<thead>
<tr>
<th>Year 1 – BPharmSci</th>
<th>Year 2 – BPharmSci</th>
<th>Year 3 – BPharmSci</th>
<th>Year 4 – Honours</th>
<th>Year 5 – BChemEng</th>
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<td>BPharmSci (double)</td>
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<td>Career opportunities</td>
<td>Biomedical research</td>
<td>Academia</td>
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<td>Pharmaceuticals</td>
<td>Regualtory affairs</td>
<td>Skincare and cosmetics</td>
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<td>Paints and coatings</td>
<td>Food and beverage</td>
<td>Forensics</td>
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<td>Agrochemicals</td>
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<td>Patents and intellectual property</td>
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When I was a student I loved being in the lab because it’s so hands on and satisfying when it leads to a result. That’s why I enjoy cosmetics—it’s all about working towards a final product and getting that product out into the world within a set timeframe.”

—Georgie Percival
Production and New Product Development Scientist, Milkman Grooming Co
Pharmaceutical Science Employability videos
Videos

Pharmaceutical Science Education in the Age of COVID-19: Lab teaching during lockdown

Employability Intensive Overview

Pharmaceutical Science Placements: Jeff's Story

Learning and Teaching at Monash Pharmacy and Pharmaceutical Sciences