AT MONASH PHARMACY AND PHARMACEUTICAL SCIENCES
WE’RE ON A MISSION TO MAKE HEALTHCARE BETTER

And our mission begins with what’s most important: educating the next generation of pharmacists and pharmaceutical scientists.

It’s why we focus on small group learning that allows you to receive individual attention from some of the world’s leading educators.

It’s why we focus on equipping you with not just the most up-to-date knowledge but also with the skills you need to put that knowledge into practice.

And it’s why both of our undergraduate degrees offer extensive placements, so you can integrate what you’ve learnt in the classroom with what goes on in the wider world.

It’s the mission we’ve had since 1881, long before we became one of the world’s most highly regarded institutions in our field, when we began serving Victoria as the Victorian College of Pharmacy.

Studying with us offers you a unique opportunity to become part of a tightly-knit community of people at the highest echelons of their professions, all utterly dedicated to improving the world around them.

Please, join us.

CONTENTS

Life at Monash Parkville 5
Bachelor of Pharmacy (Honours)/Master of Pharmacy 6
Careers in Pharmacy 10
Have an international experience whilst you study 12
Bachelor of Pharmaceutical Science 15
Bachelor of Pharmaceutical Science/Bachelor of Engineering (Honours) 17
Careers in Pharmaceutical Science 18
Entry requirements 21
Pathways 22
The Monash Guarantee 22
Scholarships 23
Programs for schools 23
IN ONE WAY, WE’RE SMALL.

We’re a community of about 1500 people (researchers, educators, students, administrators) bound together by a shared passion for the transformative power of medicines. We’re fascinated by the biology, chemistry and biomedical science that underpin pharmaceuticals and are dedicated to making sure medicines are used safely, effectively and with maximum benefit for our communities. Our small size means students get to know each other and their instructors well. At Monash Parkville, it’s hard to slip through the cracks.

BUT IN ALL THE WAYS THAT MATTER, WE’RE BIG.

We’re part of Monash, Australia’s largest university and a highly regarded global brand. This means you can enjoy the resources of Australia’s largest university. Develop your skills through a student leadership program, relax with your friends at an on-campus festival, or join a student-run club suited to your interests.

Location is everything
Located on the edge of Melbourne’s Central Business District (CBD) and easily accessible by tram and train, we’re right next door to buzzing inner-city suburbs like Carlton and Brunswick. We’re also in the heart of Melbourne’s world-renowned Biomedical Precinct, a global hub for research and healthcare talent. That comes in handy when it’s time to go on placement.

What will your week look like?
Studying at Parkville involves a mix of interactive lectures, small-group classes, self-directed learning and hands-on practical skill-building in labs and workshops.

In a typical week, you’ll follow our developed instructional model called ‘DEAR’ for ‘Discover, Explore, Apply, Reflect.’

DISCOVERY involves spending time familiarising yourself with key concepts by reading, watching videos and completing exercises online.

You’ll then EXPLORE the ideas further through interactive lectures with skilled teachers, and have the chance to APPLY your new-found knowledge in small group workshops with academics, practitioners and science facilitators.

Finally, you’ll spend some time consolidating what you’ve learnt and ensuring it makes sense in the context of your overall course, by REFLECTING on your plans for continuing development.

The course you’re undertaking will determine exactly how you’ll learn. For example, our budding pharmaceutical scientists spend more time in the lab than our pharmacists in training, who focus more on developing their clinical skills.

You’ll also have the valuable opportunity to meet regularly with a ‘skills coach’, an academic or practitioner from your course who will help you develop and implement a personalised learning plan and ensure you’re on track.
PHARMACY SUPPORTING HEALTHIER COMMUNITIES

The world needs pharmacists. As the experts in medicines and the way they interact with the body, pharmacists play a vital role in healthcare teams. Each year, nearly 700,000 Australians end up in hospital as a result of inappropriate or incorrect medication use. In response to this, in 2019 the Australian government announced medicine safety as a national health priority area. The World Health Organisation has outlined 13 major health challenges for the next decade, and the issues of medicine access, use and safety feature in four of them.

For more information, visit: www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade

Building a better pharmacist

Monash has long been considered the leading pharmacy program provider in Australia. For the last three years we have been consistently ranked within the top three pharmacy and pharmacology schools in the world, amongst universities like Harvard and Oxford. In part, this is because we believe the world doesn’t just deserve more pharmacists; it deserves better pharmacists.

That’s why in 2017 we launched an innovative new course: Australia’s only combined Bachelor of Pharmacy (Hons)/Master of Pharmacy.

It means our graduates go out into the world equipped with a higher level of learning.

You’ll also undertake work placements in community pharmacies, hospitals, and other environments, practicing your new skills while learning from some of Australia’s best pharmacists about areas such as primary health care, medicines information, and patient-focused pharmacy services.

Same duration, higher qualification

The pathway to registration as a pharmacist in Australia generally takes five years.

Traditionally, this has been structured as a four-year bachelor degree plus a one-year internship. At Monash, our program takes the same amount of time but instead you’ll graduate with both a master and bachelor.

The fifth year of the course combines a year of supervised practice (during which time you are paid as a provisionally registered pharmacist), with intern studies (Intern Training Program and Intern Foundation Program). This intensive combination of learning and working prepares you for registration as a pharmacist. It will be your responsibility to arrange the internship and ensure your workplace is credentialed by the faculty.

Flexible course options

Your Monash BPharm(Hons) is your entry point to an internship in Australia. You don’t have to complete the MPharm during your intern year, especially if you are an international student not requiring completion of an intern year to register in your home country. In that case you can graduate with a standalone, four year Bachelor of Pharmacy (Hons).

Only Monash BPharm(Hons) graduates are eligible to undertake the MPharm in their intern year. That’s because our BPharm(Hons) contains some master’s-level material which is credited towards the Master.

A pharmacist in training from day one

From the very beginning, we go beyond ensuring you have a thorough grasp of the underlying scientific disciplines — chemistry, biology, pharmacology and so on. We also focus on the key skills that make the difference between a good pharmacist and a great one. We call these skills your POWERIT-Inq skills and you’ll get a chance to practice them throughout your whole degree.

DID YOU KNOW?

Pharmacy graduates almost universally get jobs straight out of university, with 95.7 per cent in full-time employment within four months of graduating.*

*Source: Graduate Outcomes Survey 2019
BECOME A PHARMACIST FASTER: GRADUATE ENTRY PATHWAY

Graduate Entry Pharmacy is for those of you who choose to study a more general science degree after high school, or didn’t meet our pharmacy course requirements at the end of Year 12. You’ll commence into third year of our Bachelor of Pharmacy/Master of Pharmacy program, eligible for registration as a pharmacist in just three years, including a paid internship.

Who’s eligible?
It’s important you know our eligibility requirements for Graduate Entry Pharmacy and build them into your course progression if necessary. You may be eligible for graduate entry if you have a minimum distinction average of 70% (or equivalent) and have graduated from a relevant degree in the last ten years.

Relevant degrees include:
• Bachelor of Biomedical Science/Bachelor of Biomedicine
• Bachelor of Health Sciences
• Bachelor of Pharmaceutical Sciences
• Bachelor of Science

In assessing your eligibility we’ll take into account the number of relevant subjects you’ve completed. The units completed in the degree should be appropriate and science based. As shown below, you’ll have to complete and pass a 6.5 week summer school before entering into the course, as well as an overload unit on top of your Year 3.

For more information about Graduate Entry Pharmacy, including eligibility and application information, visit: monash.edu/graduate-pharmacy

How do I apply?
Applications for 2021 entry open on our website from 3 August, 2020 and close on 11 December, 2020.

Apply at: applicant.connect.monash.edu.au/connect/webconnect

BACHELOR OF PHARMACY (HONOURS)/MASTERS OF PHARMACY

COURSE MAP

YEAR 1

Semester 1 12 Credit points
PHR1001 Bridge to practice I (Bridge to practice students only) 12 Credit points

Semester 2 12 Credit points
PHR1011 Bridge to practice II (Bridge to practice students only) 12 Credit points

YEAR 2

Semester 1 12 Credit points
PHR2011 Professional practice I 6 Credit points

Semester 2 12 Credit points
PHR2012 Professional practice IV 12 Credit points

YEAR 3

Summer Semester 12 Credit points
PHR2041 How medicines work I 6 Credit points

Semester 1 12 Credit points
PHR2042 Student experiential placements 12 Credit points

Semester 2 12 Credit points
PHR3042 Acute care 12 Credit points

YEAR 4

Semester 1 12 Credit points
PHR3041 Blood, brain and cancers 12 Credit points

Semester 2 12 Credit points
PHR3042 Integrated care 12 Credit points

YEAR 5

Semester 1 12 Credit points
PHR4011 Endocrinology and renal 6 Credit points

Semester 2 12 Credit points
PHR4012 Endocrinology and renal 6 Credit points

YEAR 6

Semester 1 12 Credit points
PHR5051 How medicines work III 6 Credit points

Semester 2 12 Credit points
PHR5052 How medicines work II 6 Credit points

Inquiry units
• How the Body Works unit
  • Gastrointestinal disorders
  • Respiratory and sinus disorders
  • How the body works

Comprehensive Care units
• Integrated care
  • Endocrinology and renal

Bridge to Practice units
• Bridge to Practice students only
  • How medicines work I
  • How medicines work II

Place the units in your course progression if necessary.

Themes, integrated units
Like many primary healthcare courses, your units are taught thematically, ensuring you’ll gain knowledge in an applied and engaging way. They also integrate with each other, meaning your knowledge will consolidate and build as you progress through the course.

If you want details about what you’ll specifically be learning in your units, you’ll find them in our online handbook: handbook.monash.edu

Earlier and enhanced placements
You’ll be exposed to real-life practice environments as early as possible. Right from first year, you’ll spend time in experiential placement sites working with some of the best pharmacists in Australia.

To ensure you’re ready for placement, we credential you to provide appropriate patient services, allowing you to assist in contributing to patient care throughout your degree.

We have had the opportunity to work collaboratively with both medical and nursing students, which has been a highlight of my degree so far. Not only were we able to work through a clinical case together, we were able to better understand one another’s scope of knowledge and unique skill sets.”
OLIVIA DE GIOVINE

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Prior undergraduate science degree
12 Credit points Semester 1
Bridge to practice I
6.5 weeks Summer school
12 Credit points Semester 2
Bridge to practice II
– postponed

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To ensure you’re ready for placement, we credential you to provide appropriate patient services, allowing you to assist in contributing to patient care throughout your degree.
If you’ve ever had a prescription filled at your local community pharmacy, you probably think you know what pharmacists do. The fact is, community pharmacy represents only one of dozens of career paths our graduates pursue, and many others are listed below.

**Aged care pharmacist**
Older people often have complex needs when it comes to medications. They are frequently taking a number of different medications and can be more susceptible to side effects. They may also need adjustments to their medications to accommodate difficulties with vision, hearing, memory or cognitive function.

**Clinical trials pharmacist**
Pharmacists in this area support the management and delivery of clinical trials of new medicines. The role involves coordinating studies from a medicinal perspective, ensuring that drugs used in the trials are imported, stored, accounted for, compounded, dispensed and used in accordance with strict protocols. It may involve liaising with hospital staff, counselling participants and carers, and educating medical and nursing staff.

**Complex care coordinator**
A relatively new career path, complex care coordination involves working with a hospital healthcare team and is often combined with consultant pharmacy work. The role involves providing early post-discharge medication review and follow-up plans for patients identified as being ‘high risk’ by hospital clinicians.

**Consultant pharmacist**
Accredited consultant pharmacists conduct home medicines reviews and residential medication management reviews. As with many roles, consultant pharmacists often work part time undertaking medication reviews, while also working in other healthcare settings such as working at a community health centre, working with chronic disease management groups, or providing nurse education.

**Drug safety officer**
Pharmacovigilance is an area focusing on monitoring drug safety. A pharmacist working as a drug safety officer liaises regularly with government and industry bodies, consumers and other healthcare professionals. Their responsibilities include receiving and processing reports of adverse drug events and conducting regular reconciliation with health authorities. They use their skills and qualifications to ensure the public has access to safe and reliable medications.

**Hospital pharmacist**
Hospital pharmacy involves a lot of collaboration as you find yourself working closely with a team of other healthcare professionals, including doctors and nurses, to provide the best care for patients.

According to the Society of Hospital Pharmacists of Australia (SHPA), “…it offers variety, both in the roles you can have, such as clinical (i.e. direct patient care) or management, and in the types of hospitals you can work in – city or country, small or large, general or specialist.” Working as a hospital pharmacist helps you develop valuable skills that are highly sought after in other pharmacy settings. Many pharmacists will spend some part of their career in a hospital environment.

**Primary care pharmacist**
A practice pharmacist doesn’t dispense medicines. Instead, they work within a general medical practice to deliver direct support to general practitioners, practice nurses, and patients. They can often give more time and attention to individual cases, providing quality care and specialised services such as smoking cessation.

**Public health advisor**
Pharmacists have knowledge, skills and experience that can contribute to advisory roles, both for the government as well as non-government institutions, such as health funds and private hospitals. The range of possible roles in this area is extensive, including medicines access, public health, developing eHealth services and more.

**Regulatory affairs associate**
Working in regulation involves ensuring the appropriate licensing of and legal compliance by pharmaceutical and medical products. Following this career path, you are involved in ensuring that a company’s products comply with regulations and legislation.

**Researcher / Academic**
Many students find their passion for research while studying and go on to make a career of exploring and developing ideas in pharmacy. Through research and evaluation, pharmacists can make a huge practical difference to health policy and services. Common research areas for pharmacy graduates include pharmacy practice, pharmacotherapy, drug discovery, toxicology, clinical sciences, public health and much more.

**Specialty practice pharmacists**
There are many different types of specialty practice pharmacists, below are just a few of the most common.

**Mental health pharmacist**
Mental health pharmacists in hospitals are responsible for providing clinical pharmacy services to the adult mental health in-patient wards, and psychiatric assessment and planning units. It is a highly specialised career path that includes managing the supply of anti-psychotic medications to mental health patients in government units, outpatient clinics, community centres and specialist hospitals.

**Women’s and newborns’ pharmacist**
Providing safe and effective dosing and administration of medications during pregnancy and for infants is the focus of the role. One of the biggest challenges can be assisting in the care of babies born prematurely. But it is also a highly rewarding area to work in; a skilled pharmacist can play a crucial role in giving a baby a better chance at a healthy life.

**Antimicrobial steward**
Antimicrobial stewardship is a vital role in any hospital and health facility, with responsibilities that include promoting the appropriate use of antimicrobials (including antibiotics), reducing microbial resistance, and decreasing the spread of drug resistant infections.

**Pain educator and consultant**
Chronic and acute pain are fascinating areas to work in. Pain management is a constantly-evolving field that encompasses many areas of treatment, not just pharmacy and pain medications. Pharmacists work with pain sufferers to manage their medications and coordinate other forms of treatment.
HAVE AN INTERNATIONAL EXPERIENCE WHILST YOU STUDY

Pharmacy is a global profession and we want you to experience that in your degree.

As part of our program, you can apply for exchange opportunities at our Malaysia campus. You can also apply to complete projects and elective placements in the US, the UK and a number of developing countries. We work closely with preferred partners at the University of North Carolina, University College London, and Work the World to ensure that our international activities are interesting and ethical.

All eligible Monash students who are accepted into an international program will receive some financial aid towards the cost of their experience.

An international career

Margaret Louey currently works as a Senior Technical Manager, Product Development and Regulatory Affairs at Clinton Health Access Initiative (CHAI). CHAI is a non-profit organisation founded by US President Clinton in 2002 with the aim of helping save the lives of millions of people living with HIV/AIDS in the developing world. CHAI has now expanded its goals to include access to critical medicines and diagnostics for HIV/AIDS, TB, malaria and other diseases in low and middle-income countries (LMICs).

After completing her Bachelor of Pharmacy degree at Monash University, Margaret worked in community and hospital pharmacies in London. She returned to Melbourne a couple of years later to do her honours and PhD at Monash.

To read more about Margaret’s journey, visit: monash.edu/pharm/alchemy-33/special-feature-pharmacy-gone-global/our-international-alumni/margaret-louey
A pharmaceutical science degree from Monash will springboard you into an exciting career. Your understanding of the powerful interplay between chemistry and biology will set you apart from the crowd.

Learn what it takes to invent, develop and approve a new medicine from internationally renowned scientists. You’ll also get lots of time in the lab, working with industry-standard research instrumentation. When you accept your first job offer after graduation, you’ll hit the ground running. And because the faculty has long standing relationships with employers in the sector, you’ll emerge armed with the skills employers are looking for.

Use industry-standard instrumentation
As well as gaining a deep understanding of the fundamental concepts in chemistry, biology and product formulation, you’ll learn how to design and conduct experiments using sophisticated instrumentation, and most importantly how to interpret and effectively communicate your data.

A growing and prominent sector
In early 2020 the World Health Organisation released a report detailing urgent global health challenges for the next decade. Many are problems for pharmaceutical scientists to solve, ranging from Stopping infectious diseases, Preparing for epidemics and Protecting the medicines that protect us. For more information, visit: www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade.

Victoria is a global centre of excellence in medical technology and pharmaceuticals. In 2018 Victoria exported medtech and pharmaceutical products worth over $2.4 billion, an increase of 145% since 2014. With significant support from the government in such initiatives as the Medicines Manufacturing Innovation Centre (head-quartered at our Parkville campus) the opportunity to interact with industry and undertake placements will allow you to start developing your networks early.

Flexible course and career options
During the course, you’ll have the opportunity to align your interests with particular aspects of the drug discovery pipeline.

For example, you might be attracted to Drug discovery biology. Drug discovery is about gaining an understanding of what causes different types of diseases and how current medicines work at a molecular level to treat them. You’ll get hands-on experience designing experiments to identify and test new biological targets for the development of novel drugs.

Or you might be drawn to Medicinal chemistry, which represents the intersection of biology and chemistry, and involves the development of potential pharmaceutical compounds from conception through to their clinical use. You’ll study how drugs work, and how they’re designed and made. By applying the principles and techniques of organic chemistry, medicinal chemists discover and develop compounds that prevent, treat or cure disease.

There’s also Formulation Science, which enables you to understand the principles of designing pharmaceutical products and how medicines are absorbed and travel around the body to the site of action.

Regardless of the area you choose to focus on, the Bachelor of Pharmaceutical Science is designed to enable you to work, collaborate and explore different areas of the drug discovery pipeline upon graduation.

Three-year BPharmSci vs Four-year BPharmSciAdvHons: what’s the difference?
Some of our students want to complete their degree, get out there and start working. For them, the three-year Bachelor of Pharmaceutical Science is the perfect pathway into a career in the pharmaceutical sector or any of its allied industries such as skincare, cosmetics, chemicals or even food manufacturing.

Other students find that their natural curiosity and passion to work on innovative research attracts them to a degree with a significant research component. For those students, the Bachelor of Pharmaceutical Science Advanced (Honours) is ideal. The third year of the degree includes an extended placement in one of our world-class pharmaceutical research groups, which will give you the skills and independence to conduct a substantial research project in your fourth (honours) year. Upon completion of an honours year, students are eligible to apply for a PhD.

Don’t know which of these categories you fall into? Don’t worry – no matter which course you start in, there are options for you to transfer out of the Advanced (Honours) program, or complete a standalone Honours year after three years of study.

I’ve done so many great things in this course. Last year I made an anti-epileptic drug from scratch. And the lecturers are so approachable. When you’re struggling with something, it’s amazing to be able to walk along the hall and knock on the door of someone who is one of the world-leading researchers in the area.”

JOMO KIGOTHO
Bachelor of Pharmaceutical Science student
# Bachelor of Pharmaceutical Science / Bachelor of Pharmaceutical Science Advanced (Honours)

## Bachelor of Pharmaceutical Science Course Map (3 Years)

### Year 1

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BPS1011</td>
<td>Human physiology I: Cells to systems</td>
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<tr>
<td>BPS1021</td>
<td>Medical chemistry I: Equilibrium and change</td>
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<td>BPS1041</td>
<td>Scientific inquiry</td>
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<tr>
<th>Semester 2</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>BPS1012</td>
<td>Human physiology II: Body systems</td>
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<tr>
<td>BPS1022</td>
<td>Medical chemistry II: Reactivity and reactivities</td>
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</tr>
<tr>
<td>BPS1042</td>
<td>Pharmaceutical science in context</td>
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### Year 2

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<tr>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>BPS2011</td>
<td>Pharmacology I: Biochemical signalling</td>
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<tr>
<td>BPS2021</td>
<td>Synthetic chemistry I: Structure and reactivity</td>
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<tr>
<td>BPS3031</td>
<td>Analytical methods I: Principles and applications</td>
<td></td>
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<tr>
<td>BPS2041</td>
<td>Drug delivery: Absorption pathways</td>
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<tr>
<th>Semester 2</th>
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<tbody>
<tr>
<td>BPS2012</td>
<td>Pharmacology II: Drug action</td>
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<tr>
<td>BPS2022</td>
<td>Drug discovery and design</td>
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<tr>
<td>BPS2032</td>
<td>Analytical methods II: Investigation design</td>
<td></td>
</tr>
<tr>
<td>BPS2042</td>
<td>Drug development</td>
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### Major Specialisations

#### Year 3 Drug Discovery Biology

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<tbody>
<tr>
<td>BPS3111</td>
<td>Pharmacology III: Advanced concepts</td>
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<tr>
<td>BPS3112</td>
<td>Drug discovery and design</td>
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<tr>
<td>BPS3131</td>
<td>Microbiology and immunology</td>
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<tbody>
<tr>
<td>BPS3112</td>
<td>Professional experience in drug discovery biology</td>
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<tr>
<td>BPS3132</td>
<td>Toxicology</td>
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#### Year 3 Medicinal Chemistry

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<tr>
<td>BPS3211</td>
<td>Computational drug design</td>
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<tr>
<td>BPS3221</td>
<td>Synthetic chemistry II: Emerging methods</td>
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<tr>
<td>BPS3231</td>
<td>Advanced experimental spectroscopy</td>
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<td>BPS3212</td>
<td>Professional experience in medicinal chemistry</td>
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<tr>
<td>BPS3222</td>
<td>Synthetic strategies for drug design</td>
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</tr>
<tr>
<td>BPS3232</td>
<td>Molecular basis of drug action</td>
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#### Year 3 Formulation Science

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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BPS3311</td>
<td>Applied pharmacokinetics and pharmaceutics</td>
<td></td>
</tr>
<tr>
<td>BPS3321</td>
<td>Biotechnology products</td>
<td></td>
</tr>
<tr>
<td>BPS3331</td>
<td>Pharmaceutical product development and manufacture</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS3312</td>
<td>Professional experience in formulation science</td>
<td></td>
</tr>
<tr>
<td>BPS3322</td>
<td>Drug delivery nanotechnology</td>
<td></td>
</tr>
<tr>
<td>BPS3332</td>
<td>Industrial formulation</td>
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</tr>
</tbody>
</table>

### Bachelor of Pharmaceutical Science (Honours) Year

A Honours year gives you a taste of a research career and enhances your job prospects upon graduation. The Bachelor of Pharmaceutical Science Advanced (Honours) contains a Year 4, shown below.

<table>
<thead>
<tr>
<th>Year 4 Full year units</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS4001</td>
<td>Coursework in Pharmaceutical Science (92 points)</td>
<td></td>
</tr>
<tr>
<td>BPS4002</td>
<td>Research in Pharmaceutical Science (58 points)</td>
<td></td>
</tr>
</tbody>
</table>

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**DID YOU KNOW?**

Bachelor of Pharmaceutical Science/Bachelor of Engineering (Honours) is taught between two Monash campuses – Parkville and Clayton. You’ll study Year 1 and 3 at Parkville, and Years 2, 4 and 5 at Clayton.
CAREERS IN PHARMACEUTICAL SCIENCE

The course material sounds fascinating, all that time using high-tech lab equipment seems really fun, and the internship opportunities mean you’ll graduate ready for the workforce. So what exactly does a pharmaceutical scientist do?

That’s a trickier question to answer than you might think. Although the course is primarily focused on understanding medicines, the skills you learn will translate to a range of chemistry-related or biomedical research opportunities. Our graduates can be found in industries from paint and coatings to cosmetics to food manufacturing.

Here are some of our more common graduate destinations.

**Biomedical researcher**
Biomedical researchers investigate how the human body works with the aim of finding new ways to improve health. Usually based in a laboratory, you’ll conduct experiments and clinical tests to record and report on the findings.

In general, biomedical researchers within a university focus on improving tools and techniques, studying biological processes and the causes and progression of diseases. Private sector labs develop high value products that generate considerable income for the company.

**Clinical research associate**
As a clinical research associate, you will use your experience in running experiments, gathering data and documenting the results during clinical trials. Typical employers for this role include clinical research organisations, pharmaceutical and biotechnology companies and even hospitals and universities. There is growing demand for this role in Australia, as we are one of the leading countries for phase one clinical trials.

**Forensic scientist**
Forensic science is the application of scientific techniques to help investigate crimes, accidents and other incidents. It’s not always like what you see on your favourite crime investigation TV shows, but can entail tasks such as analysing illicit drugs or suspect situations.

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**Ensuring quality medicines**

Jeremy Shonberg works for the Therapeutic Goods Administration as a pharmaceutical evaluator. He was originally drawn to medicinal chemistry as it involves a lot of problem solving and can deliver interesting results and great benefits in terms of drug design.

With both a bachelor and a PhD from Monash, Jeremy’s current role involves evaluating the chemistry, manufacture, quality controls and bioavailability data supplied by pharmaceutical companies to support the products they submit for government approval.
International development officer

For graduates with a desire to work in the social advancement field, one career path is to work with an International Non-Governmental Organization (“INGO”), like the World Health Organization (“WHO”).

With a goal to build a better, healthier future for people all over the world, WHO staff work side by side with governments and other partners to ensure the highest attainable level of health for all people.

Medicinal chemist

Medicinal chemistry is an interdisciplinary science, drawing graduates from a range of different fields. A career in this area usually involves working on the development and testing of potentially therapeutic compounds. This might be within a company that is developing new products, for a research facility exploring new compounds, or at a regulatory agency testing pharmaceuticals for compliance.

Paints and protective coatings scientist

Not all pharmaceutical science graduates go on to work with products for human consumption. Graduates can find a role working on the development of many of the products we come into daily contact with, such as paints, pigments and protective coatings.

These compounds are present in our living and working spaces, our clothing, our food packaging and many, many other products and environments. We are exposed to them on a regular basis, so manufacturers must study them and be sure that they are safe.

Patent attorney

To be successfully taken to market, new discoveries need to be commercialised and a company’s intellectual property protected.

That’s where a patent attorney comes in.

A patent attorney will typically work for a specialist consultancy, advising commercialised and a company’s intellectual property.

That’s where a patent attorney comes in.

A patent attorney will typically work for a specialist consultancy, advising clients on the development and protection of intellectual property.

A skilled regulatory affairs associate can be the difference an effective product reaching the market or not. Regulatory professionals are expected to keep the ins and outs of the medical regulation, and to understand how changing regulations will impact their industry.

Skincare and cosmetics developer

Youthful, clear skin is big business, with skin care and cosmetic companies around the world spending millions on researching and developing new products. There are plenty of opportunities in this fast-moving industry, with competing companies striving for the next breakthrough that will give them the edge.

It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment. It’s not just big name international cosmetic brands that offer employment.

A surprising career, in a good way

After graduating from Monash, Reshma Prakash worked as a Research & Development (R&D) chemist in the cosmetics and personal care products sector. However she soon discovered that her degree could open up many doors. Reshma now works in marketing as a product support manager for a mining company, Orica Mining Services.

“arways imagine working in the mining industry,” she says. “My job involves product support for packaged explosives and initiating systems in the mining industry across Australia and Asia.”

She enjoys the challenge of combining commercialisation with technical knowledge while developing her marketing skills.
PATHWAYS
If you didn’t meet our course requirements at the end of Year 12, we offer a number of pathway options. You may be able to transfer into either Pharmacy or Pharmaceutical Science after completing first year in another degree if you achieve a minimum 70% GPA and meet course prerequisites. Course prerequisites can be met through the study of tertiary units, and must meet VCE equivalent scores or higher. Note that transfers into the BPharm (Hons)/MPharm will receive no credit, even if you have studied pharmacy at another university. Graduate Entry Pharmacy is another pathway to consider, further information about the program and eligibility can be found on pages 8-9.

THE MONASH GUARANTEE
The Monash Guarantee recognises that your potential to succeed at university is about more than just your ATAR. It ensures fair entry for students to Monash, so that even if your achieved ATAR is below the lowest selection rank to which an offer was made in 2020, you could still land a place at the University.

You’ll be eligible if you:
• have experienced financial disadvantage;
• are an Indigenous Australian; or
• attend a school under-represented at Monash.

Visit the Monash Guarantee website for further information: monash.edu/study/how-to-apply/entry-schemes/the-monash-guarantee
Monash Guarantee scores for our courses can be found on page 21.

SCHOLARSHIPS
We want as many bright minds as possible to benefit from a Monash education. That’s why we offer one of the most generous scholarship programs in the country.

There are too many scholarships available to list here. To find out how you can achieve your full potential and make your mark on the world, visit monash.edu/scholarships and hit “Pharmacy and Pharmaceutical Science” under “Browse by Faculty”.

PROGRAMS FOR SCHOOLS
The faculty runs a number of outreach programs and events for students studying VCE Chemistry and Biology. For more information or to express interest in having your school involved, visit: monash.edu/pharm/future/outreach
Head to our youtube channel to view a ton of interesting videos about our courses, research and career outcomes.

JOIN US AT OUR 2020 OPEN DAYS
2 August – Monash Clayton  |  16 August – Monash Parkville
To register and plan your day, visit: monash.edu/open-day