

HEALTH SCIENCE

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SCHOOL OF HEALTH SCIENCES



THE FUTURE OF HEALTH SCIENCE



- Everyone has health and everyone's health is important to them....

The future of healthcare will involve:

- Technology
- Personalised healthcare
- Prevention and community-based

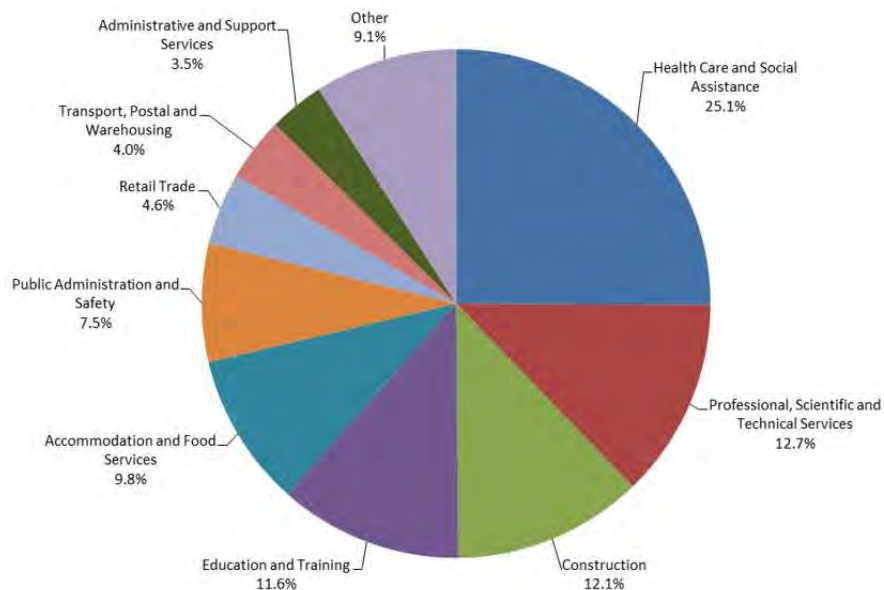
WHAT IS HEALTH SCIENCE?

- The application of science to health to address and deliver healthcare to human beings
- Working with people; patients, colleagues, populations and clients
- Looking at disease in terms of prevention and treatment/intervention, healing and Health in general
- Health Science is the fastest growing employment area
- Australia spends \$160 billion dollars on health each year



HEALTH, CARE AND SOCIAL ASSISTANCE IS THE HIGHEST GROWING INDUSTRY (ABS, 2017)

Share of projected employment growth, by industry¹ - five years to May 2022



With a degree in Health Science from Swinburne, you will also be able to work in the fields of:

- **Healthcare and social assistance**
- **Professional, Scientific and Technical Services**
- **Public administration and safety**
- **Administrative and support services and**
- **Education and Training**

HEALTH SCIENCE AT SWINBURNE



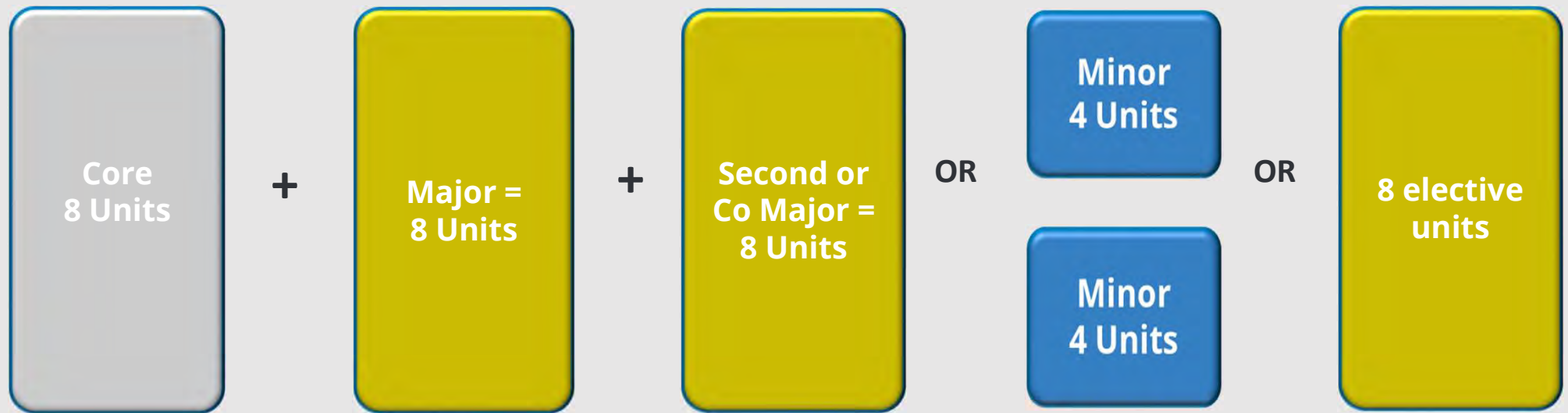
- Our emphasis on technology and digital health
- Our new and developing ways of delivering industry linked information to improve employability
- ALL students have project management skills
- ALL students have digital health knowledge
- 7 majors within the degree
 - With the right majors, can articulate directly into post graduate courses

STATE-OF-THE-ART TECHNOLOGIES

- Students have access to the latest digital, model and **Virtual Reality** in teaching
 VR and AR → top innovations driving healthcare in the future
- All teaching is applied to real world problems



BACHELOR OF HEALTH SCIENCE - THE COURSE STRUCTURE

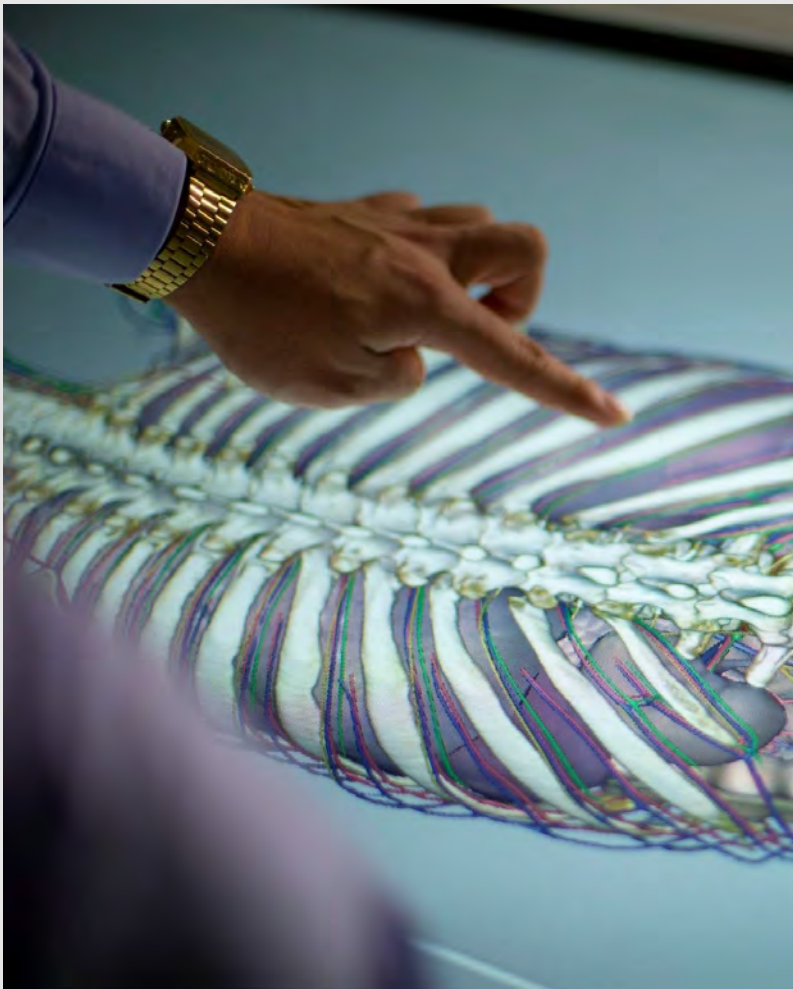


Your options are:

Biomedical Science
Clinical Technologies
Health Promotion
Neuroscience
Nutrition

Psychology and Forensic Science*
Psychology and Psychophysiology*

MAJORS TO CHOOSE FROM



- Biomedical Science
- Clinical Technologies
- Health Promotion
- Neuroscience
- Nutrition
- Psychology and Forensic Science
- Psychology and Psychophysiology

BIOMEDICAL SCIENCE



- Combination of Biological Science as a basis for Health
- Developing and emerging areas of practice
- **Career outcomes:**
 - Medical Researcher
 - Laboratory Technician
 - Pharmaceutical Sales
 - Healthcare Technician

CLINICAL TECHNOLOGIES



Celebrating 40 years of experience in this area

Swinburne is the only Australian university to offer clinical technologies in biomedical science focused on:

- Instrumentation
- Clinical measurement
- Monitoring and imaging technologies

Employment in hospital sector

sleep centres, neurology, intensive care, respiratory, cardiology, vascular laboratories

Graduates and trainees in all major hospitals



HEALTH PROMOTION

Improving health literacy, advocacy, supporting change in communities and individuals

- shift in perspective by government, councils, insurance companies
- cheaper to *prevent* disease than to *treat* disease

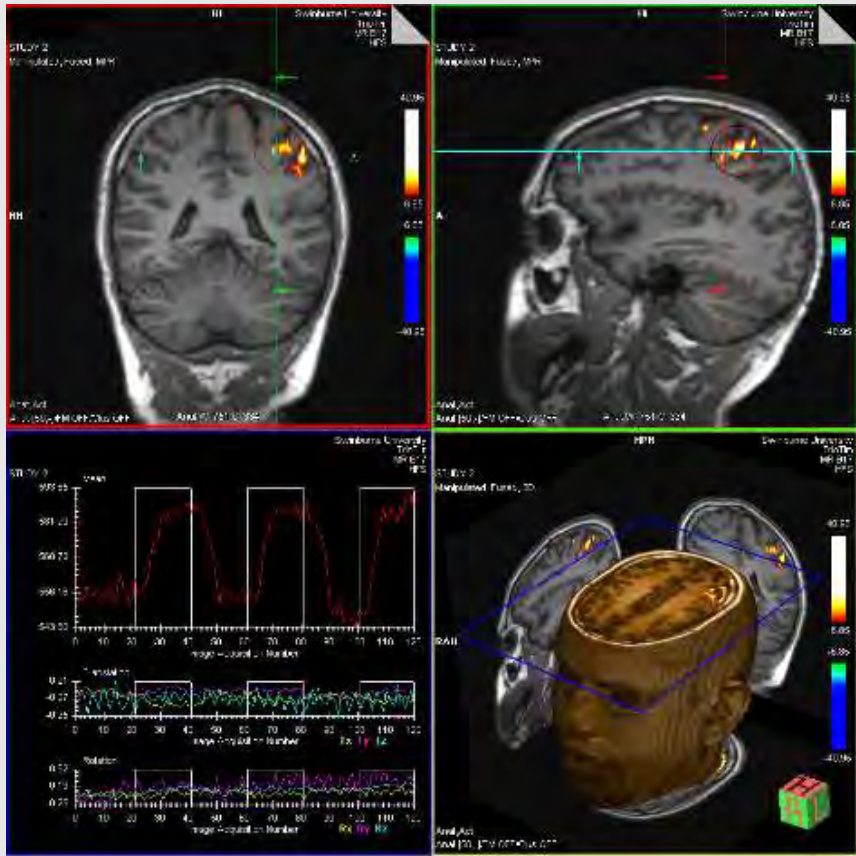
A pathway to becoming a public/health promotion professional

Employment in allied health areas

- health promotion, media, community health



NEUROSCIENCE



Understanding how the brain works

- normal health
- diseased states
- mental illness

Swinburne facilities

- highly advanced brain imaging in Australia
- internationally and nationally recognised brain researchers
- Combine with other majors
- Strong hospital network in both teaching and research

NUTRITION



Gain knowledge of nutrition and food, including:

- The interaction of nutrition and health in the treatment and prevention of disease
- Food as a source of nutrients
- Identify the social and cultural importance of food
- Career outcomes in nutritional research, dietetics, nutrition education, development, media positions, sales or public health
- Combined with Biomedical Science major = pathway to Master of Dietetics

PSYCHOLOGY AND FORENSIC SCIENCE

Application of knowledge to aspects of the law, the justice system and forensic science and statistical skills relevant to forensic issues

Completion of research projects, specialist units in research design and project units related to forensic psychology



PSYCHOLOGY AND PSYCHOPHYSIOLOGY

Covers a range of areas, including:

- Cognition
- Developmental psychology
- Social psychology
- Personality
- Design and measurement
- Psychological measurement
- Abnormal psychology

Physiological processes relevant to:

- Psychology and address neuroanatomy
- Neurophysiology
- physiological responses to sleep
- Dreaming
- Memory and cognition
- Brain disorders



STUDENT PROJECTS

Examples:

- Designing a community-based intervention for prevention of obesity, smoking, mental health issues
- Developing an evaluation plan for Indigenous health interventions
- Measuring activity and participation for people who use wheelchairs
- How do people recognise facial expression?



CAREER OPPORTUNITIES



- Hospital scientists
- Health promotion officers
- Policy advisors
- Hospital and Community Health administration
- NGO and NFP organisations
- Community Health
- Pharmaceutical representatives
- Health information managers
- Health data analysts
- Entrepreneur
- Project management
- Med tech sales/support officers
- Consultant
- Food industry
- Researcher
- Health product/service designers

And many more!

ENTRY REQUIREMENTS

Bachelor of Health Science	60
Bachelor of Health Science (Professional)	80

VCE Prerequisites

Units 3 and 4: a minimum study score of 25 in English (or equivalent) or 30 in English (EAL).

PATHWAYS

Consider other courses that provide a pathway to your chosen degree

- **UniLink Diplomas**
 - Entry with **ATAR of 50**
 - Equivalent to **first year** of university
 - Receive **advanced standing** of up to one year* of full-time study from a related degree
 - Health Science
 - Science
- **Vocational Education Courses**
 - Enter with ATAR below 50/completion of Year 12 or equivalent
 - May receive credit towards related degree
 - Provides a primary focus on skills for work
 - Practical learning environment

**Number of credits can vary depending on the destination degree*



QUESTIONS?

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SWIN.EDU.AU/HEALTH

