

# **Bachelor of Biomedical Science**

# Course code: HBBS (Commencing 2BI 2025)

## **Course Requirements**

To attain the Bachelor of Biomedical science, students will be required to complete 288 credit points consisting of:

- 96 credit points of First Year Core studies
- · 96 credit points of Major studies

Plus one of the follwing:

#### Option A:

· 96 credit points of second Major studies

OR

#### Option B:

• 96 credit points of Minor studies (Two Minor sets in total)

**Please Note**: Students that select Option A must choose 12 credit points in place of HBM3202 Applied Biomedical Science, as this unit is covered in the first Major study. Students are able to select a unit from within any of the Minors offered in this course, in consultation with the Course Coordinator and according to unit pre-requisites.

Students are required to enrol in all units for semester 1 and 2, and are not permitted to enrol in more than 48 credit points per semester as a full-time load.

### **Credit Points**

A credit point is used to measure the study load for a unit. A standard unit consists of 12 credit points, with each completed unit's credit points adding up to meet your required total of credit points to complete your course.

#### **Further Information**

Unit and course information is available from the University course search site at <a href="http://vu.edu.au/course-search">http://vu.edu.au/course-search</a> or go to <a href="https://askvu.vu.edu.au">https://askvu.vu.edu.au</a> or Phone VUHQ on 03 9919 6100

### **Campus**

St Albans (SA)

## College

College of Sport, Health and Engineering

### **Study Mode**

Full Time or Part Time

#### **Duration**

3 years Full Time or Part Time equivalent

## Fee Type

For information on course fees, refer to <a href="http://vu.edu.au/fees">http://vu.edu.au/fees</a>

## **Application Method**

VTAC - https://vtac.edu.au Direct Application - https://gotovu. custhelp.com/app/landing

#### **Timetable**

vu.edu.au/timetables

#### **Course Chair**

Xiao Su

#### **Course Advice**

AskCUA - https://askvu.vu.edu.au/ app/askcua

## **Course Delivery Plan 2025**



#### Year 1

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
RCS1601	Chemistry 1A	Core	2B1 2025	12	FP, SA	
RBM1200	Functional Anatomy of the Limbs	Core	2B2 2025	12	SA	
HHH1001	Mathematics and Statistics for Biomedicine	Core	2B3 2025	12	FP	
RCS1602	Chemistry 1B	Core	2B4 2025	12	FP, SA	RCS1601

**Please Note**: From Semester 2 2026 onwards your study sequence will be determined by what Majors/Minors you select to study. Please see your Course & Unit Advisor for further assistance with sequencing and enrolling these units.

#### Year 2

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM1002	Biological Systems	Core	1B1, SB1	12	SA	
RBM1518	Human Physiology 1	Core	1B2	12	FP, SA	
RBM1100	Functional Anatomy of the Trunk	Core	1B3	12	SA	
RBM1528	Human Physiology 2	Core	1B4	12	SA	RBM1518
		Major	2B1			
	Major/Minor Unit	Minor		12		
		Major	0.00	10		
	Major/Minor Unit	Minor	2B2	12		
	Main a/Min and India	Major	202	12		
	Major/Minor Unit		2B3	12		
Maria o/Miora or Harib	Major	204	12			
	Major/Minor Unit	Minor	2B4	12		

**Students should be enrolling in the above sequence patterns only.** Unit offerings have been created by your discipline for your specific course. If the unit quota is full, please contact <u>AskCUA</u> for course advice

# **Prerequisites**

A number of units within the degree have 'prerequisites'. These prerequisites must be met before enrolment in the unit is permitted. Generally these prerequisites require the successful completion of a unit or units taken at an earlier stage in the course. Students should pay particular attention to these prerequisite requirements as failure to meet these can seriously hinder progression through the course.

#### Core

A unit that must be completed

### Major

The subject area that you will specialise in during your degree, comprising a set of units within a particular discipline. For example, a business degree has majors such as marketing and banking & finance. At Victoria University a major is made up of 96 credit points (equivalent to 8 units)

### **Minor**

A subject area that is the second focus of a degree, comprising a smaller set of units than a major within a particular discipline. At Victoria University a minor is made up of 48 credit points (equivalent to 4 units).



## Year 3

Init Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
	Major/Minor Unit	Major	1B1	12		
	Major/Millor Offic	Minor	101			
	Major/Minor Unit	Major	1B2	12		
	мајог/мптог отпс	Minor	162			
	Major/Minor Unit	Major	102	12		
	Major/Minor Unit	Minor	1B3	12		
	Major/Minor Unit	Major	1B4	12		
	Major/Minor Unit	Minor	104			
	Major/Minor Unit	Major	2B1	12		
	мајог/мптог отпс	Minor	201			
	Major/Minor Unit	Major	2B2	12		
	Major/Millor Offic	Minor	202			
	Major/Minor Unit	Major	2B3	12		
	Major/Millor Offic	Minor	ZD3			
	Maing/Minny Hoit	Major	2B4	12		
	Major/Minor Unit	Minor	ZD4			

## Year 4

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites	<b>•</b>	•	<b>•</b>	
	Main a/Min and India	Major	101	12						
	Major/Minor Unit	Minor	1B1	12						
	Main a/Min and India	Major	1B2	12						
	Major/Minor Unit	Minor								
		Major	100	12			•	•	•	
	Major/Minor Unit	Minor	1B3		12	12				
			154	10						
Major/Minor Unit		Minor	1B4	12			•		•	



# **Majors and Minors**

Approved Majors							
НМАНРН	<u>Human Physiology</u>						
НМАМСВ	Molecular Cell Biology						

Approved Minors							
HMIAPP	Applied Research						
НМІНРН	Anatomy & Integrated Physiology						
НМІМСВ	Molecular Cell Biology						



# **Course Delivery Plan 2025**



# **Majors**

# **Human Physiology - HMAHPH**

The Human Physiology major provides an integrated suite of units which builds upon the fundamentals of anatomy and physiology covered in the College core units. Specifically, students will learn about regional and rehabilitation anatomy, cardiorespiratory, renal and neuromuscular physiology and associated diseases.

The relationships between gastrointestinal function, diet, nutrition, metabolism and human health will be covered, including examining the role of diet in chronic diseases and its importance in growth and development. In the final year, students will draw on their knowledge and apply their learning in different contexts in the two capstone units, Applied Biomedical Sciences and Integrative Physiology.

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM2103	Digestion, Nutrition and Metabolism	Major		12	SA	RBM1528 or RBM1174 or HBM1202
НВМ3202	Applied Biomedical Science	Major		12	SA	RBM2133, HBM2106, RBM2200 and RBM2800
HBM3203	Integrative Physiology	Major		12	SA	RBM2800
RBM2100	Rehabilitation Anatomy	Major		12	SA	RBM1200 or AHE1101 and AHE2202
RBM2200	Functional Anatomy of the Head and Back	Major		12	SA	RBM1100 and RBM1200
RBM2800	Cardiorespiratory and Renal Physiology	Major		12	FP, SA	RBM1528
RBM3264	Advanced Nerve and Muscle Physiology	Major		12	SA	RBM2800
RBM3640	Advanced Neurosciences	Major		12	ORT, SA	RBM2100 or RBM2540 or RBM2800

### **Semester Dates**

For accurate, up-to-date semester dates for this major, please go to MyVU.





# **Majors**

# Molecular Cell Biology - HMAMCB

The Molecular Cell Biology major builds on the knowledge of introductory cell function and molecular mechanisms, acquired from the first year core units. The suite of units offered in this major focuses on the investigation of the human body at the molecular and cellular levels, with emphasis on the molecular basis of disease.

Understanding the molecular techniques utilized in molecular biomedicine will underpin this majoR. Students will develop both theoretical and laboratory skills essential for becoming successful professionals in both research and clinical based biomedical science.

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM2105	Medical Microbiology and Immunity	Major		12	SA	RBM1528 or RBF1310
HBM2106	Human Genetics	Major		12	SA	HBM1002 and RBF1320
HBM3202	Applied Biomedical Science	Major		12	SA	RBM2133, HBM2106, RBM2200 and RBM2800
HBM3204	Biomolecular Mechanisms of Disease	Major		12	SA	RBM2133 and HBM2106
RBM2133	Cell and Molecular Biology	Major		12	ORT, SA	RBM2560 and RBM1528 or RBF1310
RBM2560	Medical Biochemistry	Major		12	FP	RBM1528 or RBF1310 and RCS1602
RBM3720	Immunology	Major		12	SA	HBM2105
RBM3800	Pharmacology	Major		12	OSP	RBM2560 and RBM2800

## **Semester Dates**

For accurate, up-to-date semester dates for this major, please go to  $\underline{\text{MyVU}}.$ 





## **Minors**

## **Applied Research - HMIAPP**

This Minor provides the opportunity for students to focus on theoretical and practical skills essential for Biomedical Research. The importance of biomedical research in developing new treatments and understanding the underlying mechanisms of diseases underpins this minor. Following on from first year core units students will further develop their understanding of qualitative and quantitative research with an emphasis on critically reviewing scientific literature, statistical analysis and effective scientific communication.

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM3101	Research Methods	Minor		12	FP	RBM2800
HBM3105	Research Project	Minor		12	SA	HBM3101
HBM3106	Reproductive and Developmental Biology	Minor		12	SA	
RBM3265	Exercise Biochemistry and Integrated Metabolism	Minor		12	FP	RBM2560

## Anatomy & Integrated Physiology - HMIHPH

The Anatomy & Integrative Physiology minor introduces the students to the gross anatomy of the head, neck and back and the application of anatomy in medicine will be highlighted in clinical scenarios. The integrative nature of the cardiovascular, renal, respiratory systems will be interrogated further, building on basic physiological principals covered in Human Physiology in Year 1. The relationship between gastrointestinal physiology, nutrition and human health is also covered. Upon completion of this minor students will have an understanding of the link between anatomy, physiology, nutrition, metabolism and health.

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM2103	Digestion, Nutrition and Metabolism	Minor		12	FP	RBM1528 or RBM1174 or HBM1202
RBM2100	Rehabilitation Anatomy	Minor		12	SA	RBM1200 or AHE1101 and AHE2202
RBM2200	Functional Anatomy of the Head and Back	Minor		12	SA	RBM1100 and RBM1200
RBM2800	Cardiorespiratory and Renal Physiology	Minor		12	FP, SA	RBM1528

#### **Semester Dates**

For accurate, up-to-date semester dates for these minors, please go to MyVU.



# **Minors**

# Molecular Cell Biology - HMIMCB

The Molecular Cell Biology minor builds on the knowledge of introductory cell function and molecular mechanisms, acquired from the first year core units. The suite of units offered in this minor focuses on the investigation of the human body at the molecular and cellular levels. Key concepts in microbiology, human genetics and biochemistry will be taught and utilized to understand human disease at the molecular level.

Unit Code	Unit Title	Unit Type	Sem	Credit Points	Campus	Pre-Requisites
HBM2105	Medical Microbiology and Immunity	Minor		12	SA	RBM1528 or RBF1310
HBM2106	Human Genetics	Minor		12	SA	HBM1002 and RBF1320
RBM2133	Cell and Molecular Biology	Minor		12	ORT, SA	RBM2560 and RBM1528 or RBF1310
RBM2560	Medical Biochemistry	Minor		12	FP	RBM1528 or RBF1310 and RCS1602

### **Semester Dates**

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