Welcome to Murdoch University!

Congratulations on your offer of a place at Murdoch University. The details included in this booklet will assist you with accepting your offer, seeking advice on your options of enrolment, choosing your units and completing your enrolment online. Tick [✓] the steps below as you complete them, to ensure you complete all parts of your enrolment successfully.

If you do not have ready access to computer facilities either at home, work, your local library etc., the University has many computers available on-campus for students. For further details contact the IT Helpdesk on 9360 2000 or http://www.murdoch.edu.au/studentit/labs.html.

External students who are unable to access computer facilities due to extenuating circumstances are able to apply to receive their University correspondence via hardcopy. A copy of the Application letter is included in your External Enrolment Pack. For further information please contact the External Studies Office on 9360 2710.

**STEP 1 Accept your offer and activate your Murdoch account via the Offer Response System**

Go to the Murdoch Home page (http://www.murdoch.edu.au/) and follow the link to the New Students website. You will need your Offer Letter (Domestic students) or Confirmation of Enrolment- eCOE (International students) handy as this contains your Student Number. From here you can:

- Choose to Accept, Defer or Reject your offer (domestic students only)
- Set your Murdoch Password (all students)
- Set and confirm your email address (all students)
- Select your course as offered (domestic students only)

Now that you have accepted your place as a Murdoch student you are ready to select your units and complete your enrolment! Continue from Step 2 over the page.

**Important Point Email Account**

*The University’s primary form of correspondence to all students is via email.*

If you have not set an existing email address in Step 1, the University automatically provides you with an email address, of the format yourstudentnumber@student.murdoch.edu.au. You can access your Murdoch email account with webmail (available on any browser) at: https://wwwstudent.murdoch.edu.au/mail using your Murdoch User name (Student Number) and Murdoch Password (same as MyInfo). It is essential that the University has your updated email preference so that you receive important communications from your lecturers and University Administrators.

External students that are unable to access computer facilities due to extenuating circumstances are able to apply to receive their University correspondence via hardcopy. A copy of this application letter is included in your Enrolment Pack. For further information please contact the External Studies office on 9360 2710.
**STEP 2 Research your Course, Unit Sets (majors, minors) and Units**

Review your Course Description (Appendix A).
From here you can see any recommended Double Majors or Minors and the list of units that you will be required to complete in order to graduate in your chosen course and qualification.

Review the Course Checklist and Unit Prerequisites (Appendix B)

Review the Sample Enrolments for your course (Appendix C).
Some courses provide you with a choice of units within the requirements, so you may wish to plan your own enrolment version and therefore not need to follow the sample enrolment that we have provided.

**1st Year units**
Generally new full-time students will enrol in 4 units in each semester at Part I level (units beginning with a ‘1’). Students do not have to take a full-time load and can enrol part-time, however this does not mean that the units are taken “after hours”. Part-time refers to a load of less than 9 credit points in the Semester. Please note that in order to qualify for AUSTUDY usually you need to enrol in at least 9 points per semester. This may vary. If in doubt you should check with Centrelink to confirm your entitlements.

**2nd (and subsequent) Year units**
Students who have completed studies at another tertiary institution before starting at Murdoch and who have been given credit of at least 18 points may take 2nd year (Part II units) provided they have also completed the individual unit’s prerequisites.

Review the unit listing in the Handbook for a description of each of your Units.
http://handbook.murdoch.edu.au/units/

Review your Lecture Timetable.
Once you have decided which units you will take in Semester 2 2007 but before you enrol, you are encouraged to check that the units you have chosen are not timetabled to run at the same time. Generally you should find that the lectures for the units you are required to take will not clash, however some elective units may not fit into your timetable. The quickest method of checking is to refer to the online teaching timetable’s nominated units website at: http://www.murdoch.edu.au/admin/timetables/teaching/enquiry.html Here you can type in your 3 or 4 units for the semester and see the timetabled lecture times.

You may also need to consider whether you can attend campus for all units (internal option) or whether it would be better if you could take one or two units in the External option. The learning objectives of any unit are identical irrespective of whether you are studying the unit internally or externally. The External option is not available in all units however you may have a choice within your course. Please note: Under visa requirements International students are not permitted to take external units.

Record your Personal Study Plan (Appendix E)
STEP 3 Unit Enrolment Online

The University’s student self enrolment and management system is known as MyInfo (http://myinfo.murdoch.edu.au/). Within Myinfo you can manage your enrolment in your course including unit selection, unit set (majors, minors) enrolment and tutorial signup. You can also update your personal details (home and postal addresses, email address).

Log into MyInfo
Log into Myinfo at http://myinfo.murdoch.edu.au/ by using your Murdoch User Name (Student Number) and Murdoch Password (as per Step 1).

Check Personal Details
Click on the Personal Details menu item and then Change Address(es). You should check that this information is up to date and make any changes as necessary.

Enrol in Units for 2007
Click on the Change Enrolment Details menu item and then Self Enrolment Steps. Read all of the information on this page and then scroll down to the Self Enrolment Steps heading.

Starting with the Disclaimer work your way through each of the steps. Each step has an explanation to the process so please read each one carefully.

- Disclaimer – Statement concerning your use of MyInfo and adherence to the University’s legislation.
- Services – Your opportunity to join the Student Guild as a financial member and access their many services and facilities. You can also validate your Transperth SmartRider for a tertiary concession if you are studying fulltime.
- Course Completion Date – Keeping the university informed when you are likely to graduate.
- Unit Sets – Your method of adding or amending unit sets (Majors and Minors). You will need to have at least one Unit set recorded as your Primary one.
- Units – This is where you add your new units. Use the Search function to find the unit you want. You can also just type in the first 3 alpha characters to list all of the units with that prefix. It is essential that you Save Changes when you have selected the unit(s) that you want added.
- Commonwealth Assistance Form (Domestic Students only) – This is a Commonwealth Government requirement. To complete this you will need your TAX FILE NUMBER (TFN). If you do not have TFN handy you can come back to this step later, however this step must be completed by the Census date (31st August) to avoid having your course cancelled as per Commonwealth Government regulations.

Once you have returned to the Self Enrolment Steps main page all items that you have successfully completed will be flagged with either a ‘Green Tick’, which means that you do not have to come back to these, or a ‘Circular Arrow’ which means that you have successfully completed this item but can come back and make changes at a later date as well.

If you need any help with navigating through MyInfo or have a technical issue, check out the Help section first. This can be found on the left hand menu if you are already logged into MyInfo or if you are not logged into MyInfo there is the “Need Help?” section on the right hand side of MyInfo Access page (http://www.murdoch.edu.au/students/myinfo/).
**STEP 4 Current Enrolment Details**

When you have enrolled in all units that you intend to take in 2007 you are encouraged to view your current enrolment from the Current Enrolment Details menu item in MyInfo. Select Course and Unit Details and then click on Units. You will need to check that all the units that you intend to take are included, and show as ENROLLED!

Print out a copy of your Current Enrolment Details

**Important Point  Enrolment Deadlines**

<table>
<thead>
<tr>
<th>Important Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>You will be expected to enrol in all your units for Semester 2, 2007 as soon as possible. The last date to add an internally offered unit to your enrolment is the end of Week 1 of Semester; and the last date to add an externally offered unit, or to change from an internal offering to an external offering, is earlier to allow time for mail out of materials. You need to enrol in external offerings no later than the end of Orientation week, however please check the Dates and Deadlines page online for exact dates - <a href="http://www.oss.murdoch.edu.au/enrolment/deadlines.html">http://www.oss.murdoch.edu.au/enrolment/deadlines.html</a>.</td>
</tr>
</tbody>
</table>

**STEP 5 Attend your Course Advice session(s)**

If you are unsure about your choice of units or have specific course related questions that you need answered, you should attend the Course Advice Session(s) offered by your School. These are held during Orientation week. At these sessions the Program Chair(s) will be available to advise students on the requirements of the degree and answer any unit selection and enrolment queries that may arise. The Orientation and Course advice session timetable will be available at [http://www.oss.murdoch.edu.au/orientation/](http://www.oss.murdoch.edu.au/orientation/).

If you have read through this booklet AND attended a Course Advice Session but still have a query or concern with your enrolment, your Divisional Student Administrative staff will be able to assist you. You are encouraged to “have a go” by yourself and then either telephone or email your Divisional student administrative staff member (Appendix I) with the specific concern, and they will look after you! However, please be aware that this assistance may be limited during the busy course advice session times, during Orientation Week and also Week 1 of semester.

Don’t panic if you are unsure of your choice of units. Do the best you can, and then seek advice either at your Course Advice Session, from the resources available on the Divisional Student Administration websites:

and  
**Step 6: Student ID/Library Card and Parking Permit**

Get your Murdoch Student ID/Library Card

These are available from the IT Service Desk in the Library (this can be done at any time or during Orientation Week) or, if you are an external student living more than 30 aerial kms from the South Street campus, contact Janice Pell (J.Pell@murdoch.edu.au or telephone 08 9360 2154) to request a Student ID/Library card application form or see URL: [http://wwwlib.murdoch.edu.au/for/external/forms/idlibrarycard.doc](http://wwwlib.murdoch.edu.au/for/external/forms/idlibrarycard.doc).

Purchase your Parking Permit.

If you wish to drive to Uni and park your car on campus you will require a Murdoch parking permit or a valid ACROD sticker (for Easy Access bays only). Murdoch campus students will need to purchase a parking permit at either the Student Service Centre, Level 2 Chancellery Building, or by avoiding any queues and applying online at [http://www.oss.murdoch.edu.au/parking/](http://www.oss.murdoch.edu.au/parking/). The online facility will be open from mid July 2007.

Parking at the Murdoch campus in the Green zones will be free between 18th June and 3rd August. After this date you will need a parking permit (Students at the Rockingham and Peel campuses will be required to apply for a 2007 permit however there will be no charge for 2007. You can apply via the Rockingham and Peel administration offices.)

**Step 7: Lectures, Tutorials, Labs and Workshop Enrolment - Activities**

From 2007 Murdoch, Rockingham and Peel students will be able to enrol in Lectures, Tutorials, Labs and Workshops (activities) online via MyInfo ([http://myinfo.murdoch.edu.au/](http://myinfo.murdoch.edu.au/)).

Enrol in your activities for 2007

Click on the Change Enrolment Details menu item and then Activity Enrolment. Read all of the information on this page and then scroll down to see your Unit enrolments and the available activities.

You will need to have completed your Unit Enrolment (See Step 3 above) before you can enrol in any associated lecture, tutorial, lab or workshop. If your unit attempt status is INVALID, you will not be able to select activities for that unit. Enrolment in a Lecture activity may not be mandatory for all units, however it is highly recommended in order to avoid clashes on your timetable.

This system works on a first-in-first-served basis so you are advised to enrol in your activities as soon as possible.

Make sure you also note the start week for each activity as they may not all start from week 1.
STEP 8 Attend Orientation (Week of 30th July)

The Orientation program has been designed to meet your specific needs as a new student to Murdoch, to introduce you to key Murdoch University staff and the campus and facilities you will require. You can check the full orientation timetable at [http://www.oss.murdoch.edu.au/orientation/](http://www.oss.murdoch.edu.au/orientation/) for activities and Course Advice session details.

All students are strongly encouraged to attend Orientation. We’ve planned a number of activities that will give you lots of opportunity to experience the helpful and friendly atmosphere at Murdoch. During Orientation Week you will be able to;

- Attend Foundation Unit ‘taster’ sessions. These sessions will allow you to get a better understanding of what our Foundation Units are all about and which one is the best for you.
- Meet other students in your same course. Never undervalue the benefits from having friends in your same course.
- Attend a Course Advice Session for information about your enrolment
- Go on Campus and Library tours.
- Attend information sessions about Student Support services. A wide range of services are available through our Teaching and Learning Centre and Equity, Health and Counselling. Make sure that you are aware of these BEFORE you ever need them.
- Have an introduction to the Student Guild and their services.
- Purchase a parking permit.

**Important Point  Start of Lectures**

<table>
<thead>
<tr>
<th>Semester 2, 2007 begins Monday 6th August and all students enrolled in INTERNAL units are expected to attend classes during this week. Within Activity Enrolment (Step 7 above) you will be able to see which week your individual activities start, as some Tutorials may start in week 1 or 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you enrolled in a unit in the external option before the end of Orientation Week, your unit materials will be mailed to your home address before the end of Week 1.</td>
</tr>
</tbody>
</table>
## Dictionary of ‘Uni-speak’

Outlined below is a general summary of Murdoch enrolment information to help you with some of the more common terms that you will come across as you plan your studies. A full list of Murdoch terminology and relevant regulation requirements can be found in the Murdoch Glossary ([http://handbook.murdoch.edu.au/geninfo/vocabulary.html](http://handbook.murdoch.edu.au/geninfo/vocabulary.html)).

| **Booklists** | Booklists are available online at [https://www.murdoch.edu.au/ofm/services/bookshop/booklist_edo](https://www.murdoch.edu.au/ofm/services/bookshop/booklist_edo) and books can either be ordered online or direct from the Bookshop located on Bush Court at the Murdoch Campus and on the ground floor of the Arts and Commerce building at the Rockingham campus. |
| **Core Units** | You will need to ensure that you take the Core units at Part I and Part II for the major(s) that you have decided to complete. Core units are essential units in your major(s). In your first year, your enrolment will include the Part I core units, and in your second and subsequent years you will take the Part II core units. |
| **Course description, Course checklist and Course structure** | At the end of this booklet (appendices) you will find specific information to help you plan your enrolment, find which units you need to take, which pre-requisites are required and the common double majors and minors. For full details of other majors refer to the 2007 Murdoch Handbook ([http://handbook.murdoch.edu.au/](http://handbook.murdoch.edu.au/)), your Divisional Student Administrative office or the New Student website ([http://www.murdoch.edu.au/students/new/](http://www.murdoch.edu.au/students/new/)). Hard copies of the Handbook are also available in your local library, in the Murdoch University library or can be purchased from the Bookshop. |
| **Course or Degree** | Murdoch uses course and degree to identify the qualification that you will be studying towards, for example the Bachelor of Science (or Bachelor of Arts) degree is your course of study. |
| **Credit – Advanced Standing – Accreditation** | If you have studied at a University or TAFE before coming to Murdoch University you may be eligible for credit. Credit will mean that the amount of time and units that you need to study at Murdoch could be reduced. The University has two Accreditation Officers, one for domestic students and one for International students. The Accreditation Officers will need to see your past results to assess how much credit you can have. [http://www.choose.murdoch.edu.au/advst.html](http://www.choose.murdoch.edu.au/advst.html) |
| **Exemptions** | If the study that you completed before coming to Murdoch University was the same or similar to Murdoch’s requirements for your course/degree, you may be granted both credit (points) and exemption for some units. This will mean that you do not have to take those units again. The Accreditation Officer will assess your previous study record for Exemptions and advise you in writing as to the outcome. |
| **Foundation Unit** | The main purpose of the foundation unit is to help new students to develop learning skills and attitudes to assist them with their studies at Murdoch. For this reason all Murdoch students are required to complete one Foundation Unit unless they have been awarded advanced standing for it. The full description of the 2007 Foundation units is available in the appendix. You will need to choose one of these. |
| **Full time study/Part time study** | Full time study at Murdoch is considered to be at least 12 points per semester. The minimum time to complete a 72 point Bachelor Degree is therefore 3 years (12 points per semester for 6 semesters). International students are required to be enrolled in a full time load every semester as per visa requirements. Part time study refers to the points load, of less than 12 points each semester, and does not mean that you can take units “After Hours”. The minimum study that you must take to retain your place at Murdoch University, is a single unit in the academic year. |
General Electives

Most undergraduate degree structures leave room for students to take other units outside of their first major. These are your General Elective units, or free choice units, however most students plan to take these units as the requirements of their second major or towards a minor within the 72 points required for most degrees. Use the Murdoch Handbook online (http://handbook.murdoch.edu.au/) to search for general electives, minors or second majors and for individual unit prerequisites. A list of all Part I units can also be found at the above Handbook address and this is a handy list to use if you cannot decide which general electives to take.

Intermission

If you require a break in studies of one year or more due to serious illness or other exceptional personal circumstances which might prohibit you from continuing your enrolment you can apply for an INTERMISSION of study (http://www.dse.murdoch.edu.au/admin/student/forms/Intermission.html). This may include but is not limited to, personal/family reasons, employment, sporting, cultural, legal or military duties. (Bach Deg Reg 38B). International Students MUST obtain permission from Murdoch International before applying for intermission of enrolment, as the Department of Immigration does not allow international students to intermit their studies except in exceptional circumstances. Intermission of Enrolment may result in cancellation of the student visa. International students should consult Murdoch International or the DIAC help line (131881) for information and advice.

Internal and External

Murdoch offers most units as Internal (D) where students are expected to attend lectures and tutorials on campus. Some units are offered as External (X), where students would be mailed out the unit materials and would be expected to study at home, and submit all assignments through email or mail. The main challenge of external study will be your ability to commit yourself to a regular timetable of study over the semester. This will require a fair degree of self discipline and in some cases an understanding and supportive network of family and friends. For further information about studying in the external mode see http://external.murdoch.edu.au/offcampus.html.

The closing date for enrolment in external units is earlier than the deadline for enrolment in internal units, to allow time for the materials to reach you before the end of Week 1 of Semester. International students are only permitted to take internal offerings of units, as per visa requirements.

Lecture, Workshops, Tutorials

The teaching method for most internal units is by Lecture where all students attend, as well as smaller tutorial groups of approximately 15 or workshop groups of approximately 30. Some units may have a single Lecture per week however many units have 2 or 3 lectures per week. A guide as to how many hours you will be required to attend on campus can be found in the Handbook entry for each unit. The online Teaching Timetable shows the Lecture, Laboratory and Workshop times. You will be required to signup for your tutorials as part of your online enrolment. Many tutorials commence in Week 2, and this information is provided at the first lecture. The Foundation units are the exception as they commence Lectures AND tutorials in Week 1.

Major

A major is a group of units that identifies a specialisation in an area of study. Students taking the Bachelor of Arts, for example, will be expected to complete at least one major (eg History) plus general elective units. Many students take their general elective units from a second major or a minor. As part of the enrolment process you will be asked to nominate your major(s) and minor(s). The course description for your major includes the Program Chair’s recommendations for other majors and minors that can be completed with your major (see Attachment A in this booklet).
<p>| <strong>Minor</strong> | A minor is a smaller package of units (unit set) similar to a major, however there are less core units in a Minor. Students are encouraged to take a second major or a minor when they are choosing their General Elective units for their first major. The full list of Minors can be found in the Handbook |
| <strong>Part I units</strong> | Part I is the name that Murdoch gives to the units that students generally take in their first year. Most of Murdoch’s undergraduate degrees require students to normally complete 24 points of Part I units. As most of the Part I units are worth 3 points of credit each this will mean that you will be taking 8 units in your first year, being 4 units each semester. These units have 100 level unit codes (e.g. MAS161). |
| <strong>Part II units</strong> | Part II is the name that Murdoch gives to the units that students generally take when they are in their second or third year of study. Most the Part II units are worth 4 points of credit each, and this will mean that you will be taking 6 Part II units in each of the 2&lt;sup&gt;nd&lt;/sup&gt; and 3&lt;sup&gt;rd&lt;/sup&gt; years, being 3 units each semester. These units have 200 or 300 unit codes (e.g. PEC235). |
| <strong>Points</strong> | There are 72 points required as the minimum to complete most Bachelor degrees with at least one major. Depending on the choice of majors students can also complete a double major within these 72 points. This would normally take 3 years to complete if you studied full time and successfully passed all units (12 points) each semester. |
| <strong>Primary Unit Set</strong> | You have accepted your offer into a course of study, and this course will include the particular first major that you wish to complete. To enable you to enrol in individual units in that course and major you will need to have at least one major recorded as your Primary Unit Set on MyInfo, and the major must relate to the course that you have been offered. For example, if you were offered a single Bachelor of Science in Chemistry your first major would be Chemistry, and therefore you should record Chemistry as your Primary Unit Set. MyInfo will not permit you to enrol in units if you select a Primary Unit set that does not match with your course. |
| <strong>Preclusion</strong> | A student may be granted exemptions on the basis of equivalent studies taken before coming to Murdoch, which are not eligible for credit or, in the case of language units, on the basis of language or other relevant proficiency. Such exemptions without credit are called PRECLUSIONS. Where a Preclusion has been awarded the student would not need to complete the precluded unit, however they WILL be required to replace the number of points of preclusion with other general elective Murdoch points. |
| <strong>Prerequisite Unit(s)</strong> | This is a requirement which a student must have met in order to be allowed to enrol in a unit. Some units assume a level of understanding before you start the unit. For example, in the Finance major it is expected that you will have an understanding of EXM130 Geological Processes before taking the higher level unit EXM256 Process Mineralogy in Part II (2&lt;sup&gt;nd&lt;/sup&gt; year). Therefore EXM130 is the PREREQUISITE unit to EXM256. |
| <strong>Program Chair</strong> | This is the academic staff member who looks after you while you are studying for your first major. The names and contact details of some Program Chairs are listed at the back of this booklet or the full list can be found online at <a href="http://www.murdoch.edu.au/contacts/academic/">http://www.murdoch.edu.au/contacts/academic/</a> |</p>
<table>
<thead>
<tr>
<th>Specified Electives</th>
<th>Some majors may give you a choice of units from a defined list, and these are called Specified Electives. Please note that you do not need to take all of the Specified Electives, only sufficient to meet the requirements of the major.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Timetable</td>
<td>Before enrolling you should check that the units you have chosen are not timetabled to run at the same time. You can find Murdoch’s online timetable at <a href="http://www.murdoch.edu.au/admin/timetables/teaching/enquiry.html">http://www.murdoch.edu.au/admin/timetables/teaching/enquiry.html</a>. On this timetable you will find your lectures, workshop and tutorial times. Please note that there is an R (Repeat) against certain lectures/workshops/laboratories in the timetable. This is a repeat and you should attend at the time that fits best into your timetable. If there is no R against the time then you are expected to attend every session indicated.</td>
</tr>
<tr>
<td>Unit Co-ordinator and Tutor</td>
<td>An academic staff member is usually the main lecturer of each unit, and is called the Unit Co-ordinator. When you attend the smaller tutorial group you may also be assigned a Tutor. The tutor or the Unit Co-ordinator are the people who you can go to if you have any queries about the individual unit. The names of the Unit co-ordinators are available on each Unit Welcome Page on the Murdoch website (<a href="http://www.murdoch.edu.au/index/units">http://www.murdoch.edu.au/index/units</a>).</td>
</tr>
<tr>
<td>Units</td>
<td>This is the name given to each individual package of study, for example MAS182 Applied Mathematics is a unit.</td>
</tr>
<tr>
<td>Unit Set</td>
<td>Murdoch’s online enrolment system refers to Unit Sets as being the name of the Majors and minors, or specializations that you are intending to complete during your course. See also “Major” and “minor”.</td>
</tr>
</tbody>
</table>
FAQs – Frequently Asked Questions

1. General Electives - What are they and where can I find them?
   A General Elective is a unit that is not a required unit (Core Unit or Specified Elective) for your Major or Course. It can be selected from outside your primary area of study and may form part of a second Major or Minor. See ‘Uni-speak’ in this booklet for a longer explanation of General Electives along with Majors and Minors. There is no single ‘list’ of General Electives. You can select General Electives by taking the units that make up a second Major or Minor or by looking at the online Handbook list of units http://handbook.murdoch.edu.au/units/.

2. Units - Which units do I need to do and how do I know that I have enrolled in the right units?
   The Checklist of Units and Prerequisites (Appendix B) and Sample Enrolments (Appendix C) in this booklet show you your required units and units you should enrol into. Enrolment Information for New Students booklets for other Majors are available from the New Student website http://www.murdoch.edu.au/students/new/.

3. Invalid Units - Why is my unit enrolment INVALID?
   Click on the ‘Why is this Invalid?’ button in MyInfo. To find this button, go to ‘Change Enrolment Details’, ‘Self Enrolment Steps’, and then ‘Units’. Beside the invalid unit, you will find this grey button. When you click, a pop-up window will display the reason that the unit is invalid. If you still require help, print off or copy down this information before contacting your Student Administrative Officer (http://www.murdoch.edu.au/dirs/adminassist.html).

4. Activities (Tutorials/Workshops/Labs) & Unit Coordinators - How do I sign up for my Activities and what do I do if they are full?
   Activity sign can be found in MyInfo by going to ‘Change Enrolment Details’, ‘Activity Sign Up’ and then click on the ‘Add or Change Activities’ button. Choose your Activities from the selection available. If your chosen Activity is full there are three options available: review your whole timetable to check if you can make changes to any other units, consider doing a unit externally (if available), or contact the Unit Coordinator, if your circumstances are extenuating. Unit Coordinator contact details can be found via the Unit Welcome Page http://www.murdoch.edu.au/index/units.

5. Unit Sets - What are Unit Sets?
   This is the name given to Majors and Minors by MyInfo, and often referred to as a Course. You must have at least one primary unit set on MyInfo which matches to your course (eg. Bachelor of Arts in History, with primary unit set of History). See also “Unit sets” in the “Uni-speak” in this booklet.

6. Majors and Minors - How do I add or change a major or a minor?
   Second Majors and Minors can be added or changed under ‘Unit Sets’ in the Self Enrolment Steps on MyInfo. To change your course entirely will require a course transfer which can only be applied for near the end of each semester. The relevant Amend Course Details form can be found online at http://www.oss.murdoch.edu.au/forms/.

7. Part time study or Intermission – How do I study part time? How do I take a semester off?
   You only need to enrol in the number of units you wish to complete each semester. Less than 9 credit points in a semester will mean that the University considers you part time. Students can change between full time and part time study semester by semester, as their circumstances change. See ‘Part time/Full time’ in Uni-speak in this booklet. If you would like to take a semester or more off from studying, you should apply for an ‘Intermission of Enrolment’. The appropriate form can be found online at http://www.dse.murdoch.edu.au/admin/student/.
<table>
<thead>
<tr>
<th>Title</th>
<th>Biological Sciences (BSc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
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</tr>
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<td>School of Biological Sciences and Biotechnology</td>
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<tr>
<td>Course Codes</td>
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</tr>
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<td>Duration</td>
<td>3 years full-time or part-time equivalent</td>
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<tr>
<td>Description</td>
<td>The Biological Sciences major aims to produce biologists with wide-ranging training and experience in a broad area of biology. It adopts an integrated approach to the major themes of biology, from the molecular and cellular levels to the whole organism and community levels. This is achieved by examining the common features and differences in the biochemistry, genetics, physiology, ecology and behaviour of micro-organisms, plants and animals. In addition, students may select electives to place emphasis on animal biology, biochemistry, ecology, environmental biology and microbiology.</td>
</tr>
<tr>
<td>Special Requirements</td>
<td>The course can only be completed by internal study, although some units are available externally. Students will not be required to kill any vertebrate animal, although they may be required to work with vertebrate tissues or products. Some collection of invertebrate specimens is required.</td>
</tr>
<tr>
<td>Employment Prospects</td>
<td>Graduates find employment with government departments such as CALM and the Department of Agriculture, hospitals and medical laboratories, in teaching and in the private sector. Employment prospects are broadened by taking a double major, or a major and one or more minors.</td>
</tr>
<tr>
<td>Recommended Double Majors</td>
<td>Conservation and Wildlife Biology (BSc); Environmental Science (BEnvSc, BSc); Marine Science (BSc); Molecular Biology (BSc)</td>
</tr>
<tr>
<td>Recommended Minors</td>
<td>Animal Biology; Conservation Biology; Marine Biology; Molecular Biology</td>
</tr>
<tr>
<td>Excluded Minors</td>
<td>Plant Biology</td>
</tr>
<tr>
<td>Professional Recognition</td>
<td>Graduates are eligible for admission to a wide range of professional societies.</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td><strong>Biotechnology (BSc)</strong></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>Division</strong></td>
<td>Science and Engineering</td>
</tr>
<tr>
<td><strong>School/Responsible Organisational Unit</strong></td>
<td>School of Biological Sciences and Biotechnology</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td>Bachelor of Science (BSc) in Biotechnology</td>
</tr>
<tr>
<td><strong>Credit Points for Course</strong></td>
<td>72</td>
</tr>
<tr>
<td><strong>Course Codes</strong></td>
<td>B1032</td>
</tr>
<tr>
<td><strong>Availability</strong></td>
<td>Murdoch campus (internal)</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>3 years full-time or part-time equivalent</td>
</tr>
</tbody>
</table>

**Description**
Biotechnology is concerned with the commercial applications of biological techniques or biological agents such as bacteria or isolated enzymes in medicine, agriculture or industry. Examples include fermentation processes such as wine, beer, bread and cheese making; enzyme engineering for the manufacture of vitamins, antibiotics and biochemicals; genetic engineering of plants and animals for agricultural and medical purposes; and environmental engineering to allow for the efficient treatment of wastes and the rehabilitation of polluted sites.

The major provides broad training as well as in-depth study in selected areas so as to generate graduates capable of operating in an interdisciplinary environment. Consequently, the major provides the opportunity to gain experience in the biological, chemical and commercial aspects of biotechnology with an emphasis on the development of the skills and knowledge applicable to a wide range of biotechnological processes. Areas studied include genetic engineering, immunology and vaccine production, fermentation technology and cell culture. Specialisations may be incorporated into the degree through the appropriate choice of double majors and minors (see Recommended Double Majors and Minors in this section). All students in the Biotechnology major are encouraged to obtain on-the-job training in industry, which may be achieved via an Industry Practicum or through a Professional Placement.

**Special Requirements**
Students undertaking units in Biotechnology will not be required to kill any vertebrate animal but they will be required to work with fresh tissue from dead animals in certain units.

**Employment Prospects**
Biotechnologists gain employment in pharmaceutical companies, in the food industry, in research and diagnostic teams in hospitals, in biotechnology companies, in agriculture departments, in university research centres and in the CSIRO. Some graduates have found employment in the legal field as patent attorneys while others have become sales managers in scientific equipment and pharmaceutical companies.

**Recommended Double Majors**
Biomedical Science (BSc); Chemistry (BSc); Entrepreneurship and Innovation (BCom) [also see Double Degree in Biotechnology and Commerce]; Management (BCom) [also see Double Degree in Biotechnology and Commerce]; Marketing Management (BCom) [also see Double Degree in Biotechnology and Commerce]; Molecular Biology (BSc); Nanoscience (BSc) [discuss unit selections with the Program Chair]

**Recommended Minors**
Animal Biology; Applied Statistics; Bioinformatics; Biomedical Science; Biomolecular Chemistry; Chemistry; Entrepreneurship and Innovation; Management; Marketing; Physiology and Pharmacology; Plant Biology

**Excluded Minors**
Molecular and Ecological Basis of Infection; Molecular Biology

**Professional Recognition**
Students who complete the three-year double major in Biotechnology and Chemistry are eligible for membership of the Royal Australian Chemical Institute (RACI).
<table>
<thead>
<tr>
<th>Title</th>
<th>Biotechnology (BSc) + Management (BCom), Biotechnology (BSc) + Marketing Management (BCom), Biotechnology (BSc) + Entrepreneurship and Innovation (BCom)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Science and Engineering</td>
</tr>
<tr>
<td>School/Responsible Organisational Unit</td>
<td>School of Biological Sciences and Biotechnology</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Bachelor of Science (BSc) in Biotechnology + Bachelor of Commerce (BCom) in Entrepreneurship and Innovation or Management or Marketing Management</td>
</tr>
<tr>
<td>Credit Points for Course</td>
<td>96</td>
</tr>
<tr>
<td>Course Codes</td>
<td>B1191</td>
</tr>
<tr>
<td>Availability</td>
<td>Murdoch campus (internal) Some units may also be available in the following locations and attendance modes: Peel campus (internal) (Entrepreneurship and Innovation only) Rockingham campus (internal) (Management; Marketing Management only)</td>
</tr>
<tr>
<td>Duration</td>
<td>4 years full-time or part-time equivalent</td>
</tr>
<tr>
<td>Description</td>
<td>Biotechnology is an applied science that uses the techniques of biochemistry, microbiology, molecular biology, fermentation technology and genetic engineering to generate commercial products of benefit to medicine, agriculture and industry. Because of the commercial applications of biotechnology, training in commerce is considered by employers in the biotechnology industry to be highly desirable. This specially constructed joint degree provides thorough training in biotechnology and in either management, marketing management or entrepreneurship and innovation. Graduates will be awarded a BSc (Biotechnology) and a BCom (Management or Marketing Management or Entrepreneurship and Innovation). Students undertaking this double qualification should note that, due to the combination of units offered, it is not possible to avoid timetable clashes between all units. Students will need to select their units carefully to ensure completion of the qualification within four years and should seek advice from the Program Chair on the most appropriate enrolment pattern on a yearly basis.</td>
</tr>
<tr>
<td>Special Requirements</td>
<td>Students undertaking units in Biotechnology will not be required to kill any vertebrate animal but they will be required to work with fresh tissue from dead animals in certain units.</td>
</tr>
<tr>
<td>Employment Prospects</td>
<td>Biotechnologists gain employment in pharmaceutical companies, in the food and beverage industry, in research and diagnostic teams in hospitals, in agriculture departments and in the mining industry. Because of the commercial and industrial applications of biotechnology, completion of a BCom will enhance employment prospects and ultimately lead to greater opportunities to move into management positions.</td>
</tr>
<tr>
<td>Recommended Minors</td>
<td>Forensic Biology</td>
</tr>
<tr>
<td>Excluded Minors</td>
<td>Entrepreneurship and Innovation; Forensic Analysis; Management; Marketing; Molecular and Ecological Basis of Infection; Molecular Biology</td>
</tr>
<tr>
<td>Title</td>
<td><strong>Conservation and Wildlife Biology (BSc)</strong></td>
</tr>
<tr>
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<td>-----------------------------------------</td>
</tr>
<tr>
<td>Division</td>
<td>Science and Engineering</td>
</tr>
<tr>
<td>School/Responsible Organisational Unit</td>
<td>School of Biological Sciences and Biotechnology</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Bachelor of Science (BSc) in Conservation and Wildlife Biology</td>
</tr>
<tr>
<td>Credit Points for Course</td>
<td>72</td>
</tr>
<tr>
<td>Course Codes</td>
<td>B1138</td>
</tr>
</tbody>
</table>
| Availability | Murdoch campus (internal)  
Some units may also be available in the following locations and attendance modes:  
Murdoch campus (external) |
| Duration | 3 years full-time or part-time equivalent |
| Description | Conservation Biology is concerned with the study and protection of biological diversity. It requires a detailed understanding of biology as well as of the social, political and economic context in which conservation policy is developed and implemented. It is therefore an excellent interdisciplinary major embracing aspects of science and the social sciences. The core of the degree is a solid grounding in a range of biological disciplines and their application to the conservation of biota. This is supplemented by required units covering law, policy and management. |
| Special Requirements | Students undertaking units in Conservation Biology will not be required to kill any vertebrate animal but they will be required to work with fresh tissue from dead animals in certain units. |
| Employment Prospects | Commonwealth, state and local agencies dealing with nature conservation; the interdisciplinary breadth of the course is also well suited to teaching careers. |
| Recommended Double Majors | Biological Sciences (BSc); Environmental Science (BEnvSc, BSc); Marine Science (BSc); Molecular Biology (BSc) |
| Recommended Minors | Animal Biology; Applied Statistics; Bioinformatics; Ecosystem Management; Land Management; Marine Biology; Mathematical Modelling; Molecular Biology; Plant Biology |
| Excluded Minors | Conservation Biology |
| Professional Recognition | Eligible to seek membership of the Ecological Society of Australia and other relevant professional bodies. |
### Molecular Biology (BSc)

<table>
<thead>
<tr>
<th>Title</th>
<th>Molecular Biology (BSc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Science and Engineering</td>
</tr>
<tr>
<td>School/Responsible Organisational Unit</td>
<td>School of Biological Sciences and Biotechnology</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Bachelor of Science (BSc) in Molecular Biology</td>
</tr>
<tr>
<td>Credit Points for Course</td>
<td>72</td>
</tr>
<tr>
<td>Course Codes</td>
<td>B1139</td>
</tr>
</tbody>
</table>
| Availability | Murdoch campus (internal)  
Some units may also be available in the following locations and attendance modes:  
Murdoch campus (external) |
| Duration | 3 years full-time or part-time equivalent |
| Description | Molecular Biology is concerned with the structure and function of genetic material, the organisation and expression of genes and with the techniques of genetic engineering. These techniques have widespread application in agriculture (production of disease resistant crops; enhancement of the nutritive value of plant and animal products), in medicine (production of vaccines; treatment of genetic diseases; understanding the molecular basis of cancer), in forensic science (DNA profiling) and in conservation biology (control of feral animals; generation of disease resistance in plants and animals).  
From the perspective of the fundamental disciplines of biochemistry and microbiology, the Molecular Biology major provides in-depth study of modern molecular genetics and introduces students to the scientific techniques associated with gene manipulation. Students are also provided with an opportunity to explore the ethical considerations relevant to gene transfer technology. |
<p>| Special Requirements | Students undertaking units in Molecular Biology will not be required to kill any vertebrate animal but they will be required to work with fresh tissue from dead animals in certain units. |
| Employment Prospects | Molecular biologists are in high demand in hospitals, research organisations such as the CSIRO and medical research centres, university and agriculture departments and in biotechnology and food processing companies. |
| Recommended Double Majors | Animal Science (BAnimSc); Biological Sciences (BSc); Biomedical Science (BSc); Biotechnology (BSc); Conservation and Wildlife Biology (BSc); Forensic Biology and Toxicology (BForensics) |
| Recommended Minors | Animal Biology; Applied Statistics; Biomedical Science; Biomolecular Chemistry; Conservation Biology; Forensic Biology; Marine Biology; Molecular and Ecological Basis of Infection; Nutritional Biochemistry; Physiology and Pharmacology; Plant Biology |
| Excluded Minors | Molecular Biology |</p>
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Forensic Biology and Toxicology (BForensics)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division</strong></td>
<td>Science and Engineering</td>
</tr>
<tr>
<td><strong>School/Responsible Organisational Unit</strong></td>
<td>School of Biological Sciences and Biotechnology</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td>Bachelor of Forensics (BForensics) in Forensic Biology and Toxicology</td>
</tr>
<tr>
<td><strong>Credit Points for Course</strong></td>
<td>72</td>
</tr>
<tr>
<td><strong>Course Codes</strong></td>
<td>B1256</td>
</tr>
</tbody>
</table>
| **Availability** | Murdoch campus (internal)  
Some units may also be available in the following locations and attendance modes:  
Murdoch campus (external) |
| **Duration** | 3 years full-time or part-time equivalent |
| **Description** | Forensic Biology and Toxicology is concerned with the application of the techniques of molecular biology (DNA profiling) and analytical chemistry (drug and alcohol analysis) to the fight against crime. The major provides in-depth study of modern molecular genetics including practical training in the techniques of genetic analysis such as the polymerase chain reaction (PCR) and the use of VNTRs (variable number of tandem repeats), STRs (short tandem repeats) and SNPs (single nucleotide polymorphisms) to identify regions of DNA. The application of these techniques to the analysis of ancient DNA is discussed. Training is also provided in forensic pathology, forensic anthropology and forensic botany with an emphasis on the gathering of evidence and its presentation in court.  
Hands-on experience is also provided in the modern analytical techniques associated with the detection of legal and illicit drugs and homicidal poisons including gas chromatography, HPLC, NMR and mass spectrometry. The major also provides thorough training in biochemistry, including aspects of drug metabolism, and incorporates case studies and examples from a wide range of forensic investigations which are supported by guest lectures from forensic science professionals. |
| **Special Requirements** | Students undertaking units in Forensic Biology and Toxicology will not be required to kill any vertebrate animal but they will be required to work with fresh tissues from dead animals in certain units. Students will also be exposed to graphic images of homicidal injuries. |
| **Employment Prospects** | The establishment of a national DNA database and the increasing emphasis on the monitoring of blood and urine samples for residual alcohol and drugs has seen a significant increase in employment opportunities for forensic biologists and toxicologists, particularly in government Health Departments and in analytical laboratories. Graduates have also found employment as Crime Scene Officers. The techniques of genetic analysis and analytical chemistry are highly transportable and graduates can also expect to obtain employment in hospitals, research organisations such as the CSIRO and in medical research centres, agriculture departments, food processing companies or in the pharmaceutical industry. |
| **Recommended Double Majors** | Biomedical Science (BSc); Chemistry (BSc); Criminology (BLS); Molecular Biology (BSc) [also see triple major in Forensic Biology and Toxicology, Molecular Biology and Biomedical Science, which can also incorporate a Criminology minor] |
| **Recommended Minors** | Biomedical Science; Chemistry; Criminology; Molecular Biology; Physiology and Pharmacology; Security, Terrorism and Counterterrorism |
| **Excluded Minors** | Forensic Analysis; Forensic Biology |
| **Professional Recognition** | Students who complete the three-year double major in Forensic Biology and Toxicology and Chemistry are eligible for membership of the Royal Australian Chemical Institute (RACI). |
Appendix B – Checklist of Units and Prerequisites

Biological Sciences (BSc)
School of Biological Sciences and Biotechnology
Bachelor of Science (BSc) in Biological Sciences
http://www.murdoch.edu.au/contacts/academic/School_of_Biological_Sciences_and_Biotechnology

Course Structure — 72 points

Part I — 24 points
□ A Foundation Unit — 3 points
For further information, refer to the Foundation Units section in this Handbook.

Core Units — 12 points
□ BIO152 Cell Biology — 3 pts
Murdoch: S2-internal
□ BIO103 Environmental Biology — 3 pts
Murdoch: S1-internal, S1-external
□ MAS183 Statistical Data Analysis and Databases — 3 pts
Murdoch: S1-internal, S1-external, S2-internal, S2-external
□ PEC114 Chemistry for Biological Sciences — 3 pts
Murdoch: S1-internal, S1-external, S2-internal, S2-external
□ Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts [Murdoch: S1-internal, S1-external, S2-internal, S2-external] as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts.

General Electives — 9 points
Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the requirements of a second major or minor. Please refer to any recommended Double Majors and Minors listed in the description of this course.

Part II — 48 points

Core Units — 28 points
□ BIO261 Animal Diversity — 4 pts
Murdoch: S1-internal
□ BIO263 Microbiology I — 4 pts
Murdoch: S1-internal
□ BIO265 Plant Diversity — 4 pts
Murdoch: S1-internal
□ BIO270 Biochemistry I — 4 pts
Murdoch: S2-internal
□ ENV268 Ecology — 4 pts
Murdoch: S2-internal, S2-external
□ BIO372 Genetics — 4 pts
Murdoch: S2-internal
□ BIO369 Evolutionary Biology — 4 pts
Murdoch: S2-internal

PREREQUISITES BIOLOGICAL SCIENCES

□ BIO261 Animal Diversity
N103/BIO103 Environmental Biology.
□ BIO270 Biochemistry I
N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences.
M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.
□ BIO152 Cell Biology
A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
□ PEC114 Chemistry for Biological Sciences
A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
□ ENV268 Ecology
N103/BIO103 Environmental Biology.
☐ BIO103 Environmental Biology
   Nil.

☐ BIO369 Evolutionary Biology

☐ BIO372 Genetics
   N152/BIO152 Cell Biology and either M183/MAS183 Statistical Data Analysis and Databases or M182/MAS182 Applied Mathematics or M184/MAS184 Biostatistics and Information Retrieval.

☐ PEC140 Introduction to Chemistry
   This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.

☐ BIO263 Microbiology I
   N152/BIO152 Cell Biology.

☐ BIO265 Plant Diversity
   N103/BIO103 Environmental Biology.

☐ MAS183 Statistical Data Analysis and Databases
   Nil.
Course Structure — 72 points

Part I — 24 points

☐ A Foundation Unit — 3 points
For further information, refer to the Foundation Units section in this Handbook.

Core Units — 12 points

☐ PEC114 Chemistry for Biological Sciences — 3 pts
Murdoch: S1-internal, S1-external, S2-internal, S2-external. Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts. Students enrolled in a double major with Chemistry should complete PEC116 Chemistry for Physical Sciences — 3 pts.

☐ BIO103 Environmental Biology — 3 pts
Murdoch: S1-internal, S1-external. Students enrolled in a double major with Biomedical Science or Forensic Biology and Toxicology may complete BMS101 Introduction to the Human Body — 3 pts instead of BIO103 Environmental Biology — 3 pts.

☐ BIO152 Cell Biology — 3 pts
Murdoch: S2-internal

☐ MAS183 Statistical Data Analysis and Databases — 3 pts
Murdoch: S1-internal, S1-external, S2-internal, S2-external. Students enrolled in a double major with Biomedical Science or Forensic Biology and Toxicology may complete BMS101 Introduction to the Human Body — 3 pts instead of MAS183 Statistical Data Analysis and Databases — 3 pts. Students completing a double major with Chemistry should complete MAS182 Applied Mathematics — 3 pts instead of MAS183 Statistical Data Analysis and Databases — 3 pts.

General Electives — 9 points

Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the Part I requirements of a second major or minor. Please refer to the recommended Double Majors and Minors listed in the description of this course.

Part II — 48 points

Core Units — 28 points

☐ BIO270 Biochemistry I — 4 pts
Murdoch: S2-internal

☐ BIO263 Microbiology I — 4 pts
Murdoch: S1-internal

☐ BIO212 Genetic Engineering — 4 pts
Murdoch: S1-internal

☐ BUS215 Business Feasibility and Management Concepts — 4 pts
Murdoch: S1-internal

☐ BIO301 Industrial Bioprocessing and Bioremediation — 4 pts
Murdoch: S2-internal

☐ BIO253 Plant Biotechnology and Proteomics — 4 pts
Murdoch: S1-internal

☐ BIO252 Immunology, Vaccines and Cell Culture — 4 pts
Murdoch: S2-internal

☐ BIO252 Immunology, Vaccines and Cell Culture — 4 pts
Murdoch: S2-internal

Students enrolled in a double major with Biomedical Science must complete BMS203 Comparative and Human Microbiology — 4 pts instead of BIO263 Microbiology I — 4 pts. Students enrolled in a double major with Chemistry are exempt from BUS215 Business Feasibility and Management Concepts — 4 pts and from one of the 300-level Chemistry units.

General Electives — 20 points

Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the Part II requirements of a second major or minor. Please refer to the recommended Double Majors and Minors listed in the description of this course.

PREREQUISITES BIOTECHNOLOGY (BSC)

☐ MAS182 Applied Mathematics
M164/MAS164 Fundamentals of Mathematics or at least a pass in the Year 11 course Introduction to Calculus together with at least 55% in TEE Applicable Mathematics.
BIO270 Biochemistry I  
N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences.  
M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.

MAS184 Biostatistics and Information Retrieval  
Nil.

BUS215 Business Feasibility and Management Concepts  
Nil.

BIO152 Cell Biology  
A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

PEC114 Chemistry for Biological Sciences  
A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

PEC116 Chemistry for Physical Sciences  
A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling. Students who achieved marks just below the 40th percentile will be given the opportunity in week 1 to sit a chemistry test for direct entry into this unit.

BMS203 Comparative and Human Microbiology  
BIO152 Cell Biology

BIO103 Environmental Biology  
Nil.

BIO212 Genetic Engineering  
N152/BIO152 Cell Biology.

BIO252 Immunology, Vaccines and Cell Culture  
N152/BIO152 Cell Biology.

BIO301 Industrial Bioprocessing and Bioremediation  
N263/BIO263 Microbiology I and either successful completion or concurrent enrolment in N270/BIO270 Biochemistry I.

PEC140 Introduction to Chemistry  
This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.

BMS101 Introduction to the Human Body  
Nil.

BIO263 Microbiology I  
N152/BIO152 Cell Biology.

BIO253 Plant Biotechnology and Proteomics  
N152/BIO152 Cell Biology.

MAS183 Statistical Data Analysis and Databases  
Nil.
Biotechnology (BSc) + Management (BCom), Biotechnology (BSc) + Marketing Management (BCom), Biotechnology (BSc) + Entrepreneurship and Innovation (BCom)

School of Biological Sciences and Biotechnology
Bachelor of Science (BSc) in Biotechnology +
Bachelor of Commerce (BCom) in Management or Marketing Management or Entrepreneurship and Innovation

Course Structure — 96 points
Part I — 27 points

- A Foundation Unit — 3 points
  For further information, refer to the Foundation Units section in this Handbook.
Core Units - 21 points (Marketing Management), 24 points (Management) and (Entrepreneurship and Innovation)
- BIO103 Environmental Biology — 3 pts
  Murdoch: S1-internal, S1-external
- BIO152 Cell Biology — 3 pts
  Murdoch: S1-internal
- PEC114 Chemistry for Biological Sciences — 3 pts
  Murdoch: S1-internal, S2-internal
  Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts [Murdoch: S1-internal, S1-external, S2-internal, S2-external] as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts.
- MAS183 Statistical Data Analysis and Databases — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal
- BUS165 Principles of Commercial Law — 3 pts
  Murdoch: F3-internal, S1-internal, S1-external, S2-internal
  Peel: S2-internal
  Rockingham: S2-internal

Entrepreneurship and Innovation
- BUS145 Principles of Management — 3 pts
  Murdoch: F3-internal, S1-internal, S2-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS169 Principles of Marketing — 3 pts
  Murdoch: S1-internal, S2-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS140 Principles of Finance and Banking — 3 pts
  Murdoch: S1-internal, S2-internal
  Peel: S1-internal
  Rockingham: S1-internal

Marketing Management
- BUS160 Introduction to Accounting — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS169 Principles of Marketing — 3 pts
  Murdoch: S1-internal, S2-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS161 Introduction to Economics — 3 pts
  Murdoch: F3-internal, S1-internal, S2-internal
  Peel: S2-internal
  Rockingham: S2-internal

General Electives (Marketing Management only) — 3 points
Select from any 100-level units offered by the University, subject to individual unit prerequisites.
Part II — 69 points
Core Units — 48 points

Biotechnology
- BIO212 Genetic Engineering — 4 pts
  Murdoch: S1-internal
- BIO263 Microbiology I — 4 pts
  Murdoch: S1-internal
- BIO270 Biochemistry I — 4 pts
  Murdoch: S2-internal
- BIO252 Immunology, Vaccines and Cell Culture — 4 pts
  Murdoch: S2-internal
- BIO253 Plant Biotechnology and Proteomics — 4 pts
  Murdoch: S1-internal
- BIO301 Industrial Bioprocessing and Bioremediation — 4 pts
  Murdoch: S2-internal

Entrepreneurship and Innovation
- BUS214 Marketing Development and Planning — 4 pts
  Murdoch: S1-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS218 Business Innovation Finance — 4 pts
  Murdoch: S1-internal
  Peel: S1-internal
- BUS274 Entrepreneurship and Innovation — 4 pts
  Murdoch: S2-internal
  Peel: S2-internal
- BUS240 Organisation and Management Development — 4 pts
  Murdoch: S2-internal
  Peel: S2-internal
  Rockingham: S2-internal
- BUS229 Business Development Law — 4 pts
  Murdoch: S2-internal
  Peel: S2-internal
- BUS331 Applied Business Innovation — 4 pts
  Murdoch: S2-internal
  Peel: S2-internal

Marketing Management
- BUS214 Marketing Development and Planning — 4 pts
  Murdoch: S1-internal
  Peel: S1-internal
  Rockingham: S2-internal
- BUS273 Consumer Behaviour — 4 pts
  Murdoch: S2-internal
  Rockingham: S1-internal
- BUS209 Marketing and Advertising Law — 4 pts
  Murdoch: S1-internal
  Rockingham: S1-internal
- BUS335 Marketing Research and Analysis — 4 pts
  Murdoch: S2-internal
  Rockingham: S2-internal

plus at least two of the following:
- BUS208 Quantitative Methods for Business and Economics — 4 pts
  Murdoch: S2-internal, S2-external
- BUS321 International Marketing — 4 pts
  Murdoch: S1-internal
  Rockingham: S1-internal
- BUS336 Integrated Marketing Communications — 4 pts
  Murdoch: F3-internal, S1-internal
- BUS324 Services Marketing — 4 pts
  Murdoch: S2-internal
- BUS305 Digital Marketing — 4 pts
  Murdoch: S1-internal
- BUS339 Advertising Production — 4 pts
  Murdoch: S1-internal

Management
- BUS223 Organisational Theory and Behaviour — 4 pts
  Murdoch: F3-internal, S1-internal
  Rockingham: S1-internal
- BUS240 Organisation and Management Development — 4 pts
  Murdoch: S2-internal
  Peel: S2-internal
  Rockingham: S2-internal
- BUS228 Workplace Law — 4 pts
  Murdoch: S2-internal
  Rockingham: S2-internal
- BUS317 Strategic Management — 4 pts
  Murdoch: S2-internal
  Rockingham: S2-internal
- BUS320 Management of Human Resources — 4 pts
  Murdoch: F3-internal, S1-internal
  Rockingham: S1-internal

plus at least one of the following:
- BUS222 Employee Relations — 4 pts
  Murdoch: S1-internal
  Rockingham: S1-internal
- BUS323 International Management — 4 pts
  Murdoch: S1-internal
BUS378 Knowledge and Organisational Learning — 4 pts
Murdoch: S1-internal

**General Electives — 21 points**
Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are encouraged to consider using these points to incorporate a further major, a minor, or a Professional Placement.

**PREREQUISITES**
- BUS339 Advertising Production
- BUS331 Applied Business Innovation
  - BUS274 Entrepreneurship and Innovation.
- BIO270 Biochemistry I
  - N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences. M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.
- BUS229 Business Development Law
  - BUS165 Principles of Commercial Law.
- BUS218 Business Innovation Finance
  - BUS140 Principles of Finance and Banking.
- BIO152 Cell Biology
  - A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
- PEC114 Chemistry for Biological Sciences
  - A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.
- BUS273 Consumer Behaviour
  - C169/BUS169 Principles of Marketing or C213/TOU213 Tourism Marketing.
- BUS305 Digital Marketing
  - C214/BUS214 Marketing Development and Planning.
- BUS222 Employee Relations
  - C145/BUS145 Principles of Management or enrolment in the Graduate Certificate in Human Resource Management or the Graduate Diploma in Human Resource Management.
- BUS274 Entrepreneurship and Innovation
  - BUS145 Principles of Management.
- BIO103 Environmental Biology
  - Nil.
- BIO212 Genetic Engineering
  - N152/BIO152 Cell Biology.
- BIO252 Immunology, Vaccines and Cell Culture
  - N152/BIO152 Cell Biology.
- BIO301 Industrial Bioprocessing and Bioremediation
  - N263/BIO263 Microbiology I and either successful completion or concurrent enrolment in N270/BIO270 Biochemistry I.
- BUS336 Integrated Marketing Communications
- BUS323 International Management
  - C240/BUS240 Organisation and Management Development or C223/BUS223 Organisational Theory and Behaviour.
- BUS321 International Marketing
- BUS160 Introduction to Accounting
  - Nil.
- PEC140 Introduction to Chemistry
  - This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.
- BUS161 Introduction to Economics
  - Nil. This unit assumes no prior knowledge of economics and is a prerequisite for many Part II units in Economics.
- BUS378 Knowledge and Organisational Learning
  - Nil.
- BUS320 Management of Human Resources
- BUS209 Marketing and Advertising Law
  BUS165 Principles of Commercial Law.
- BUS214 Marketing Development and Planning
  C169/BUS169 Principles of Marketing or
  C213/TOU213 Tourism Marketing.
- BUS335 Marketing Research and Analysis
  M180/MAS180 Introduction to Statistics and
  C214/BUS214 Marketing Development and
  Planning.
- BIO263 Microbiology I
  N152/BIO152 Cell Biology.
- BUS240 Organisation and Management
  Development
  C145/BUS145 Principles of Management.
- BUS223 Organisational Theory and Behaviour
  C145/BUS145 Principles of Management or
  enrolment in the Graduate Certificate in
  Human Resource Management or the
  Graduate Diploma in Human Resource
  Management.
- BIO253 Plant Biotechnology and Proteomics
  N152/BIO152 Cell Biology.
- BUS165 Principles of Commercial Law
  Nil.
- BUS140 Principles of Finance and Banking
  Nil.
- BUS145 Principles of Management
  Nil.
- BUS169 Principles of Marketing
  Nil.
- BUS208 Quantitative Methods for Business and
  Economics
  Nil.
- BUS324 Services Marketing
  C214/BUS214 Marketing Development and
  Planning and C273/BUS273 Consumer
  Behaviour.
- MAS183 Statistical Data Analysis and
  Databases
  Nil.
- BUS317 Strategic Management
  C240/BUS240 Organisation and Management
  Development and either C223/BUS223
  Organisational Theory and Behaviour or
  C320/BUS320 Human Resources
  Management.
- BUS228 Workplace Law
  C165/BUS165 Principles of Commercial Law.
Course Structure — 72 points

Part I — 24 points

- A Foundation Unit — 3 points

Core Units — 12 points

- BIO103 Environmental Biology — 3 pts
  Murdoch: S1-internal, S1-external
- ENV102 Introduction to Environmental Science — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal
- BIO152 Cell Biology — 3 pts
  Murdoch: S2-internal
  Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts [Murdoch: S1-internal, S1-external, S2-internal, S2-external] as a prerequisite for BIO152 Cell Biology — 3 pts.
- MAS183 Statistical Data Analysis and Databases — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external

General Electives — 9 points

Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the requirements of a second major or minor. Please refer to any recommended Double Majors and Minors listed in the description of this course.

Part II — 48 points

Core Units — 28 points

- BIO261 Animal Diversity — 4 pts
  Murdoch: S1-internal
- BIO265 Plant Diversity — 4 pts
  Murdoch: S1-internal
- ENV268 Ecology — 4 pts
  Murdoch: S2-internal, S2-external
- BIO372 Genetics — 4 pts
  Murdoch: S2-internal
- BIO368 Conservation and Wildlife Biology — 4 pts
  Murdoch: S1-internal
- ENV228 Environmental Policy and Law — 4 pts
  Murdoch: S2-internal, S2-external
- BIO317 Wildlife Biology — 4 pts
  Murdoch: S2-internal

General Electives — 20 points

Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the requirements of a second major or minor. Please refer to any recommended Double Majors and Minors listed in the description of this course.

PREREQUISITES

- BIO261 Animal Diversity
  N103/BIO103 Environmental Biology.
- BIO152 Cell Biology
  A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
- BIO368 Conservation and Wildlife Biology
  N268/ENV268 Ecology or enrolment in the MSc Environmental Science.
- ENV268 Ecology
  N103/BIO103 Environmental Biology.
- BIO103 Environmental Biology
  Nil.
- ENV228 Environmental Policy and Law
  Nil.
- BIO372 Genetics
  N152/BIO152 Cell Biology and either M183/MAS183 Statistical Data Analysis and Databases or M182/MAS182 Applied Mathematics or M184/MAS184 Biostatistics and Information Retrieval.
- PEC140 Introduction to Chemistry
  This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.
- ENV102 Introduction to Environmental Science
  Nil.
- BIO265 Plant Diversity
  N103/BIO103 Environmental Biology.
- MAS183 Statistical Data Analysis and Databases
  Nil.
- BIO317 Wildlife Biology
  Nil.
Molecular Biology (BSc)
School of Biological Sciences and Biotechnology
Bachelor of Science (BSc) in Molecular Biology
http://www.murdoch.edu.au/contacts/academic/School_of_Biological_Sciences_and_Biotechnology

Course Structure — 72 points
Part I — 24 points
□ A Foundation Unit — 3 points
Core Units — 12 points
□ BIO103 Environmental Biology — 3 pts
  Murdoch: S1-internal, S1-external
□ BIO152 Cell Biology — 3 pts
  Murdoch: S2-internal
□ PEC114 Chemistry for Biological Sciences — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external
□ MAS183 Statistical Data Analysis and Databases — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external

Students enrolled in a double major with Biomedical Science or Forensic Biology and Toxicology may complete BMS101 Introduction to the Human Body — 3 pts of BIO103 Environmental Biology — 3 pts.

Students enrolled in a double major with Biomedical Science may complete MAS184 Biostatistics and Information Retrieval — 3 pts instead of MAS183 Statistical Data Analysis and Databases — 3 pts.

Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts.

General Electives — 9 points
Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the requirements of a second major or minor. Please refer to any recommended Double Majors and Minors listed in the description of this course.

Part II — 48 points
Core Units — 24 points
□ BIO212 Genetic Engineering — 4 pts
  Murdoch: S1-internal
□ BIO372 Genetics — 4 pts
  Murdoch: S2-internal
□ BIO316 Molecular Genetics — 4 pts
  Murdoch: S1-internal
□ BIO263 Microbiology I — 4 pts
  Murdoch: S1-internal
□ BIO270 Biochemistry I — 4 pts
  Murdoch: S2-internal OR
□ BMS261 Human and Comparative Biochemistry — 4 pts
  Murdoch: S1-internal
□ BIO371 Biochemistry II — 4 pts
  Murdoch: S2-internal OR
□ BIO364 Microbiology II — 4 pts
  Murdoch: S1-internal

Students enrolled in a double major with Biomedical Science are required to complete BMS203 Comparative and Human Microbiology — 4 pts instead of BIO263 Microbiology I — 4 pts.

Students enrolled in a double major with Animal Science may complete ANS252 Animal Molecular Biology — 4 pts instead of BIO212 Genetic Engineering — 4 pts.

General Electives — 24 points
Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the Part II requirements of a second major or minor. Please refer to the recommended Double Majors and Minors listed in the description of this course.

PREREQUISITES — MOLECULAR BIOLOGY (BSc)
□ ANS252 Animal Molecular Biology
  Enrolment in Bachelor of Animal Science and BIO152 Cell Biology and PEC140 Introduction to Chemistry.
BIO270 Biochemistry I
N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences.
M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.

BIO371 Biochemistry II
N270/BIO270 Biochemistry I or V261/BMS261 Human and Comparative Biochemistry or ANS251 Agricultural Biochemistry.

MAS184 Biostatistics and Information Retrieval
Nil.

BIO152 Cell Biology
A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

PEC114 Chemistry for Biological Sciences
A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

BMS203 Comparative and Human Microbiology
BIO152 Cell Biology

BIO103 Environmental Biology
Nil.

BIO212 Genetic Engineering
N152/BIO152 Cell Biology.

BIO372 Genetics
N152/BIO152 Cell Biology and either M183/MAS183 Statistical Data Analysis and Databases or M182/MAS182 Applied Mathematics or M184/MAS184 Biostatistics and Information Retrieval.

BMS261 Human and Comparative Biochemistry
N152/BIO152 Cell Biology.

PEC140 Introduction to Chemistry
This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.

BMS101 Introduction to the Human Body
Nil.

BIO263 Microbiology I
N152/BIO152 Cell Biology.

BIO364 Microbiology II
N263/BIO263 Microbiology I or V361/BMS361 Medical Microbiology or ANS351 Animal Microbiology.

BIO316 Molecular Genetics
BIO212 Genetic Engineering or ANS252 Animal Molecular Biology.

MAS183 Statistical Data Analysis and Databases
Nil.
Forensic Biology and Toxicology (BForensics)
School of Biological Sciences and Biotechnology
Bachelor of Forensics (BForensics) in Forensic Biology and Toxicology
http://www.murdoch.edu.au/contacts/academic/School_of_Biological_Sciences_and_Biotechnology

Course Structure — 72 points

Part I — 24 points
- A Foundation Unit — 3 points

Core Units — 15 points
- BMS101 Introduction to the Human Body — 3 pts
  Murdoch: S1-internal
  Students enrolled in a double major with Molecular Biology may complete BIO103 Environmental Biology — 3 pts instead of BMS101 Introduction to the Human Body — 3 pts.
- PEC103 Introduction to Forensic Science — 3 pts
  Murdoch: S2-internal
- BIO152 Cell Biology — 3 pts
  Murdoch: S2-internal
- PEC114 Chemistry for Biological Sciences — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external
- MAS183 Statistical Data Analysis and Databases — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external
  Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts.
  Students enrolled in a double major with Chemistry should complete PEC116 Chemistry for Physical Sciences — 3 pts instead of PEC114 Chemistry for Biological Sciences — 3 pts.
  Students enrolled in a double major with Biomedical Science may complete MAS184 Biostatistics and Information Retrieval — 3 pts [Murdoch: S1-internal] rather than MAS183 Statistical Data Analysis and Databases — 3 pts.

General Electives — 6 points
Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the Part I requirements of a second major or minor. Please refer to the recommended Double Majors and Minors listed in the description of this course.

Also recommended:
FNSC220 Mysteries of Forensic Science — 3 pts equivalent, UWA: S2X-internal
This is a unit offered by the University of Western Australia and is available on a cross-institutional basis to all students enrolled in the Forensic Biology and Toxicology major. For details please contact the Program Chair.

Part II — 48 points

Core Units — 28 points
- BIO212 Genetic Engineering — 4 pts
  Murdoch: S1-internal
- BIO270 Biochemistry I — 4 pts
  Murdoch: S2-internal
- BIO215 Bodies of Evidence — 4 pts
  Murdoch: S1-internal
- PEC240 Analytical Chemistry — 4 pts
  Murdoch: S1-internal, S1-external
- PEC340 Instrumental Analysis — 4 pts
  Murdoch: S2-internal, S2-external
- BIO313 Forensic DNA Analysis — 4 pts
  Murdoch: S1-internal
- BIO314 Forensic Toxicology — 4 pts
  Murdoch: S2-internal

General Electives — 20 points
Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using these points to meet the requirements of a second major or minor. Please refer to the recommended Double Majors and Minors listed in the description of this course. A triple major
(Double Degree) with Molecular Biology and Biomedical Science which can also incorporate a Criminology minor is highly recommended. See the separate description.

PREREQUISITES — FORENSIC BIOLOGY AND TOXICOLOGY (BFORENSICS)

- PEC240 Analytical Chemistry
  M114/PEC114 Chemistry for Biological Sciences or M115/PEC115 Chemistry for Environmental Science or M116/PEC116 Chemistry for Physical Sciences.

- MAS182 Applied Mathematics
  M164/MAS164 Fundamentals of Mathematics or at least a pass in the Year 11 course Introduction to Calculus together with at least 55% in TEE Applicable Mathematics.

- BIO270 Biochemistry I
  N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences.
  M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.

- MAS184 Biostatistics and Information Retrieval
  Nil.

- BIO215 Bodies of Evidence
  M114/PEC114 Chemistry for Biological Sciences OR M115/PEC115 Chemistry for Environmental Science OR M116/PEC116 Chemistry for Physical Sciences; BIO152 Cell Biology; PEC235 Forensic Science.

- BIO152 Cell Biology
  A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

- PEC114 Chemistry for Biological Sciences
  A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.

- PEC116 Chemistry for Physical Sciences
  A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling. Students who achieved marks just below the 40th percentile will be given the opportunity in week 1 to sit a chemistry test for direct entry into this unit.

- BIO103 Environmental Biology
  Nil.

- BIO313 Forensic DNA Analysis
  BIO202 Molecular Biology I or BIO212 Genetic Engineering.

- BIO314 Forensic Toxicology
  M240/PEC240 Analytical Chemistry; M235/PEC235 Forensic Science or permission of Unit Coordinator; N270/BIO270 Biochemistry 1 or V261/BMS261 Human and Comparative Biochemistry; successful completion of, or concurrent enrolment in, M340/PEC340 Instrumental Analysis.

- BIO212 Genetic Engineering
  N152/BIO152 Cell Biology.

- PEC340 Instrumental Analysis
  M240/PEC240 Analytical Chemistry.

- PEC140 Introduction to Chemistry
  This unit is for students with a weak background in Chemistry. Students with scores in the top 40 per cent of Year 12 Chemistry within the past three years may be excluded from the unit. A knowledge of simple algebraic techniques will be assumed.

- PEC103 Introduction to Forensic Science
  Nil.

- BMS101 Introduction to the Human Body
  Nil.

- MAS183 Statistical Data Analysis and Databases
  Nil.
**Forensic Biology and Toxicology (BForensics) + Molecular Biology (BSc) + Biomedical Science (BSc)**

School of Biological Sciences and Biotechnology

*Bachelor of Forensics (BForensics) in Forensic Biology and Toxicology + Bachelor of Science (BSc) in Molecular Biology + Bachelor of Science (BSc) in Biomedical Science*

**Course Structure — 96 points**

**Part I — 24 points**

- □ Any Foundation Unit — 3 points

**Core Units — 18 points**

- □ BMS101 Introduction to the Human Body — 3 pts
  Murdoch: S1-internal
  OR
- □ BIO103 Environmental Biology — 3 pts
  Murdoch: S1-internal, S1-external
- □ BIO152 Cell Biology — 3 pts
  Murdoch: S2-internal
- □ PEC114 Chemistry for Biological Sciences — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external
- □ VET107 Principles of Vertebrate Physiology — 3 pts
  Murdoch: S2-internal
- □ MAS183 Statistical Data Analysis and Databases — 3 pts
  Murdoch: S1-internal, S1-external, S2-internal, S2-external
  OR
- □ MAS184 Biostatistics and Information Retrieval — 3 pts
  Murdoch: S1-internal
- □ PEC103 Introduction to Forensic Science — 3 pts
  Murdoch: S2-internal.

*Students who do not have a satisfactory level of Chemistry, as determined by the Program Chair, are required to enrol in PEC140 Introduction to Chemistry — 3 pts as a prerequisite for BIO152 Cell Biology — 3 pts and PEC114 Chemistry for Biological Sciences — 3 pts.*

**General Electives — 3 points**

Select from any 100-level units offered by the University, subject to individual unit prerequisites.

Recommended:

- FNSC2200 Mysteries of Forensic Science — 3 pts
  equivalent, UWA: S2X-internal

This is a unit offered by the University of Western Australia and is available on a cross-institutional basis to all students enrolled in the Forensic Biology and Toxicology major. For details please contact the Program Chair.

Student undertaking the Criminology Minor are required to enrol in one of the following:

- □ LEG100 Law, Justice and Social Policy — 3 pts
  Murdoch: S2-internal
  OR
- □ LEG150 Australian Legal System — 3 pts
  Murdoch: S1-internal

**Part II — 72 points**

**Core Units — 60 points**

- □ BMS264 Biomedical Physiology — 4 pts
  Murdoch: S1-internal
- □ BIO212 Genetic Engineering — 4 pts
  Murdoch: S1-internal
- □ BIO270 Biochemistry I — 4 pts
  Murdoch: S2-internal
- □ BMS203 Comparative and Human Microbiology — 4 pts
  Murdoch: S2-internal
- □ PEC240 Analytical Chemistry — 4 pts
  Murdoch: S1-internal, S1-external
- □ BIO215 Bodies of Evidence — 4 pts
  Murdoch: S1-internal
- □ BIO252 Immunology, Vaccines and Cell Culture — 4 pts
  Murdoch: S2-internal
  OR
- □ BMS265 Medical Immunology and Molecular Genetics — 4 pts
  Murdoch: S2-internal
- □ BIO316 Molecular Genetics — 4 pts
  Murdoch: S1-internal
- □ BIO313 Forensic DNA Analysis — 4 pts
  Murdoch: S1-internal
- □ BMS360 Mechanisms of Disease — 4 pts
  Murdoch: S1-internal
- □ BMS368 Advances in Medical Science — 4 pts
  Murdoch: S2-internal
□ BIO314 Forensic Toxicology — 4 pts  
Murdoch: S2-internal
□ PEC340 Instrumental Analysis — 4 pts  
Murdoch: S2-internal, S2-external
□ BIO372 Genetics — 4 pts  
Murdoch: S2-internal
□ BIO371 Biochemistry II — 4 pts  
Murdoch: S2-internal  
OR
□ BIO364 Microbiology II — 4 pts  
Murdoch: S1-internal

**General Electives — 12 points**
Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites.
Students enrolled in the Criminology Minor are required to enrol in three of the following:
□ LEG210 Criminal Behaviour — 4 pts  
Murdoch: S1-internal
□ LEG209 Psychology and Law — 4 pts  
Murdoch: S2-internal
□ LEG219 Criminal Law in Western Australia — 4 pts  
Murdoch: S2-internal
□ LEG205 Criminal Justice — 4 pts  
Murdoch: S1-internal
□ LEG220 Sentencing and Penology — 4 pts  
Murdoch: S1-internal
□ LEG206 Criminology — 4 pts  
Murdoch: S2-internal

**PREREQUISITES — FORENSIC BIOLOGY AND TOXICOLOGY (BFORENSICS) + MOLECULAR BIOLOGY (BSC) + BIOMEDICAL SCIENCE (BSC)**
□ BMS368 Advances in Medical Science  
BMS360 Mechanisms of Disease + (one of BMS203 Human and Comparative Microbiology or BMS361 Comparative and Human Microbiology or BIO263 Microbiology I) + (one of BMS265 Medical Immunology and Molecular Genetics or BIO252 Animal Biotechnology)
□ PEC240 Analytical Chemistry  
M114/PEC114 Chemistry for Biological Sciences or M115/PEC115 Chemistry for Environmental Science or M116/PEC116 Chemistry for Physical Sciences.
□ LEG150 Australian Legal System  
Nil.
□ BIO270 Biochemistry I  
N152/BIO152 Cell Biology and M114/PEC114 Chemistry for Biological Sciences.  
M115/PEC115 Chemistry for Environmental Science and M116/PEC116 Chemistry for Physical Science are acceptable substitute prerequisites.
□ BIO371 Biochemistry II  
N270/BIO270 Biochemistry I or  
V261/BMS261 Human and Comparative Biochemistry or ANS251 Agricultural Biochemistry.
□ BMS264 Biomedical Physiology  
□ MAS184 Biostatistics and Information Retrieval  
Nil.
□ BIO215 Bodies of Evidence  
M114/PEC114 Chemistry for Biological Sciences OR M115/PEC115 Chemistry for Environmental Science OR M116/PEC116 Chemistry for Physical Sciences; BIO152 Cell Biology; PEC235 Forensic Science.
□ BIO152 Cell Biology  
A thorough knowledge of Year 12 secondary level Chemistry is assumed. Students who did not achieve a final mark of 61% within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
□ PEC114 Chemistry for Biological Sciences  
A thorough knowledge of Year 12 secondary-level Chemistry is assumed. Students who did not achieve scores in the top 40 per cent of Year 12 secondary-level Chemistry within the three years immediately preceding enrolment are required to pass M140/PEC140 Introduction to Chemistry prior to enrolling.
□ BMS203 Comparative and Human Microbiology  
BIO152 Cell Biology
□ LEG210 Criminal Behaviour  
Nil.
□ LEG205 Criminal Justice  
L170/LEG170 Legal Process or L100/LEG100 Law, Justice and Social Policy or LEG150 Australian Legal System.
□ LEG219 Criminal Law in Western Australia  
L170/LEG170 Legal Process or L100/LEG100 Law, Justice and Social Policy or LEG150 Australian Legal System or permission of the Unit Coordinator and Program Chair.
## Appendix C – Sample Enrolments

### Biological Sciences

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester 1</th>
<th>Semester 2</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Foundation Unit (see list below)</td>
<td><strong>BIO152 Cell Biology</strong> 3pts</td>
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<tr>
<td></td>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td><strong>BIO152 Cell Biology</strong> 3pts</td>
</tr>
<tr>
<td></td>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
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<tr>
<td></td>
<td><strong>students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units</strong></td>
<td>12pts</td>
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<tr>
<td></td>
<td><strong>BIO103 Environmental Biology</strong> 3pts</td>
<td><strong>BIO270 Biochemistry</strong> 4pts</td>
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<tr>
<td></td>
<td><strong>MAS183 Statistical Data Analysis and Databases</strong> 3pts</td>
<td><strong>ENV268 Ecology</strong> 4pts</td>
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<tr>
<td></td>
<td>Part I Unit (General Elective)* 3pts</td>
<td><strong>BIO372 Genetics</strong> 4pts</td>
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<tr>
<td></td>
<td>Part I Unit (General Elective)* 3pts</td>
<td>12pts</td>
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<td></td>
<td>12pts</td>
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<tr>
<td></td>
<td><strong>BIO261 Animal Diversity</strong> 4pts</td>
<td><strong>BIO369 Evolutionary Biology</strong> 4pts</td>
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<td></td>
<td><strong>BIO263 Microbiology I</strong> 4pts</td>
<td>*<em>Part II Unit (General Elective)</em> 4pts</td>
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<td></td>
<td><strong>BIO265 Plant Diversity</strong> 4pts</td>
<td>*<em>Part II Unit (General Elective)</em> 4pts</td>
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<td>12pts</td>
<td>12pts</td>
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<td>*<em>Part II Unit (General Elective)</em> 4pts</td>
<td>*<em>Part II Unit (General Elective)</em> 4pts</td>
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<tr>
<td></td>
<td>12pts</td>
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</table>

**Foundation Unit:** Select one of the following:
- FDN115 Interactions of Society and Technology
- FDN150 Reinventing Australia

If you are good at Mathematics and enjoy the subject consider enrolling in a Minor in Applied Statistics or Mathematical Modeling.
# Biotechnology

<table>
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<th>Semester 1</th>
<th>Semester 2</th>
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<tbody>
<tr>
<td></td>
<td>Foundation Unit (see list below)</td>
<td>3pts</td>
</tr>
<tr>
<td></td>
<td><strong>BIO152 Cell Biology</strong></td>
<td>3pts</td>
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<tr>
<td></td>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td>3pts</td>
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<tr>
<td></td>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
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<tr>
<td></td>
<td>(** students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units)**</td>
<td>12pts</td>
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<tr>
<td>Year 2</td>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
</tr>
<tr>
<td></td>
<td>MAS183 Statistics Data Analysis and Databases</td>
<td>3pts</td>
</tr>
<tr>
<td></td>
<td>BIO103 Environmental Biology (for students without a satisfactory background in Biology)</td>
<td>3pts</td>
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<td></td>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
</tr>
<tr>
<td></td>
<td><strong>BIO270 Biochemistry I</strong></td>
<td>4pts</td>
</tr>
<tr>
<td></td>
<td><strong>BIO252 Immunology, Vaccines and Cell Culture</strong></td>
<td>4pts</td>
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<td>Part II Unit (General Elective)*</td>
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<td><strong>BIO263 Microbiology I</strong> (Students enrolled in a double major with Biomedical Science must complete BMS203 Comparative and Human Microbiology instead of this unit)</td>
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<tr>
<td></td>
<td><strong>BIO212 Genetic Engineering</strong></td>
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<tr>
<td></td>
<td><strong>BIO253 Plant Biotechnology and Proteomics</strong></td>
<td>4pts</td>
</tr>
<tr>
<td></td>
<td><strong>BIO301 Industrial and Environmental Microbiology</strong></td>
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<td>Part II Unit (General Elective)*</td>
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<td>Part II Unit (General Elective)*</td>
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<td>Year 3</td>
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<td>Year 4</td>
<td>BUS215 Business Feasibility and Management Concepts</td>
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**Foundation Unit:** Select one of the following:

- FDN115 Interactions of Society and Technology
- FDN150 Reinventing Australia
## Biotechnology (BSc) + Management/Marketing Management/Entrepreneurship and Innovation (BCom)

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<tr>
<th>Year</th>
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<td>3pts</td>
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<tr>
<td><strong>BUS160 Introduction to Accounting</strong></td>
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<td><strong>BIO152 Cell Biology</strong></td>
<td>3pts</td>
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<tr>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td>3pts</td>
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(** students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units)

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<tr>
<th>Year</th>
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<tr>
<td><strong>BUS165 Principles of Commercial Law</strong></td>
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<td><strong>MAS183 Statistics Data Analysis and Databases</strong></td>
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<td><strong>BIO103 Environmental Biology</strong> <em>(for students without a satisfactory background in Biology)</em></td>
<td>3pts</td>
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<td><strong>OR</strong></td>
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<tr>
<td><strong>BUS169 Principles of Marketing</strong></td>
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<th>Year</th>
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<tr>
<td><strong>BIO263 Microbiology I</strong></td>
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<td><strong>BIO212 Genetic Engineering</strong></td>
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<tr>
<td><strong>BIO251 Analytical and Food Chemistry</strong></td>
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<td><strong>OR</strong></td>
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<tr>
<td><strong>BIO270 Biochemistry I</strong></td>
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<td><strong>BIO252 Animal Biotechnology</strong></td>
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<td><strong>OR</strong></td>
<td>12pts</td>
<td>12pts</td>
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<tr>
<td><strong>BIO253 Plant Biology (Semester 1)</strong></td>
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<td><strong>Part II Unit (General Elective)</strong>*</td>
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<tr>
<th>Year</th>
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<tr>
<td><strong>BIO302 Molecular Biology II</strong></td>
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<tr>
<td><strong>BUS214 Marketing Development and Planning</strong></td>
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<td><strong>BUS209 Marketing and Advertising Law</strong></td>
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<tr>
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### Foundation Unit: Select one of the following:
- FDN115 Interactions of Society and Technology
- FDN150 Reinventing Australia

### # Part II Specified Elective: Select at least two from below

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<td><strong>BUS321 International Marketing</strong></td>
<td><strong>BUS324 Services Marketing</strong></td>
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<td><strong>BUS336 Integrated Marketing Communications</strong></td>
<td><strong>BUS208 Quantitative Methods for Business and Economics</strong></td>
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<td><strong>BUS305 Electronic Marketing</strong></td>
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<td><strong>BUS339 Advertising Production</strong></td>
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</table>
## Conservation and Wildlife Biology

<table>
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<th>Semester 2</th>
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<td></td>
<td>Foundation Unit (see list below) 3pts</td>
<td>**students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking this unit)</td>
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<tr>
<td><strong>1</strong></td>
<td><strong>BIO152 Cell Biology 3pts</strong></td>
<td><strong>BIO103 Environmental Biology 3pts</strong></td>
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<td></td>
<td><strong>MAS183 Statistics Data Analysis and Databases 3pts</strong></td>
<td><strong>ENV102 Introduction to Environmental Science 3pts</strong></td>
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<td>*<em>Part I Unit (General Elective)</em> <strong>12pts</strong></td>
<td><strong>ENV268 Ecology 4pts</strong></td>
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<td><strong>2</strong></td>
<td><strong>ENV102 Introduction to Environmental Science 3pts</strong></td>
<td><strong>ENV228 Environmental Policy and Law 4pts</strong></td>
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<td><em><em>Part I unit (General Elective)</em> 3pts</em>*</td>
<td><em><em>Part II unit (General Elective)</em> 4pts</em>*</td>
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<tr>
<td><strong>3</strong></td>
<td><strong>BIO261 Animal Diversity 4pts</strong></td>
<td><strong>BIO369 Evolution and Conservation 4pts</strong></td>
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<td><strong>BIO265 Plant Diversity 4pts</strong></td>
<td><strong>BIO372 Genetics 4pts</strong></td>
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<td><em><em>Part II Unit (General Elective)</em> 4pts</em>*</td>
<td><strong>BIO317 Wildlife Biology 4pts</strong></td>
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<td><strong>BIO368 Conservation Biology 4pts</strong></td>
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<td><em><em>Part II Unit (General Elective)</em> 4pts</em>*</td>
<td><em><em>Part II Unit (General Elective)</em> 4pts</em>*</td>
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</table>

**Foundation Unit:** Select one of the following:
- **FDN115 Interactions of Society and Technology**
- **FDN150 Reinventing Australia**

If you are good at Mathematics and enjoy the subject consider enrolling in a Minor in Applied Statistics or Mathematical Modelling.
# Molecular Biology

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<th>Semester 1</th>
<th>Semester 2</th>
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<tr>
<td></td>
<td><strong>BIO152 Cell Biology</strong></td>
<td>3pts</td>
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<tr>
<td></td>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td>3pts</td>
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<tr>
<td></td>
<td>MAS183 Statistical Data Analysis and Databases</td>
<td>3pts</td>
</tr>
<tr>
<td></td>
<td>(** students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units)</td>
<td>12pts</td>
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<tr>
<td></td>
<td>BIO103 Environmental Biology</td>
<td>3pts</td>
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<td>Part I Unit (General Elective)*</td>
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<tr>
<td></td>
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<td></td>
<td>Part I Unit (General Elective)*</td>
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<tr>
<td></td>
<td>BIO270 Biochemistry</td>
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<td></td>
<td>BMS261 Human &amp; Comparative Biochemistry (Semester 1)</td>
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<td></td>
<td>BIO372 Genetics</td>
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| Year 2 | |
|--------| |
|        | Year 2 |
|        | BIO103 Environmental Biology | 3pts |
|        | Part I Unit (General Elective)* | 3pts |
|        | Part I Unit (General Elective)* | 3pts |
|        | Part I Unit (General Elective)* | 3pts |
|        | BIO270 Biochemistry | 4pts |
|        | BMS261 Human & Comparative Biochemistry (Semester 1) | 4pts |
|        | BIO372 Genetics | 4pts |
|        | Part II Unit (General Elective)* | 12pts |
|        | OR |

| Year 3 | |
|--------| |
|        | Year 3 |
|        | BIO212 Genetic Engineering | 4pts |
|        | BIO263 Microbiology I | 4pts |
|        | BIO316 Molecular Genetics | 4pts |
|        | BIO371 Biochemistry II | 4pts |
|        | BMS261 Human & Comparative Biochemistry (Semester 1) | 4pts |
|        | Part II Unit (General Elective)* | 12pts |
|        | OR |

| Year 4 | |
|--------| |
|        | Year 4 |
|        | BIO302 Molecular Biology II | 4pts |
|        | Part II Unit (General Elective)* | 4pts |
|        | Part II Unit (General Elective)* | 4pts |
|        | 12pts |

**Foundation Unit:** Select one of the following:

FDN115 Interactions of Society and Technology
FDN150 Reinventing Australia
<table>
<thead>
<tr>
<th>Year</th>
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<th>Semester 2</th>
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<tr>
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<tr>
<td><strong>BIO152 Cell Biology</strong></td>
<td>3pts</td>
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</tr>
<tr>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td>3pts</td>
<td></td>
</tr>
<tr>
<td><strong>MAS183 Statistical Data Analysis and Databases</strong></td>
<td>3pts</td>
<td></td>
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<tr>
<td><strong>OR</strong></td>
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<tr>
<td><strong>MAS184 Biostatistics and Information Retrieval (is an acceptable alternative to MAS183 for students enrolled in double major in Biomedical Science)</strong></td>
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<td><strong>OR</strong></td>
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<tr>
<td><strong>MAS182 Applied Mathematics (is an acceptable alternative to MAS183 for students enrolled in double major in Chemistry)</strong></td>
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<td>(** students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units)**</td>
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<tr>
<td><strong>Year 2</strong></td>
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</tr>
<tr>
<td>BMS101 Introduction to the Human Body</td>
<td>3pts</td>
<td>BIO270 Biochemistry I</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>BIO103 Environmental Biology (is an acceptable alternative to BMS101 for students enrolled in double major in Molecular Biology)</td>
<td></td>
<td>BMS261 Human and Comparative Biochemistry (Semester 1)</td>
</tr>
<tr>
<td>Part I Unit (General Elective)*</td>
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<td>Part II Unit (General Elective)*</td>
</tr>
<tr>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
<td>Part II Unit (General Elective)*</td>
</tr>
<tr>
<td>Part I Unit (General Elective)*</td>
<td>3pts</td>
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<tr>
<td><strong>Year 3</strong></td>
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<td><strong>Year 4</strong></td>
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<tr>
<td>BIO212 Genetic Engineering</td>
<td>4pts</td>
<td>VET107 Principles of Vertebrate Biology</td>
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<tr>
<td>PEC240 Analytical Chemistry</td>
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<td>VET106 Animal &amp; Human Bioethics</td>
</tr>
<tr>
<td>BIO215 Bodies of Evidence</td>
<td>4pts</td>
<td>traveller143 Chemical Laboratory Techniques (or Semester 1)</td>
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<td></td>
<td>PSY141 Introduction to Psychology (or Semester 1)</td>
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<tr>
<td><strong>Foundation Unit:</strong></td>
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<td><strong>Recommended Part I General Elective Units:</strong></td>
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<td>Select one of the following:</td>
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<td>FDN150 Reinventing Australia</td>
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<tr>
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<th>Semester 2</th>
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<tr>
<td><strong>VET107 Principles of Vertebrate Biology</strong></td>
<td>VET106 Animal &amp; Human Bioethics</td>
</tr>
<tr>
<td><strong>LEG100 Law, Justice &amp; Social Policy</strong></td>
<td><strong>PEC143 Chemical Laboratory Techniques (or Semester 1)</strong></td>
</tr>
<tr>
<td><strong>POL192 Perspectives on Security and Terrorism</strong></td>
<td><strong>PSY141 Introduction to Psychology (or Semester 1)</strong></td>
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</table>
## Forensic Biology and Toxicology (BForensics) + Molecular Biology (BSc) + Biomedical Science (BSc)

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<tr>
<td><strong>Year 1</strong></td>
<td><strong>Year 1</strong></td>
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<tr>
<td>BIO152 Cell Biology</td>
<td><strong>BIO215 Bodies of Evidence</strong></td>
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<tr>
<td><strong>PEC114 Chemistry for Biological Sciences</strong></td>
<td><strong>VET107 Principles of Vertebrate Physiology</strong></td>
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<tr>
<td>MAS183 Statistical Data Analysis and Databases</td>
<td><strong>PEC340 Instrumental Analysis</strong></td>
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<tr>
<td><strong>MAS184 Biostatistics and Information</strong></td>
<td><strong>BIO314 Forensic Toxicology</strong></td>
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<tr>
<td><strong>Students who did not achieve a score of 60% for Year 12 Chemistry must enrol in PEC140 Introduction to Chemistry before taking these units</strong></td>
<td><strong>BMS203 Human and Comparative Microbiology</strong></td>
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<tr>
<td>BMS101 Introduction to the Human Body</td>
<td><strong>BIO313 Forensic DNA Analysis</strong></td>
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<tr>
<td><strong>OR</strong></td>
<td><strong>BIO252 Immunology, Vaccines and Cell Culture</strong></td>
</tr>
<tr>
<td>BIO103 Environmental Biology <em>(is an acceptable alternative to BMS101 for student enrolled in double major in Molecular Biology)</em></td>
<td><strong>OR</strong></td>
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<tr>
<td><strong>Part I Unit (General Elective)</strong>*</td>
<td><strong>BMS265 Medical Immunology and Molecular Genetics</strong></td>
</tr>
<tr>
<td><strong>BIO215 Bodies of Evidence</strong></td>
<td><strong>BIO372 Genetics</strong></td>
</tr>
<tr>
<td>3pts</td>
<td><strong>BMS368 Advances in Medical Science</strong></td>
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<td>BIO364 Microbiology II</td>
<td><strong>BIO364 Microbiology II</strong></td>
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<td><strong>BMS360 Mechanisms of Disease</strong></td>
<td><strong>BIO364 Microbiology II</strong></td>
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### Recommended Part I and Part 2 General Elective Units: *NB LEG units for Criminology Minor*

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<thead>
<tr>
<th><strong>Semester 1</strong></th>
<th><strong>Semester 2</strong></th>
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<tbody>
<tr>
<td>VET107 Principles of Vertebrate Biology</td>
<td>VET106 Animal &amp; Human Bioethics</td>
</tr>
<tr>
<td>LEG100 Law, Justice &amp; Social Policy</td>
<td>PEC143 Chemical Laboratory Techniques (sor S1)</td>
</tr>
<tr>
<td>POL192 Perspectives on Security and Terrorism</td>
<td>PSY141 Introduction to Psychological Science (sor S1)</td>
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<td>LEG210 Criminal Behaviour</td>
<td>LEG209 Psychology and Law</td>
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<td>LEG205 Criminal Justice</td>
<td>LEG219 Criminal Law in Western Australia</td>
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<tr>
<td>LEG220 Sentencing and Penology</td>
<td>LEG205 Criminology</td>
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**Foundation Unit:** Select one of the following:

- FDN115 Interactions of Society and Technology
- FDN150 Reinventing Australia
Appendix D – Foundation Units

All Murdoch students are required to complete one Foundation Unit unless they have been awarded advanced standing and exemption for it. Check the teaching timetable for most up-to-date day, time and room location of each Foundation Unit.  
([http://www.murdoch.edu.au/admin/timetables/teaching/](http://www.murdoch.edu.au/admin/timetables/teaching/)) All foundation units have Lectures: 2 hours per week; workshops/tutorials: 2 hours per week.

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FDN115 Interactions of Society and Technology  
**Murdoch:** Semester 1-internal, Semester 2-internal  
**Peel:** Semester 1-internal  
**Rockingham:** Semester 1-internal, semester 2-internal

Society's constantly evolving interrelationship with technology has fundamentally changed our perception of ourselves and society. It is increasingly important for people to have a broad understanding of social, historical, ethical, economic and environmental factors that interconnect societal development with the nature of technology. FDN115 will provide students with an understanding of these important issues. Topics: histories of western culture and sciences, the nature of democracy, life cycle analysis and sustainability, political structures, cities, reproductive technologies, privacy, medicine, design and innovation.

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FDN150 Reinventing Australia  
**Murdoch:** Semester 1-internal, Semester 1-external, Semester 2-internal, Semester 2-external  
**Rockingham:** S1-internal

As Australia is in some sense being 'reinvented' by globalisation, new technology and other forces for change, we consider just what 'Australia' is and possibilities for shaping its future. Topics: contemporary issues such as the environment, Aboriginal rights, the family and citizenship. Our aim is to identify and understand some of the salient features of Australian society.
Appendix E – Personal Study Plan

Course: (eg Bachelor of Science) ________________________________

Major 1: _________________________________________________

Major 2: _________________________________________________

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Appendix F – Personal Timetable Planner

The Murdoch Teaching Timetable website provides a facility for students to key in their unit codes (Nominated Units Inquiry) where a personal Timetable for Lectures, Workshops and Tutorials will be displayed.

http://www.murdoch.edu.au/admin/timetables/teaching/

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### Appendix G – Dates & Deadlines

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### Appendix H – Program Chair Contact Details

<table>
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<tr>
<th>Title</th>
<th>Contact</th>
<th>Phone (+61 8)</th>
<th>Location</th>
<th>Campus</th>
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</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>Dr Howard Gill</td>
<td>9360 2282</td>
<td>BS 1.010</td>
<td>Murdoch</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Mrs Carolyn Jones</td>
<td>9360 2159</td>
<td>BS 3.015</td>
<td>Murdoch</td>
</tr>
<tr>
<td>Conservation and Wildlife Biology</td>
<td>Dr Howard Gill</td>
<td>9360 2282</td>
<td>BS 1.010</td>
<td>Murdoch</td>
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<tr>
<td>Molecular Biology</td>
<td>Assoc Prof Bob Mead</td>
<td>9360 2736</td>
<td>BS 3.023</td>
<td>Murdoch</td>
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<tr>
<td>Forensic Biology &amp; Toxicology</td>
<td>Assoc Prof Bob Mead</td>
<td>9360 2736</td>
<td>BS 3.023</td>
<td>Murdoch</td>
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### Appendix I - Enrolment queries

Enrolment advice will be provided at the Course Advice Sessions being offered in the Orientation Week. If you have attended one of these Course Advice Sessions and still have queries regarding your enrolment, please contact Julie Daniell (Science and Computing Building Room 2.026, j.daniell@murdoch.edu.au). Julie is an Administrative Officer in the Division of Science and Engineering and Health Sciences Student Services Office and looks after all students enrolled in courses offered by the School of School of Biological Sciences and Biotechnology.

The New Student website (http://www.murdoch.edu.au/students/new/) will also assist you with links to enrolment procedures, sample enrolments, including unit selection for common double majors, Fees, Orientation and Services and Facilities.
### Appendix J – Handy Contacts and Websites

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<tr>
<th>Need help with:</th>
<th>Contact</th>
<th>Email</th>
<th>Phone (+618)</th>
<th>Location Murdoch Campus</th>
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<tbody>
<tr>
<td>Not Sure Who can help?</td>
<td>Murdoch Reception Switchboard</td>
<td><a href="http://www.murdoch.edu.au/goto/AskTheOracle">http://www.murdoch.edu.au/goto/AskTheOracle</a></td>
<td>9360 6000</td>
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<tr>
<td>Enrolment queries</td>
<td>Julie Daniell (Divisional Student Administration Officer)</td>
<td><a href="mailto:J.Daniell@Murdoch.edu.au">J.Daniell@Murdoch.edu.au</a></td>
<td>9360 7294</td>
<td>SC2.026</td>
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<tr>
<td>General Student queries</td>
<td>Student Service Centre</td>
<td><a href="http://www.murdoch.edu.au/goto/AskTheOracle">http://www.murdoch.edu.au/goto/AskTheOracle</a></td>
<td>9360 6127</td>
<td>Chancellery 2.020</td>
</tr>
<tr>
<td>IT/MyInfo (Computer problems)</td>
<td>IT Service Desk</td>
<td><a href="mailto:itservicedesk@murdoch.edu.au">itservicedesk@murdoch.edu.au</a></td>
<td>9360 2000</td>
<td>Library (north) Level 3</td>
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<tr>
<td>Student ID/Library cards</td>
<td>IT Service Desk</td>
<td><a href="mailto:itservicedesk@murdoch.edu.au">itservicedesk@murdoch.edu.au</a></td>
<td>9360 2000</td>
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<td>Parking Permits</td>
<td>Student Service Centre</td>
<td><a href="mailto:parking@murdoch.edu.au">parking@murdoch.edu.au</a></td>
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<td>HECS-Help and Fees</td>
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<td><a href="mailto:fees@murdoch.edu.au">fees@murdoch.edu.au</a></td>
<td>9360 6127</td>
<td>Chancellery 2.020</td>
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<td>Books/Unit materials</td>
<td>Bookshop</td>
<td><a href="mailto:bookshop@murdoch.edu.au">bookshop@murdoch.edu.au</a></td>
<td>9360 2540</td>
<td>Refectory Building 2.051</td>
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<tr>
<td>International Students – arrivals, visas</td>
<td>Murdoch International</td>
<td><a href="mailto:internat@murdoch.edu.au">internat@murdoch.edu.au</a></td>
<td>9360 6770</td>
<td>Senate Building 1.001</td>
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<tr>
<td>Not Sure Who can help?</td>
<td>Murdoch Reception Switchboard or “Ask the Oracle” (online)</td>
<td><a href="http://www.murdoch.edu.au/goto/AskTheOracle">http://www.murdoch.edu.au/goto/AskTheOracle</a></td>
<td>9360 6000</td>
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</tbody>
</table>

### Handy Websites

- "New student’s” home page: http://www.murdoch.edu.au/students/new/
- Dates and Deadlines: http://www.oss.murdoch.edu.au/timetables/
- Division of Science and Engineering – student administration: http://www.murdoch.edu.au/dirs/adminassist.html#scieng
- Guild of Students: http://guild.murdoch.edu.au
- Library: http://wwwlib.murdoch.edu.au
- Murdoch International: http://www.international.murdoch.edu.au
- Murdoch University Homepage: http://www.murdoch.edu.au
- MyInfo (online enrolment): http://myinfo.murdoch.edu.au
- Parking and Transport: http://www.murdoch.edu.au/index/students/P&T
- School of Biological Sciences and Biotechnology: http://www.bsb.murdoch.edu.au/
- Teaching timetable: http://www.murdoch.edu.au/admin/timetables/taeaching/
- Unit coordinator details (from Unit Welcome page): http://www.murdoch.edu.au/index/units