Bachelor of Engineering
Mechatronics Engineering

Note: This program is only available to re-enrolling students. Students enrolled in this program complete a set of foundation engineering units, core units in Mechatronics Engineering and a number of option units.

Course details
Total points required for this course: 192

Students must complete the following (as set out in the table below):

- Bachelor of Engineering core units - 36 points;
- all units in Table 6.2.2la (Mechatronics Engineering core units) - 108 points;
- one unit from Group A in Table 6.2.2lb (Mechatronics Engineering options) - 6 points;
- units to make up the remaining points required for the course from groups B and C in Table 6.2.2lb provided that no more than 18 points come from Group C; and
- a Professional Practicum of at least 12 weeks.

Note that the units chosen from Group C must have the special approval of the Faculty on the recommendation of the Head of the School of Mechanical and Chemical Engineering. A Special Approval form is required (available at http://www.studentadmin.uwa.edu.au/page/8581)

The following table is intended as a guide only. All units have a value of 6 points unless noted otherwise. Unit availability may be subject to change. For the most up-to-date information, please consult the Timetable at http://www.timetable.uwa.edu.au/
# 60110 Bachelor of Engineering

## Mechatronics Engineering

### Semester One

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>MATH1020</td>
<td>Calculus, Statistics and Probability</td>
<td>(Note 1)</td>
</tr>
<tr>
<td>PHYS1101</td>
<td>Advanced Physics A</td>
<td>(Note 2)</td>
</tr>
<tr>
<td>GENG1001</td>
<td>Introduction to Engineering Mechanics</td>
<td>(Note 3)</td>
</tr>
<tr>
<td>CITS1200</td>
<td>Java Programming</td>
<td>replaced by CITS1001 Object-oriented Programming and Software Eng.</td>
</tr>
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### Semester Two

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH1010</td>
<td>Calculus and Linear Algebra</td>
<td>(Note 1)</td>
</tr>
<tr>
<td>GENG1003</td>
<td>Introduction to Professional Engineering</td>
<td>(Note 4)</td>
</tr>
<tr>
<td>ELEC1300</td>
<td>Digital Systems 1</td>
<td>(Note 5)</td>
</tr>
<tr>
<td>GENG1002</td>
<td>Eng: Introduction to Electrical and Electronic Engineering</td>
<td>(Note 3)</td>
</tr>
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</table>

### Year One – 48 Points

- MATH2040 Engineering Mathematics | (Note 1) |
- ELEC2300 Circuits and Electronic Systems 2 |
- MECH2401 Engineering Design and Visual Communication | NA 2012 | (Note 7) |
- CITS1200 Java Programming | replaced by CITS1001 Object-oriented Programming and Software Eng. |

### Year Two – 48 Points

- CITS1002 Programming and Systems | replaces CITS1210 C Programming |
- MECH1401 Engineering Dynamics |
- ELEC1302 Power and Machine Technologies | replaces ELEC2302 Electromagnetics and Electromechanics |

### Year Three – 48 Points

- MCTX3420 Mechatronics Design |
- MCTX3421 Control and Mechatronics |
- MECH3422 Mechanisms and Multibody Systems |
- Group B or Group C option |

### Year Four – 48 Points

- MCTX4421 Mechatronics Engineering Project Part 1 |
- MCTX4422 Mechatronics Engineering Project Part 2 |
- MECH4423 Advanced Control Engineering |
- Group B or Group C option |

### Notes

- **Note 1**: MATH1010 and MATH1020 will no longer be offered from 2012 onwards. Students with prerequisite requirements and have completed one of MATH1010 and MATH1020 must take MATH1001 Mathematical Methods 1 and MATH1002 Mathematical Methods 2. Students who have completed both MATH1010 and MATH1020 will take MATH2040 in S1, 2012 (offered for the last time in 2012). |
- **Note 2**: PHYS1001 Physics for Engineers and Scientists replaces PHYS1101 Advanced Physics. Students who do not have WACE Physics 3A/3B or TEE Physics must take PHYS1030 Physics as a bridging unit before enrolling in PHYS1001 Physics for Engineers and Scientists. |
- **Note 3**: Offered for the last time in 2011. Students requiring this unit or its equivalent should contact an ECM Faculty Advisor. |
- **Note 4**: Students who have not completed GENG1003 must take ENSC1001 Engineering Challenges in a Global World. |
- **Note 5**: This unit is only available with permission from the Head of School. Please contact the School of EE for availability of this unit. A Special Approval form is required. |
- **Note 6**: ELEC2301 Digital System Design replaces [MCTX2420 Mechatronics Systems (NA 2012)] |
- **Note 7**: This unit will be available in 2013. Students are advised to take a Group B option in its place.