Bachelor of Engineering and Bachelor of Economics

Materials Engineering

Note: Available to re-enrolling students only. This program allows students to combine studies in Materials Engineering with studies in Economics. The 2010 Rules for this program apply except that MECH3402 Engineering Project 1 is now added as a Group B option in Table 6.2.2Gb – Materials Engineering options and is no longer a core unit.

Course details

Total points required for this course: 252-258
Bachelor of Engineering component: 168 points
Bachelor of Economics component: 84-90 points

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

- Bachelor of Engineering foundation core units - 36 points;
- all units in Table 6.2.2Ga (Materials Engineering core units) - 108 points;
- one unit from Group A in Table 6.2.2Gb (Materials Engineering options) - 6 points;
- three units from Group B in Table 6.2.2Gb (Materials Engineering options) - 18 points;
- a Professional Practicum of at least 12 weeks; and
- a Bachelor of Economics component - 84-90 points.

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/](http://www.timetable.uwa.edu.au/)
### 61190 Bachelor of Engineering and Bachelor of Economics

**Semester One**
- MATH1020 Calculus, Statistics and Probability *(Note 1)*
- PHYS1101 Advanced Physics A *(Note 2)*
- GENG1001 Introduction to Engineering Mechanics *(Note 3)*
- Economics unit

**Semester Two**
- MATH1010 Calculus and Linear Algebra *(Note 1)*
- MATE1412 Materials Engineering 1 *(replaced by ENSC1002 Material Behaviour from Atoms to Bridges)*
- GENG1002 Introduction to Electrical and Electronic Engineering *(Note 3)*
- Economics unit

**YEAR ONE - 48 POINTS**

**YEAR TWO- 48 POINTS**
- GENG1003 Introduction to Professional Eng. *(Note 4)*
- MATH2040 Engineering Mathematics *(Note 1)*
- CHEM1001 Chemistry - Properties and Energetics *(Note 5)*
- Economics unit

**YEAR THREE - 48 POINTS**
- ENSC3004 Solid Mechanics *(replaces CIVL2110 Statics and Solid Mechanics)*
- MECH2401 Eng. Design and Vis.Com. **NA 2012** *(Note 6)*
- ENSC3003 Fluid Mechanics *(replaces MECH2403 Thermofluids 2)*
- Economics unit

**YEAR FOUR - 48 POINTS**
- CHPR3412 Extractive Metallurgy - Principles **NA 2012**
- MECH2402 Manufacturing
- MATE3411 Materials Engineering 3
- Economics unit

**YEAR FIVE - 48 POINTS**
- BE Group A or Group B option
- Economics unit
- MATE4411 Materials Engineering Project Part 1

**YEAR SIX – 12-18 POINTS**
- Economics unit
- Economics unit *(if required)*

**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 2011).*

*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:* Students who do not have WACE Chemistry 3A/3B or TEE Chemistry must complete CHEM1003 Introductory Chemistry as a bridging unit before taking this unit.

*Note 6:* This unit will be available in 2013. Students are advised to take a Group B option in its place.