

# 4641 Bachelor of Commerce and Bachelor of Aerospace Engineering (Honours) 2015

## Aerospace Engineering

**Stage one: 48 credit points (24, 30 or 36 credit points Engineering and 12-24 credit points Commerce)**

- Course advice is required for enrolment in stage one – enrolment plan depends on the need for foundation units
- Level 2 electives may be undertaken following successful completion of 24 credit points

Core Units (24 credit points) – all students complete:	Foundation units (0, 6 or 12 credit points)
ENG1060 Computing for engineers ENG1091 Mathematics for engineering ENG1001 Engineering design: lighter, faster, stronger ENG1002 Engineering design: cleaner, safer, smarter	<i>Students who have not completed VCE units 3&amp;4 of Chemistry, Physics and/or Specialist Mathematics must complete one or two units from:</i> ENG1070 Foundation chemistry ENG1090 Foundation mathematics ENG1080 Foundation physics
Elective units	
Where foundation units are not required in first year, elective units are undertaken at stage four or five. Students who complete two foundation units do not select any level 4 electives. Students who complete one foundation unit complete one level 4 elective. Students who did not require a foundation unit complete two level 4 electives.	

### Stage one (48 credit points)

Sem	Engineering stage one core unit	Engineering stage one core unit	Engineering foundation unit <u>or</u> Commerce unit	Engineering foundation unit <u>or</u> Commerce unit
Sem 1	Engineering stage one core unit	Engineering stage one core unit	Engineering foundation unit <u>or</u> Commerce unit	Engineering foundation unit <u>or</u> Commerce unit
Sem 2	Engineering stage one core unit	Engineering stage one core unit	Commerce unit	Commerce unit

### Stage two (54 credit points)

Sem	ENG2091 Advanced engineering mathematics A	MAE2401 Aircraft structures I	Commerce unit	Commerce unit	
Sem 1	ENG2091 Advanced engineering mathematics A	MAE2401 Aircraft structures I	Commerce unit	Commerce unit	
Sem 2	MAE2402 Thermodynamics and heat transfer	MAE2405 Aircraft performance	Commerce unit	Commerce unit	Commerce unit

### Stage three (54 credit points)

Sem	MEC2401 Dynamics 1	MEC2402 Engineering design I	Commerce unit	Commerce unit	Commerce unit
Sem 1	MEC2401 Dynamics 1	MEC2402 Engineering design I	Commerce unit	Commerce unit	Commerce unit
Sem 2	ENG2092 Advanced engineering mathematics B	MAE2403 Aerospace computational mechanics	MAE2404 Aerodynamics 1	Commerce unit	

### Stage four (48 credit points)

Sem	MAE3401 Aerodynamics II	MAE3404 Flight vehicle dynamics	MAE3407 Aircraft structures II	Commerce unit
Sem 1	MAE3401 Aerodynamics II	MAE3404 Flight vehicle dynamics	MAE3407 Aircraft structures II	Commerce unit
Sem 2	MAE3402 Aerospace design project	MAE3405 Flight vehicle propulsion	MAE3406 Aerospace materials	MAE3408 Aerospace control

### Stage five (48 credit points)

Sem	MAE4404 Aerospace practices	MEC4426 computer-aided design	Engineering elective from list below <u>or</u> Commerce unit	Commerce unit
Sem 1	MAE4404 Aerospace practices	MEC4426 computer-aided design	Engineering elective from list below <u>or</u> Commerce unit	Commerce unit
Sem 2	MEC4401 final year project	MAE4408 Damage tolerance and airworthiness	Engineering elective from list below <u>or</u> Commerce unit	Commerce unit

### Aerospace elective units:

MAE4407 Instrumentation and avionics MAE4409 wing design (preferred elective) MAE4965 Advanced aerodynamics and turbulence MAE4980 Aircraft engines MEC4402 final year project – Thesis (students need to have achieved an aggregate score of at least 70% to enrol in this unit)	MEC4403 Research project (subject to departmental approval) MEC4418 Control systems MEC4428 Advanced dynamics MEC4446 composite structures MEC4447 computers in fluids and energy MEC4459 wind engineering
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### Notes:

<b>Overloading</b>	Students will normally expect to complete the course in five years. This is achieved by undertaking one additional unit per semester twice in the later stages of the degree Overloading is not compulsory, students may choose to complete in 5 ½ years
<b>Credit points</b>	Unless specified, all units are worth 6 credit points <b>Bachelor of Aerospace Engineering</b> 26 units x 6cp = <b>Total of 156 credit points</b> <b>Bachelor of Commerce</b> 16 units x 6cp = <b>Total of 96 credit points</b> <b>(252cp)</b>
<b>Unit requisites</b>	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
<b>Duration of degree</b>	5 years full-time, 10 years part-time
<b>Time limit</b>	Time limit = 10 years. Students have ten years in which to complete this award from the time they commence first year. Periods of intermission are counted as part of the ten years.
<b>Course advice</b>	<a href="http://www.eng.monash.edu.au/current-students/course-advice.html">www.eng.monash.edu.au/current-students/course-advice.html</a> <a href="http://www.buseco.monash.edu.au/student/">www.buseco.monash.edu.au/student/</a>
<b>Monash University handbook</b>	Students should follow the course structure for the year the course was commenced <a href="http://monash.edu/pubs/2015handbooks/courses/index-byfaculty-eng.html">http://monash.edu/pubs/2015handbooks/courses/index-byfaculty-eng.html</a>

All information correct at publication but may be subject to change – 14 January 2015

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