4651 Bachelor of Computer Systems Engineering (Honours) 2015

Computer Systems Engineering

Stage One (48 credit points)

Sem 1	ENG1090 Foundation Mathematics and ENG1002 Engineering design: cleaner, safer, smarter OR ENG1091 Mathematics for engineering and ENG1060 Computing for engineers	FIT1029 Algorithm problem solving	ECE2071 Computer organisation and programming B
Sem 2	ENG1091 Mathematics for engineering and ENG1060 Computing for engineers OR ENG1002 Engineering design: cleaner, safer, smarter and one approved elective	FIT1008 Computer science	ECE2072 Digital systems

Stage Two (48 credit points)

Sem 1	ECE2011 Signal processing	ECE2041 Telecommunications	ECE2061 Analogue electronics	ECE3073 Computer systems
Sem 2	ECE2021 Electromagnetism	ECE2031 Circuits and control	ENG2092 Advanced engineering mathematics B	Approved elective

Stage Three (48 credit points)

Sem 1	ECE3022 Wireless and guided EM	Computer Systems Engineering elective	ECSE elective	Approved elective
Sem 2	ECE3062 Electronic systems and control	ECE3091 Engineering design	Computer Systems Engineering elective	Computer Systems Engineering elective

Stage Four (48 credit points)

Sem 1	ECE4094 Project A	ECE4099 Professional practice	ECSE elective	Computer Systems Engineering elective
Sem 2	ECE4095 Project B	ECE4074 Advanced Computer Architecture or ECE5881 System development (must be approved)	ECSE elective	Approved elective

Electives – approved elective units may include (subject to pre-requisites):	
(a) The following **Computer Systems Engineering** units: ECE4012 Applied digital signal processing ECE4023 Radio frequency electronics ECE4024 Wireless communications ECE4042 Communications theory ECE4043 optical communications ECE4044 Telecommunications protocols ECE4045 Network performance ECE4076 Computer vision ECE4077 Advanced computing techniques ECE4078 Intelligent robotics Any ECE4xxx unit deemed suitable* Approved units from the Faculty of Information Technology up to a maximum of 24 credit points*	(b) Any unit offered by the Department of Electrical and Computer Systems Engineering (ECSE) * (c) A unit from elsewhere in the university* Units in (b) and (c) must not include substantial material already completed or to be taken as part of the degree. Only one unit may be taken at each level of the degree from this category, allowing students to pursue an approved sequence of units from elsewhere in the University. *subject to departmental approval

Notes

Credit points	Unless specified, all units are worth 6 credit points **Bachelor of Computer Systems Engineering** 32 units x 6cp = **Total of 192 credit points**
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Duration of degree	4 years full-time, 8 years part-time
Time limit	Time limit = 8 years. Students have eight years in which to complete this award from the time they commence first year. Periods of intermission are counted as part of the eight years.
Course advice	www.eng.monash.edu.au/current-students/course-advice.html
Monash University handbook	Students should follow the course structure for the year the course was commenced http://monash.edu/pubs/2015handbooks/courses/index-byfaculty-eng.html