THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences
2020 Study Plan

Bachelor of Software Engineering

Semester 2 Start
Bachelor of Engineering (Honours) (Software Engineering)
Bachelor of Engineering (Honours) (Software Engineering) - Defence Systems Major
Bachelor of Engineering (Honours) (Software Engineering) – Smart Technologies Major

THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences
2020 Study Plan

Bachelor of Engineering (Honours) (Software Engineering) – Semester 2 Start

Year 1				
S 1				
S 2	COMP SCI 1106 Introduction to Software Engineering	#MATHS 1011 Mathematics IA	ENG 1002 Programming (Matlab and C)	ELEC ENG 1102 Digital Electronics
Year 2				
S 1	COMP SCI 2205 Software Engineering Workshop I	MATHS 1012 Mathematics IB	COMP SCI 1102 Object Oriented Programming	^ENG 1001 Introduction to Engineering
S 2	COMP SCI 2206 Software Engineering Workshop II	COMP SCI 2000 Computer Systems	COMP SCI 2103 Algorithm Design & Data Structures	MATHS 2107 Statistics & Numerical Methods II
Year 3				
S 1	COMP SCI 3303 Engineering Software as Services I	ELEC ENG 1100 Analog Electronics	COMP SCI 2207 Web & Database Computing	COMP SCI 2201 Algorithm & Data Structures Analysis
S 2	COMP SCI 3304 Engineering Software as Services II	COMP SCI 3004 Operating Systems	Software Engineering Elective (see elective table A & B) or General Elective	ENG 3004 Interdisciplinary Professional Practice
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship (6 units) during the course of their studies – see note below elective table.				
Year 4				
S 1	COMP SCI 4405 Research Methods in Software Engineering and Computer Science	COMP SCI 4414A Software Engineering Research Project A	COMP SCI 3001 Computer Networks & Applications	COMP SCI 2005 Systems Programming
S 2	COMP SCI 4411 Event Driven Computing	COMP SCI 4414B Software Engineering Research Project B	Software Engineering Elective (see elective table A & B)	Software Engineering Elective (see elective table B)
Year 5				
S 1	COMP SCI 4023 Software Process Management	Software Engineering Elective (see elective table A & B)	Software Engineering Elective (see elective table B)	Software Engineering Elective (see elective table B)
S 2				

Core Courses

THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences 2020 Study Plan

Elective Tables

CHOOSE FROM THE FOLLOWING SOFTWARE ENGINEERING ELECTIVES – TABLE A				
S1	COMP SCI 3005 Computer Architecture ☐	COMP SCI 3007 Artificial Intelligence ☐	COMP SCI 3305 Parallel and Distributed Computing ☐	COMP SCI 3306 Mining Big Data ☐
	COMP SCI 3308 Cybersecurity Fundamentals ☐	COMP SCI 3315 Computer Vision ☐	ENTREP 3011 Startup Methodologies ☐	ENTREP 3015 Entrepreneurial Leadership ☐
	ENTREP 3901 Tech eChallenge ☐	POLIS 1104 Introduction to Comparative Politics ☐	ENG 3305 Human Factors in Decision Making ☐	
Winter	COMP SCI 3309 Cybersecurity: A Practical Application ☐	ENTREP 3000 Innovation and Creativity ☐		
S2	COMP SCI 3012 Distributed Systems ☐	COMP SCI 3307 Secure Programming ☐	COMP SCI 3314 Introduction to Statistical Machine Learning ☐	COMP SCI 3316 Evolutionary Computation ☐
	ENG 3305 Human Factors in Decision Making ☐	ENTREP 3900 eChallenge ☐	MECH ENG 3032 Micro-Controller Programming ☐	
Summer	ENTREP 3000 Innovation and Creativity ☐			
CHOOSE FROM THE FOLLOWING SOFTWARE ENGINEERING ELECTIVES – TABLE B				
S1	COMP SCI 4407 Advanced Algorithms ☐	COMP SCI 4408 Modelling and Analysis of Complex Systems ☐	COMP SCI 4409 Search Based Software Engineering ☐	COMP SCI 4410 Computer Graphics ☐
	ENG 4010 Defence Leadership ☐			
S2	COMP SCI 4000 Software Architecture ☐	COMP SCI 4094 Distributed Databases and Data Mining ☐	COMP SCI 4095 Evolutionary Computation ☐	COMP SCI 4412 Secure Software Engineering ☐
	COMP SCI 4413 Introduction to Quantum Computing ☐	ENG 4020 Complex Systems Engineering ☐		

Faculty of Engineering, Computer and Mathematical Sciences
2020 Study Plan

NOTES

^ EAL: Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering

 # Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internship: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

General Electives: How to choose an elective course in your area of interest? Please refer to the steps via the link: https://ecms.adelaide.edu.au/study-with-us/student-support/enrolment

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

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Bachelor of Engineering (Honours) (Software Engineering) - Defence Systems Major – Semester 2 Start

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S 1	COMP SCI 2205 Software Engineering Workshop I	MATHS 1012 Mathematics IB	COMP SCI 1102 Object Oriented Programming	^ENG 1001 Introduction to Engineering
S 2	COMP SCI 2206 Software Engineering Workshop II	COMP SCI 2000 Computer Systems	COMP SCI 2103 Algorithm Design & Data Structures	MATHS 2107 Statistics & Numerical Methods II
Year 3				
S 1	COMP SCI 3303 Engineering Software as Services I	ELEC ENG 1100 Analog Electronics	COMP SCI 2207 Web & Database Computing	COMP SCI 2201 Algorithm & Data Structures Analysis
S 2	COMP SCI 3304 Engineering Software as Services II	COMP SCI 3004 Operating Systems	COMP SCI 3307 Secure Programming	ENG 3305 Human Factors in Decision Making
Internship				
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Year 4				
S 1	COMP SCI 4405 Research Methods in Software Engineering and Computer Science	COMP SCI 4414A Software Engineering Research Project A	ENG 3004 Interdisciplinary Professional Practice	COMP SCI 2005 Systems Programming
S 2	COMP SCI 4411 Event Driven Computing	COMP SCI 4414B Software Engineering Research Project B	ENG 4020 Complex Systems Engineering	COMP SCI 4092 Mobile and Wireless Systems
Year 5				
S 1	COMP SCI 4023 Software Process Management	COMP SCI 3001 Computer Networks & Applications	POLIS 1104 Introduction to Comparative Politics	ENG 4010 Defence Leadership
S 2				

Core Courses	Major Courses

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Bachelor of Engineering (Honours) (Software Engineering) – Smart Technologies Major - Semester 2 Start

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S 1	COMP SCI 2205 Software Engineering Workshop I	MATHS 1012 Mathematics IB	COMP SCI 1102 Object Oriented Programming	^ENG 1001 Introduction to Engineering
S 2	COMP SCI 2206 Software Engineering Workshop II	COMP SCI 2000 Computer Systems	COMP SCI 2103 Algorithm Design & Data Structures	MATHS 2107 Statistics & Numerical Methods II
Year 3				
S 1	COMP SCI 3303 Engineering Software as Services I	ELEC ENG 1100 Analog Electronics	COMP SCI 2207 Web & Database Computing	COMP SCI 2201 Algorithm & Data Structures Analysis
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Year 5				
S 1	COMP SCI 4023 Software Process Management	COMP SCI 3001 Computer Networks & Applications	Software Engineering Elective (see elective table A & B)	Software Engineering Elective (see elective table B)
S 2				

Core Courses	Major Courses

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	ENG 3305 Human Factors in Decision Making ☐	ENTREP 3900 eChallenge ☐		
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