

Bachelor Engineering (Honours) - 3707 - Quantum Engineering - ELECCH - T1 2026 Start

Program: Engineering (Honours) [3707]

Year 1 Term 1

Course or Activity	Prerequisites	Credits
DESN1000 Introduction to Engineering Design and Innovation		6
ELEC1111 Electrical Circuit Fundamentals		6

Year 1 Term 2

Course or Activity	Prerequisites	Credits
MATH1131 Mathematics 1A		6
<i>PHYS1121 or PHYS1131</i>		6
<i>General Education</i>		6

Year 1 Term 3

Course or Activity	Prerequisites	Credits
COMP1511 Programming Fundamentals		6
MATH1231 Mathematics 1B	MATH1131	6
PHYS1231 Higher Physics 1B		6

Year 2 Term 1

Course or Activity	Prerequisites	Credits
ELEC2134 Circuits and Signals	ELEC1111	6
ELEC2141 Digital Circuit Design		6

Year 2 Term 2

Course or Activity	Prerequisites	Credits
DESN2000 Engineering Design and Professional Practice	ELEC2141, DESN1000, COMP1511	6
ELEC2133 Analogue Electronics	ELEC2134	6
MATH2099 Mathematics 2B	MATH1231	6

Year 2 Term 3

Course or Activity	Prerequisites	Credits
ELEC3104 Digital Signal Processing	ELEC2134	6
ELEC3705 Fundamentals of Quantum Engineering	PHYS1231, MATH2099	6

MATH2069 Mathematics 2A		6
-------------------------	--	---

Year 3 Term 1

Course or Activity	Prerequisites	Credits
ELEC3106 Electronics	ELEC2141, ELEC2133	6
ELEC3115 Electromagnetic Engineering	PHYS1231, MATH2069	6
TELE9757 Quantum Communications		6

Year 3 Term 2

Course or Activity	Prerequisites	Credits
ELEC3114 Control Systems	ELEC2134, MATH2099	6
ELEC3117 Electrical Engineering Design	ELEC2133	6
PHYS3118 Quantum Physics of Solids and Devices	ELEC3705	6

Year 3 Term 3

Course or Activity	Prerequisites	Credits
<i>General Education</i>		6
<i>Quantum Engineering</i>		6

Year 4 Term 1

Course or Activity	Prerequisites	Credits
ELEC4122 Strategic Leadership and Ethics		6
ELEC4123 Electrical Design Proficiency		6
ELEC4951 Research Thesis A		4

Year 4 Term 2

Course or Activity	Prerequisites	Credits
ELEC4952 Research Thesis B	ELEC4951	4
<i>Quantum Engineering</i>		6
<i>Free Electives</i>		6

Year 4 Term 3

Course or Activity	Prerequisites	Credits
ELEC4605 Quantum Devices and Computers	ELEC3705	6
ELEC4953 Research Thesis C	ELEC4952	4
ENGG4999 Industrial Training		0
<i>Free Electives</i>		6