

## **Bachelor Engineering (Honours) - 3707 - Quantum Engineering - ELECCH - T2 2026 Start**

**Program:** Engineering (Honours) [3707]

### **Year 1 Term 2**

<b>Course or Activity</b>	<b>Prerequisites</b>	<b>Credits</b>
MATH1131 Mathematics 1A		6
PHYS1131 Higher Physics 1A		6

### **Year 1 Term 3**

<b>Course or Activity</b>	<b>Prerequisites</b>	<b>Credits</b>
DESN1000 Introduction to Engineering Design and Innovation		6
MATH1231 Mathematics 1B	MATH1131	6
PHYS1231 Higher Physics 1B	PHYS1131	6

### **Year 2 Term 1**

<b>Course or Activity</b>	<b>Prerequisites</b>	<b>Credits</b>
ELEC1111 Electrical Circuit Fundamentals		6
ELEC2134 Circuits and Signals	ELEC1111	6
ELEC2141 Digital Circuit Design		6

### **Year 2 Term 2**

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

### **Year 2 Term 3**

<b>Course or Activity</b>	<b>Prerequisites</b>	<b>Credits</b>
COMP1511 Programming Fundamentals		6
ELEC3705 Fundamentals of Quantum Engineering	PHYS1231, MATH2099	6
MATH2069 Mathematics 2A		6

### **Year 3 Term 1**

<b>Course or Activity</b>	<b>Prerequisites</b>	<b>Credits</b>
ELEC3106 Electronics	ELEC2141, ELEC2133	6

ELEC3115 Electromagnetic Engineering	PHYS1231, MATH2069	6
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### 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
ELEC3104 Digital Signal Processing	ELEC2134	6
<i>General Education</i>		6

### Year 4 Term 1

Course or Activity	Prerequisites	Credits
TELE9757 Quantum Communications		6
<i>Quantum Engineering</i>		6
<i>General Education</i>		6

### Year 4 Term 2

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

### Year 4 Term 3

Course or Activity	Prerequisites	Credits
ELEC4123 Electrical Design Proficiency		6
ELEC4605 Quantum Devices and Computers	ELEC3705	6
ELEC4952 Research Thesis B	ELEC4951	4

### Year 5 Term 1

Course or Activity	Prerequisites	Credits
ELEC4122 Strategic Leadership and Ethics		6
ELEC4953 Research Thesis C	ELEC4952	4
ENGG4999 Industrial Training		0
<i>Free Electives</i>		6