

# Bachelor of Engineering (Honours) / Computer Science (3785)

## [Renewable Energy Engineering \(SOLABH\)](#) / [Computer Science \(COMPA1\)](#)

### T1 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 1	<b>COMP1511</b> Programming Fundamentals	Term 1	<b>COMP1531</b> Software Engineering Fundamentals	Term 1	<b>COMP3121</b> Algorithm Design and Analysis <b>OR</b> <b>COMP3821</b> Extended Algorithm Design and Analysis	Term 1	<b>ELEC4122</b> Strategic Leadership and Ethics	Term 1	<b>SOLA4951</b> Research Thesis A
	<b>MATH1131</b> Mathematics 1A <b>OR</b> <b>MATH1141</b> Higher Mathematics 1A		<b>MATH2018</b> Engineering Mathematics 2D <b>OR</b> <b>MATH2019</b> Engineering Mathematics 2E		<b>SOLA2540</b> Applied Photovoltaics		<b>SOLA5050</b> Renewable Energy Policy		<b>Stand Elective</b>
	<b>PHYS1121</b> Physics 1A <b>OR</b> <b>PHYS1131</b> Higher Physics 1A		<b>MATH2089</b> Numerical Methods and Statistics				<b>SOLA5053</b> Wind Energy Converters		<b>Computing Elective</b>
Term 2	<b>MATH1231</b> Mathematics 1B <b>OR</b> <b>MATH1241</b> Higher Mathematics 1B	Term 2	<b>SOLA1070</b> Sustainable Energy	Term 2	<b>SOLA2051</b> Project in Photovoltaics and Renewable Energy	Term 2	<b>SOLA4012</b> Photovoltaic Systems Design	Term 2	<b>SOLA4952</b> Research Thesis B
	<b>PHYS1221</b> Physics 1B <b>OR</b> <b>PHYS1231</b> Higher Physics 1B		<b>COMP2521</b> Data Structures and Algorithms		<b>SOLA5057</b> Energy Efficiency		<b>Discipline Elective</b>		<b>Strand Elective</b>
	<b>COMP1521</b> Computer Systems Fundamentals				<b>COMP2511</b> Object-Oriented Design and Programming				<b>Computing Elective</b>
Term 3	<b>DESN1000</b> Introduction to Engineering Design and Innovation	Term 3	<b>MMAN2700</b> Thermodynamics	Term 3	<b>COMP3900</b> Computer Science Project	Term 3	<b>Strand Elective</b>	Term 3	<b>SOLA4953</b> Research Thesis C
	<b>ELEC1111</b> Electrical Circuit Fundamentals		<b>DESN2000</b> Engineering Design and Professional Practice		<b>COMP4920</b> Professional Issues and Ethics in Information Technology		<b>Computing Elective</b>		<b>Computing Elective</b>
			<b>ELEC2911</b> Power Engineering for Renewable Energy		<b>Computing Elective</b>		<b>Discipline Elective</b>		<b>Computing Elective</b>

**NOTES**

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Compulsory Training Component: There is a program requirement of 60 days approved [Industrial Training](#) ENGG4999

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## T2 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 2	<b>COMP1511</b> Programming Fundamentals	Term 2	<b>COMP1521</b> Computer Systems Fundamentals	Term 2	<b>SOLA2051</b> Project in Photovoltaics and Renewable Energy	Term 2	<b>SOLA5057</b> Energy Efficiency	Term 2	<b>SOLA4951</b> Research Thesis A
	<b>MATH1131</b> <sup>①</sup> Mathematics 1A		<b>SOLA1070</b> Sustainable Energy		<b>COMP2511</b> Object-Oriented Design and Programming		<b>SOLA4012</b> Photovoltaic Systems Design		<b>Strand Elective</b>
	<b>PHYS1121</b> <sup>②</sup> Physics 1A		<b>COMP2521</b> Data Structures and Algorithms		<b>Discipline Elective</b>		<b>Discipline Elective</b>		<b>Computing Elective</b>
Term 3	<b>DESN1000</b> Introduction to Engineering Design and Innovation	Term 3	<b>DESN2000</b> Engineering Design and Professional Practice	Term 3	<b>COMP4920</b> Professional Issues and Ethics in Information Technology	Term 3	<b>Strand Elective</b>	Term 3	<b>SOLA4952</b> Research Thesis B
	<b>COMP1531</b> Software Engineering Fundamentals		<b>MATH2089</b> Numerical Methods and Statistics		<b>ELEC2911</b> Power Engineering for Renewable Energy		<b>Computing Elective</b>		<b>Strand Elective</b>
			<b>MMAN2700</b> Thermodynamics						<b>Discipline Elective</b>
Term 1	<b>MATH1231</b> Mathematics 1B <u>OR</u> <b>MATH1241</b> Higher Mathematics 1B	Term 1	<b>MATH2018</b> Engineering Mathematics 2D <u>OR</u> <b>MATH2019</b> Engineering Mathematics 2E	Term 1	<b>COMP3121</b> Algorithm Design and Analysis <u>OR</u> <b>COMP3821</b> Extended Algorithm Design and Analysis	Term 1	<b>SOLA5050</b> Renewable Energy Policy	Term 1	<b>SOLA4953</b> Research Thesis C
	<b>PHYS1221</b> Physics 1B <u>OR</u> <b>PHYS1231</b> Higher Physics 1B		<b>SOLA2540</b> Applied Photovoltaics		<b>COMP3900</b> Computer Science Project		<b>SOLA5053</b> Wind Energy Converters		<b>Computing Elective</b>
	<b>ELEC1111</b> Electrical Circuit Fundamentals				<b>ELEC4122</b> Strategic Leadership and Ethics		<b>Computing Elective</b>		<b>Computing Elective</b>

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Compulsory Training Component: There is a program requirement of 60 days approved [Industrial Training](#) ENGG4999

<sup>①</sup>Students can take MATH1131 or MATH1141 depending on term offerings <sup>②</sup>Students can take PHYS1121 or PHYS1131 depending on term offerings

# Bachelor of Engineering (Honours) / Computer Science (3785)

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### T3 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 3	<b>COMP1511</b> Programming Fundamentals	Term 3	<b>COMP1531</b> Software Engineering Fundamentals	Term 3	<b>SOLA2540</b> Applied Photovoltaics	Term 3	<b>Strand Elective</b>	Term 3	<b>SOLA4951</b> Research Thesis A
	<b>MATH1131</b> Mathematics 1A <u>OR</u> <b>MATH1141</b> Higher Mathematics 1A		<b>ELEC1111</b> Electrical Circuit Fundamentals		<b>ELEC2911</b> Power Engineering for Renewable Energy		<b>Discipline Elective</b>		<b>Stand Elective</b>
	<b>PHYS1121</b> Physics 1A <u>OR</u> <b>PHYS1131</b> Higher Physics 1A		<b>MATH2089</b> Numerical Methods and Statistics		<b>DESN2000</b> Engineering Design and Professional Practice		<b>Computing Elective</b>		<b>Computing Elective</b>
Term 1	<b>MATH1231</b> Mathematics 1B <u>OR</u> <b>MATH1241</b> Higher Mathematics 1B	Term 1	<b>MATH2018</b> Engineering Mathematics 2D <u>OR</u> <b>MATH2019</b> Engineering Mathematics 2E	Term 1	<b>COMP3121</b> Algorithm Design and Analysis <u>OR</u> <b>COMP3821</b> Extended Algorithm Design and Analysis	Term 1	<b>ELEC4122</b> Strategic Leadership and Ethics	Term 1	<b>SOLA4952</b> Research Thesis B
	<b>PHYS1221</b> Physics 1B <u>OR</u> <b>PHYS1231</b> Higher Physics 1B		<b>MMAN2700</b> Thermodynamics		<b>Discipline Elective</b>		<b>SOLA5050</b> Renewable Energy Policy		<b>Strand Elective</b>
	<b>COMP1521</b> Computer Systems Fundamentals		<b>COMP2521</b> Data Structures and Algorithms				<b>SOLA5053</b> Wind Energy Converters		<b>Discipline Elective</b>
Term 2	<b>DESN1000</b> Introduction to Engineering Design and Innovation	Term 2	<b>SOLA2051</b> Project in Photovoltaics and Renewable Energy	Term 2	<b>COMP3900</b> Computer Science Project	Term 2	<b>SOLA5057</b> Energy Efficiency	Term 2	<b>SOLA4953</b> Research Thesis C
	<b>SOLA1070</b> Sustainable Energy		<b>COMP2511</b> Object-Oriented Design and Programming		<b>COMP4920</b> Professional Issues and Ethics in Information Technology		<b>Computing Elective</b>		<b>Computing Elective</b>
					<b>SOLA4012</b> Photovoltaic Systems Design				<b>Computing Elective</b>

<b>NOTES</b>	<p><b>This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.</b></p> <p>Compulsory Training Component: There is a program requirement of 60 days approved <a href="#">Industrial Training</a> ENGG4999</p>
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