

# Bachelor of Engineering (Honours) (3707)

## Photovoltaics & Solar Energy Engineering (SOLA AH)

### T1 Entry 2023 Sample Plan



**UNSW**  
SYDNEY

| Year 1 |                                                                    | Year 2 |                                                                  | Year 3 |                                                              | Year 4 |                                                    |
|--------|--------------------------------------------------------------------|--------|------------------------------------------------------------------|--------|--------------------------------------------------------------|--------|----------------------------------------------------|
| Term 1 | <b>DESN1000</b><br>Engineering Design and Innovation               | Term 1 | <b>SOLA2060</b><br>Introduction to Electronic Devices            | Term 1 | <b>SOLA3507</b><br>Solar Cells                               | Term 1 | <b>SOLA4951</b><br>Research Thesis A               |
|        | <b>MATH1131 OR MATH1141</b><br>(Higher) Mathematics 1A             |        | <b>MATH2089</b><br>Numerical Methods and Statistics              |        | <b>Discipline Elective Course</b>                            |        | <b>ELEC4122</b><br>Strategic Leadership and Ethics |
|        | <b>PHYS1121 OR PHYS1131</b><br>(Higher) Physics 1A                 |        | <b>General Education Course</b>                                  |        | <b>Strand Elective Course</b>                                |        | <b>Discipline Elective Course</b>                  |
| Term 2 | <b>MATH1231 OR MATH1241</b><br>(Higher) Mathematics 1A             | Term 2 | <b>SOLA2051</b><br>Project in Photovoltaics and Renewable Energy | Term 2 | <b>SOLA3010</b><br>Low Energy Buildings and Photovoltaics    | Term 2 | <b>SOLA4952</b><br>Research Thesis B               |
|        | <b>ENGG1811 OR COMP1911 OR COMP1511</b><br>Computing for Engineers |        | <b>MATH2018</b><br>Engineering Mathematics 2D                    |        | <b>SOLA3020</b><br>Photovoltaic Technology and Manufacturing |        | <b>SOLA4012</b><br>Photovoltaic Systems Design     |
|        | <b>Free Elective Course</b>                                        |        | <b>Strand Elective Course</b>                                    |        | <b>Discipline Elective Course</b>                            |        | <b>SOLA5057</b><br>Energy Efficiency               |
| Term 3 | <b>MATS1101</b><br>Engineering Materials and Chemistry             | Term 3 | <b>DESN2000</b><br>Engineering Design and Professional Practice  | Term 3 | <b>Discipline Elective Course</b>                            | Term 3 | <b>SOLA4953</b><br>Research Thesis C               |
|        | <b>PHYS1221 OR PHYS1231</b><br>(Higher) Physics 1B                 |        | <b>SOLA2540</b><br>Applied Photovoltaics                         |        | <b>Strand Elective Course</b>                                |        | <b>General Education Course</b>                    |
|        |                                                                    |        |                                                                  |        |                                                              |        | <b>Free Elective Course</b>                        |

#### NOTES

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

Students doing a Computing Strand should take COMP1911/COMP1511. COMP1511 space may be reserved for Computer Science and Engineering students only in Term 2, if so, you can take COMP1511 in Term 3 instead. Students selecting Mathematics Strand and Physics Strand, and BE/BSc students majoring in 'Mathematics' or 'Physics' should replace MATH2019 with MATH2011. Several Variable Calculus and MATH2121 Theory and Applications of Differential Equations.

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# Bachelor of Engineering (Honours) (3707)

## Photovoltaics & Solar Energy Engineering (SOLA AH)

### T2 Entry 2023 Sample Plan



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SYDNEY

| Year 1 |                                                                    | Year 2 |                                                                  | Year 3 |                                                              | Year 4 |                                                    |
|--------|--------------------------------------------------------------------|--------|------------------------------------------------------------------|--------|--------------------------------------------------------------|--------|----------------------------------------------------|
| Term 2 | <b>MATH1131</b><br>Mathematics 1A                                  | Term 2 | <b>SOLA2051</b><br>Project in Photovoltaics and Renewable Energy | Term 2 | <b>SOLA3010</b><br>Low Energy Buildings and Photovoltaics    | Term 2 | <b>SOLA4951</b><br>Research Thesis A               |
|        | <b>PHYS1121 OR PHYS1131</b><br>(Higher) Physics 1A                 |        | <b>MATH2018</b><br>Engineering Mathematics 2D                    |        | <b>SOLA3020</b><br>Photovoltaic Technology and Manufacturing |        | <b>SOLA4012</b><br>Photovoltaic Systems Design     |
|        | <b>ENGG1811 OR COMP1911 OR COMP1511</b><br>Computing for Engineers |        | <b>General Education Course</b>                                  |        | <b>Strand Elective Course</b>                                |        | <b>SOLA5057</b><br>Energy Efficiency               |
| Term 3 | <b>MATS1101</b><br>Engineering Materials and Chemistry             | Term 3 | <b>DESN2000</b><br>Engineering Design and Professional Practice  | Term 3 | <b>Strand Elective Course</b>                                | Term 3 | <b>SOLA4952</b><br>Research Thesis B               |
|        | <b>DESN1000</b><br>Engineering Design and Innovation               |        | <b>SOLA2540</b><br>Applied Photovoltaics                         |        | <b>Discipline Elective Course</b>                            |        | <b>Discipline Elective Course</b>                  |
|        | <b>Free Elective Course</b>                                        |        | <b>Strand Elective Course</b>                                    |        | <b>Discipline Elective Course</b>                            |        | <b>General Education Course</b>                    |
| Term 1 | <b>PHYS1221 OR PHYS1231</b><br>(Higher) Physics 1B                 | Term 1 | <b>SOLA2060</b><br>Introduction to Electronic Devices            | Term 1 | <b>SOLA3507</b><br>Solar Cells                               | Term 1 | <b>SOLA4953</b><br>Research Thesis C               |
|        | <b>MATH1231 OR MATH1241</b><br>(Higher) Mathematics 1A             |        | <b>MATH2089</b><br>Numerical Methods and Statistics              |        | <b>Discipline Elective Course</b>                            |        | <b>ELEC4122</b><br>Strategic Leadership and Ethics |
|        |                                                                    |        |                                                                  |        |                                                              |        | <b>Free Elective Course</b>                        |

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# Bachelor of Engineering (Honours) (3707)

## Photovoltaics & Solar Energy Engineering (SOLA AH)

### T3 Entry 2023 Sample Plan



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SYDNEY

| Year 1 |                                                                    | Year 2 |                                                                 | Year 3 |                                                              | Year 4 |                                                    |
|--------|--------------------------------------------------------------------|--------|-----------------------------------------------------------------|--------|--------------------------------------------------------------|--------|----------------------------------------------------|
| Term 3 | <b>MATS1101</b><br>Engineering Materials and Chemistry             | Term 3 | <b>DESN2000</b><br>Engineering Design and Professional Practice | Term 3 | <b>Discipline Elective Course</b>                            | Term 3 | <b>SOLA4951</b><br>Research Thesis A               |
|        | <b>PHYS1121 OR PHYS1131</b><br>(Higher) Physics 1A                 |        | <b>MATH2089</b><br>Numerical Methods and Statistics             |        | <b>Discipline Elective Course</b>                            |        | <b>Discipline Elective Course</b>                  |
|        | <b>MATH1131 OR MATH1141</b><br>(Higher) Mathematics 1A             |        | <b>Free Elective Course</b>                                     |        | <b>Strand Elective Course</b>                                |        | <b>General Education Course</b>                    |
| Term 1 | <b>PHYS1221 OR PHYS1231</b><br>(Higher) Physics 1B                 | Term 1 | <b>SOLA2060</b><br>Introduction to Electronic Devices           | Term 1 | <b>SOLA3507</b><br>Solar Cells                               | Term 1 | <b>SOLA4952</b><br>Research Thesis B               |
|        | <b>DESN1000</b><br>Engineering Design and Innovation               |        | <b>SOLA2540</b><br>Applied Photovoltaics                        |        | <b>Discipline Elective Course</b>                            |        | <b>ELEC4122</b><br>Strategic Leadership and Ethics |
|        | <b>MATH1231 OR MATH1241</b><br>(Higher) Mathematics 1A             |        | <b>MATH2018 OR MATH2019</b><br>Engineering Mathematics 2D (2E)  |        | <b>Strand Elective Course</b>                                |        | <b>Free Elective Course</b>                        |
| Term 2 | <b>ENGG1811 OR COMP1911 OR COMP1511</b><br>Computing for Engineers | Term 2 | <b>General Education Course</b>                                 | Term 2 | <b>SOLA3010</b><br>Low Energy Buildings and Photovoltaics    | Term 2 | <b>SOLA4953</b><br>Research Thesis C               |
|        | <b>SOLA2051</b><br>Project in Photovoltaics and Renewable Energy   |        | <b>Strand Elective Course</b>                                   |        | <b>SOLA3020</b><br>Photovoltaic Technology and Manufacturing |        | <b>SOLA4012</b><br>Photovoltaic Systems Design     |
|        |                                                                    |        |                                                                 |        |                                                              |        | <b>SOLA5057</b><br>Energy Efficiency               |

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