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You should aim to spend about 10 h/w on this course. The additional time should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

#### Contact hours

	Day	Time	Location
Lectures	Tuesday	3pm - 4pm	Online via Teams
	Wednesday	12pm – 2pm	Online via Teams
Tutorials	Friday	10am – 12noon	Quad G034/Online via Teams*

\*In Wk 5 and 7, tutorial classes will be held in Tyree Energy Technology LG09.

Please refer to your class timetable for the learning activities you are enrolled in and attend only those classes.

#### Summary and Aims of the course

Photovoltaic (PV) devices convert sunlight directly to electricity with low levels of greenhouse gas emissions per kWh of electricity produced. As such they have enormous potential to meet a large fraction of the demand for electricity. This course covers factors important to

2.	Calculate the incident solar power on a surface understanding the contributions of orientation, tilt, location, spectral change and weather factors.	1.1, 1.3, 1.5, 2.1, 2.2, 3.2
3.	Use relevant standards and data sets for calculations of cell, module and system performance.	1.3, 1.5, 2.1, 3.2

1	17 Feb	PV Systems	Lab 0: Circuit simulation with LT Spice
2	24 Feb	Load Assessment	Tut 1: Load assessment
3	2 Mar	PV System Components	Tut 2: PV System Components sizing and selection
4	9 Mar	Energy Storage	Lab 1: Modelling Solar Cells
5	16 Mar	PV Modules	









LT Spice: <https://www.analog.com/en/design-center/design-tools-and-calculators/ltspice-simulator.html>

Retscreen: Energy Project Analysis Software <http://www.retscreen.net/ang/home.php>

PVSYST: Software for photovoltaic Systems <http://www.pvsyst.com/>

On-line Resources

PV Education: PV Education is an online, interactive website by C.B. Honsberg and S. Bowden covering material similar to this textbook is also available at <http://www.pveducation.org/pvcdrom/>.

Moodle: As a part of the teaching component, Moodle will be used to disseminate teaching materials, host forums and occasionally quizzes. Announcements concerning course information will be given in the lectures and/or on Moodle. Assessment marks will also be made available via Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>.

UNSW Library website: <http://www.library.unsw.edu.au/>

If plagiarism is found in your work when you are in first year, your lecturer will offer you assistance to improve your academic skills. They may ask you to look at some online resources, attend the Learning Centre, or sometimes resubmit your work with the problem fixed. However more serious instances in first year, such as stealing another student's work or paying someone to do your work, may be investigated under the Student Misconduct Procedures.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis) even suspension from the university. The Student Misconduct Procedures are available here:

[www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf](http://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf)

