This unit will introduce students to the rapidly and evolving application of remotely piloted aircraft systems (RPAS), commonly known as drones or UAVs. This rapidly evolving technology is now widely used in the environment sector and a diversity of other vocations, including disaster and emergency management, mineral resource extraction, agriculture, and media. The ability to fly RPAS is becoming a valuable skill and the market for RPAS services is predicted to grow ten-fold over the next decade. Undertaking this course will give you the licensing, knowledge-base and practical skills to operate RPAS safely for commercial purposes.

Students enrolled in this course will be eligible to receive their Remote Pilots License (RePL). In order to fly a Remotely Piloted Aircraft (RPA) legally in Australia for commercial purposes pilots require certification from the Civil Aviation Safety Authority. This certification is an essential step to using drones for commercial ventures, including research and teaching. This certification will allow you to fly an RPAS up to 7kg and gain endorsements for a range of aircraft types safely.

This course will be run in partnership with Fly UAS as the training provider and partner to National Drones – Australia’s’ safest and fastest growing RPAS company. In the first week of this two-week intensive, experienced instructors from Fly UAS will guide you through the theory and practical skills required to fly multi-rotor RPA. This includes aerodynamics and motion, air legislation, navigation, meteorology, how to read air charts, and the internal workings of an RPAS. You will gain your aeronautical radio operators certificate, and undergo a minimum of five hours flying experience.

UNIT INFORMATION

UNIT CODES
SID300 - Undergraduate
SID500 - Postgraduate

UNIT TITLE
Remotely Piloted Aircraft: Learning to fly and survey

UNIT COORDINATOR
Dr Hamish Campbell
hamish.campbell@cdu.edu.au
08 8946 6017

OTHER INFORMATION
Field Dates:
SP2: 11-22 June 2018
Location:
CDU Casuarina campus
Duration:
10 days
Numbers:
Maximum of 20 places

08 8946 6781 | environment@cdu.edu.au | cdu.edu.au/environment
In the second week, newly certified pilots will learn compliance management and how RPA operations are carried out safely within a commercial organisation. You will discover how to use RPAS to survey and map the earth’s surface, and then how to use the imagery to create maps and 3-dimensional models of the landscape.

This is the only University unit in Australia that enables students to obtain their RPAS license and Aeronautical Radio Operators Certificate, whilst contributing towards their degree.

WHO SHOULD ATTEND
This unit is targeted at students who wish to develop knowledge, skills, and certification in flying Remotely piloted aircraft systems for commercial purposes. The unit is an accredited specialist elective of the Graduate Certificate in Spatial Sciences, Masters of Environmental Management (MEM), and elective in the third year of the Bachelor Environmental Science and Bachelor of Science. Cross-institutional enrolments from other universities are very welcome.

COURSE COORDINATOR/INSTRUCTORS
Dr Hamish Campbell is a Senior Lecturer at CDU and has worked within the Spatial Sciences for over 15 years. Ben Harris has held positions of Director, chief instructor and chief UAV Controller of both National Drones and Fly UAS with more than 10 years’ experience in conducting both manned fixed wing aerial surveying operations, RPAS operations and delivering CASA certified RPAS training courses. Ben has a wealth of experience in RPAS operations specialising in remote surveying and monitoring projects and 3D modelling.

Aaron Emmett is an instructor with Fly UAS and delivers RPAS services throughout the Northern Territory with National Drones and has over 20 years of aviation, defence and surveillance experience.

The unit will also feature lectures and demonstrations from leading researchers and practitioners in the use of RPAS.

SELECTION CRITERIA
> Completion of at least 1.5 years of undergraduate study or enrolment in a coursework Masters program or the Graduate Certificate in Spatial Sciences.

COST:
$2,750 (inclusive GST) plus standard CDU enrolment fees. The additional costs of this course are to cover the RePL certification.

HOW TO APPLY
1. Consult the Unit coordinator to lodge your expression of interest [Hamish.Campbell@cdu.edu.au]
2. CDU students to complete special enrolment e-form, non CDU students to apply for cross institutional enrolment
3. Submit the application before April 2018.

CONTACT DETAILS:
Unit Coordinator – Dr Hamish Campbell
E. hamish.campbell@cdu.edu.au
P. 08 8946 6017
Charles Darwin University, Darwin, NT 0909
E. environment@cdu.edu.au
P. 08 8946 6781
W. cdu.edu.au/environment