COURSE OUTLINE

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 The National Drones Institute – Australia’s safest and fastest growing RPAS company. In the first week of this two-week intensive, experienced instructors from the National Drones Institute will guide you through the theory and practical skills required to fly multi-rotor RPAS. This includes aerodynamics and motion, air legislation, navigation, meteorology, how to read air charts, and the internal workings of an RPA. You will gain your aeronautical radio operators certificate, and undergo a minimum of five hours flying experience.
Learn to use RPA to undertake wildlife surveys. This image shows a Magpie goose survey undertaken across farms in the N.T.

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. External participants & 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 at the National Drones Institute 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 the National Drones Institute and delivers RPAS services throughout the Northern Territory 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

COST:
CDU or other tertiary institute students -$2,500 (inclusive GST) plus standard CDU enrolment fees.
External participants - $4,300 (inclusive GST)

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 2019.

CONTACT DETAILS:
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