Atmosphere and Ocean Science

Year and Campus:	2014
Coordinator:	Professor Ian SimmondsSchool of Earth Sciences
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Overview:	The Atmosphere and Ocean Sciences major will provide the springboard for students entering careers or research any area in which an understanding of how the fluid domains of the planet function is required. This includes fundamental research into climate modelling and prediction, the role of principal wind and ocean current systems, and how these interact with the land surface to influence weather, climate and hence the environment. Careers outside research may include government organisations such as the Bureau of Meteorology and CSIRO, or areas in the aerospace industry and management. Graduates will be prepared for these pathways by developing skills in acquiring and interpreting atmospheric and oceanic information, which are crucial to being prepared to make contributions in any research or industry setting. This major will integrate knowledge from a range of disciplines from field-based studies to more theoretical aspects atmospheric dynamics and climate forcing. Students will complete a sequence of specialist subjects as well as integrated subjects in which they develop an understanding of how these may be applied to solve outstanding questions about the Earth's atmosphere, oceans and land surfaces influence changes to our environment. Students will gain experience preparing them for the workplace by participating in hands-on project work that requires careful time management and the clear communication of results.
Learning Outcomes:	This major will integrate knowledge from a range of disciplines from field-based studies to more theoretical aspects atmospheric dynamics and climate forcing. Students will complete a sequence of specialist subjects as well as integrated subjects in which they develop an understanding of how these may be applied to solve outstanding questions about the Earth's atmosphere, oceans and land surfaces influence changes to our environment. Students will gain experience preparing them for the workplace by participating in hands-on project work that requires careful time management and the clear communication of results.
Structure & Available Subjects:	Completion of 50 points of study at Level 3.
Subject Options:	All four of

Subject	Study Period Commencement:	Credit Points:
ATOC30004 Dynamical Meteorology and Oceanography	Semester 1	12.50
ATOC30005 Global Climates of the Past	Semester 1	12.50
ATOC30006 Modern and Future Climate	Semester 2	12.50
ATOC30003 Atmosphere Ocean Interaction	Semester 2	12.50

Notes:	This major is available to new generation Bachelor of Science students (B-SCI). It is also available to Bachelor of Science students who commenced prior to 2008. The published structure of this major includes subjects available in the current year. Pre-2008 Bachelor of Science students who completed one or more Level 3 science subjects towards this major prior to 2010 should contact the Science Student Centre for advice on appropriate subjects to complete this major.
Related Course(s):	Bachelor of Arts and Bachelor of Science Bachelor of Commerce and Bachelor of Science Bachelor of Science