MCEN40016 Advanced Fluid Mechanics

Credit Points:	12.50
Level:	4 (Undergraduate)
Dates & Locations:	This subject is not offered in 2011. This subject may not be offered every year. Please refer to the Department of Mechanical Engineering.
Time Commitment:	Contact Hours: Thirty-six hours of lectures and 12 hours of tutorials, assignments and/or laboratories Total Time Commitment: 120 hours
Prerequisites:	The prerequisite for this subject is 436-432 Thermofluids 4 or equivalent
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability
Contact:	**eng-info@unimelb.edu.au (eng-info@unimelb.edu.au)**
Subject Overview:	The course may include advanced topics in fluid mechanics such as critical point theory, topology of fluid flow fields, vortex dynamics, theories of turbulence, turbulent smooth and rough wall bounded flows, and modern experimental techniques in the measurement of turbulent flow fields.
Objectives:	Upon completion, students should be able to understand and apply theories and techniques which are at the forefront of fluid mechanics research.
Assessment:	One 3-hour examination (100%) at the end of semester.
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees