ELEN90046 Major Design Project

Credit Points:	25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 12 hours Total Time Commitment: 400 hours
Prerequisites:	Prerequisites for this subject are:

Subject	Study Period Commencement:	Credit Points:
ELEN90042 Analogue Electronics	Semester 1	12.50
ELEN90047 Mixed Signal Design	Semester 1	12.50
ELEN90050 RF Systems and Architecture	Semester 2	12.50
ELEN90049 RF Electronics and Design	Semester 2	12.50

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/
Coordinator:	Prof Stan Skafidas
Contact:	Prof Stan Skafidas Email: **sskaf@unimelb.edu.au (mailto:sskaf@unimelb.edu.au)**
Subject Overview:	**AIMS** The aim of this subject is to get students to apply their knowledge and skills learnt in the course in designing a real system. **INDICATIVE CONTENT** This subject centres on a group design project where students design and fabricate a substantial electronics system (example applications include wireless, GPS, radar). The final mark will also take into account the methodologies used, testing, simulation and verification of the designed system and adherence to appropriate standards.
Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILO)** Having completed this subject it is expected that the student be able to: 1 Design a substantial electronics system 2 Apply their knowledge and skills learnt in the course in designing a real system.

Assessment:	A written report of up to 100 pages due at the end of semester (approximately 300-350 hours of work), worth 50% An oral examination of duration 60 minutes at the end of semester (50%). Intended Learning Outcomes (ILOs) 1 and 2 are assessed in the submitted final report and oral examination
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
Generic Skills:	# Ability to apply knowledge of science and engineering fundamentals # Ability to undertake problem identification, formulation, and solution # Ability to utilise a systems approach to complex problems and to design and operational performance # Ability to build and test real world systems that meet industry specialisation and manufacturing standards # Proficiency in engineering design # Ability to conduct an engineering project # Capacity for creativity and innovation # Understanding of professional and ethical responsibilities, and commitment to them # Ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member # Capacity for lifelong learning and professional development
Related Course(s):	Master of Nanoelectronic Engineering