Informatics

Year and Campus:	2016
Coordinator:	Dr Rachelle Bosua
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Overview:	The Informatics major will focus on preparing students for careers in information and data management, medical and health informatics and clinical research, physical informatics and social informatics. Graduates will be prepared for these pathways by developing skills in understanding, manipulating, visualising, integrating and exploiting data and information; these skills are crucial to many industries, particularly medical/health industries, and research in biological and physical sciences. This major will integrate knowledge from a range of disciplines including computing, information modelling and human-computer interaction, by enabling students to complete a sequence of specialist subjects in each, as well as integrated subjects in which the students develop an understanding of the application of informatics to solving current problems in particular domains. Students will gain experience preparing them for the workplace by participating in project based subjects in which they will apply the skills they have learnt to real world problems.
Learning Outcomes:	*Informatics Major Graduates should demonstrate (based* on the Seoul Accord for computing): # problem solving and analysis skills: apply fundamental principles of programming, and algorithms to identify and solve complex computing problems. # knowledge for solving computing problems: knowledge of computing fundamentals and algorithms, to abstract and conceptualise computational models within a range of domains. # design and development of software solutions: applying of software engineering principles and methodologies to design and evaluate solutions/systems for complex computing problems against a specified set of needs. # tools: create, select new/adapt and use modern computing techniques, tools and IT-architectures to solve complex real-world computing problems, and understand the limitations of existing tools and IT architectures. # individual and team work: work effectively as an individual and valued member of a medium-size team in multi-disciplinary and cultural settings. # communication: communicate clearly and effectively individually and as a team within and outside the computing community about complex computing artefacts using a variety of written and oral communication techniques. # computing professionalism and society: understand, assess and describe the role of IT systems within society, and how IT systems impact on health, safety, legal, and cultural issues. # ethics: understand and comply with the relevant ethics, responsibilities, and norms of professional computing practice. # life-long learning: recognise the need to continually develop and improve the above attributes as a computing and IT professional.
Structure & Available Subjects:	Completion of 50 points of study at Level 3.
Subject Options:	All three of

Subject	Study Period Commencement:	Credit Points:
COMP30022 IT Project	Semester 2	12.50
INFO30004 Usability Engineering	Semester 1	12.50
INFO30005 Web Information Technologies	Semester 1	12.50

Plus one of

Subject	Study Period Commencement:	Credit Points:

	INFO30006 Information Security and Privacy	Semester 2	12.5
	INFO30007 Health and Biomedical Informatics	Semester 2	12.50
Related Course(s):	Bachelor of Science		