Overview of planned Web Science degree

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DESCRIPTION

The School of Computer and Information Science at the University of South Australia is planning a Web Science degree. The research undertaken at the School has a significant Web science and technologies content, and the degree is aimed at firstly tapping a predicted growth area in computer science and secondly at generating graduates to feed into the School's postgraduate research degrees.

This new degree can be achieved with relatively little new work, with the majority of the effort required falling to those who stand to most benefit by it, namely the staff whose research interests are in Web Science. These staff would each offer one advanced topic in their research area, as well as proposing and supervising student projects in their research area. This fits in well with the University's target of increasing the *teaching-research nexus*, with our research informing and shaping our teaching. Given that the School already offers an extensive selection of Web Science courses, it is sensible to collect these together along with a number of specific new courses under a dedicated Web Science degree.

DEGREE STRUCTURE

The degree will be offered in two streams, with a three-year normal degree and a four-year honours degree[1]. All students will take the usual Computer Science first year, and at the end of the first year, the higher-performing students will be offered the option of taking the four-year version (Honours degree).

Year 1

This will be the usual first year of computer science.

Year 2

Year 2 introduces the basic specialist material, supported by existing courses in networking.

Existing courses to be offered under this programme include Network Fundamentals, Advanced User Interfaces, Information Security, Intelligent Systems Technology, Advanced Internet Technology, World Wide Web Development. The designated Web Science courses will be compulsory with the remaining courses taken from relevant electives such as Database Technology.

Year 3

Year 3 contains advanced specialist material. Some of these courses are intended to be run as small, interactive classes.

This year is where the first division between the 3-year and 4-year degrees occurs:

- 3-year students must take an appropriately-themed software engineering project which comprises 50% of their effort for the entire year, with the remaining 4 courses selected from the Web Science 3rd-year courses offered.
- 4-year students will take all of the Web Science 3rd year courses, with the remaining courses taken up by electives.

Existing courses to be offered under this programme include Advanced Knowledge Representation (Stumptner), Data and Web Mining (Li), Research Placement 1, Research Placement 2, Software Architecture and Software Engineering for Web-based applications. The two Research Placement courses must be taken in two of the labs hosting Web Science research.

New courses to be offered include Social networking and recommender systems (Ashman), Web databases and querying (Liu).

Year 4

Year 4 conforms to the standard format for the fourth year of the School's degrees, with students taking a full-year research project, contributing 50% of their final year effort. The students also take the compulsory "Research Methods" course, plus two electives.

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[1] Note that in Australia, the default degree taken by most students is the ordinary, three-year degree while the honours degree is intended as a PhD-qualifying degree, taken by only the top-decile student cohort.