UNIVERSITY COURSES IN LAW & INFORMATION TECHNOLOGY

* *by Graham Greenleaf*

In these days of mandatory CLE, it may be of interest to members of the Society that there are a wider range of undergraduate and postgraduate courses linking law and information technology available through Universities in Sydney than are available in virtually any other city in the world. This article will outline the courses available at the University of New South Wales Faculty of Law which we believe has the most comprehensive range of courses available.

In our undergraduate degrees, UNSW pioneered the teaching of 'computers and law' almost a decade ago, and also developed the first Australian courses teaching computerised legal information retrieval techniques. In 1989 we expanded this commitment to the postgraduate context, with the introduction of courses concerning information technology in our new Master of Laws (LLM) by coursework. Mallesons Stephen Jaques provided financial assistance for the establishment of the coursework LLM. To teach these courses, the Faculty has an advanced Microcomputer Laboratory, contained within the Law Library.

The fundamentals of legal research techniques, both print–based, and computer-based are taught in the compulsory undergraduate courses *Legal Research & Writing 1 & 2.* The computer component in the first year course consists of a hands–on introduction to free text and hypertext searching techniques, concentrating on legal materials available on CD-ROM. In the final year subject more sophisticated search techniques are covered, and the course surveys available on–line and CD–ROM data bases and networks.

Information Systems Law is an optional undergraduate course analysing the law governing the use of computing and data communications technologies. The main topics are telecommunications law, data protection and privacy, property in computerised data and software, computer crime, civil liability for software and data bases, and computerised commercial transactions, including electronic funds transfer systems (EFTS), and electronic document interchange (EDI). The social and legal importance of information systems is examined in the light of theories of 'post industrial

society'. Corrs Pavey have donated a prize of $500 for this course. No prior computing knowledge is required, and no computer use is required during the course.

In contrast, *Computer Applications to Law* is a 'hands–on' introduction to the uses lawyers can make of computer technology, particularly data base and knowledge–based technologies. The use of data bases for text retrieval systems, court and legal data registry systems, litigation support systems and office administration, and the strengths and limitations of data base technologies are covered. The use of knowledge–based technologies in legal document generators, expert systems (systems that give legal advice) and 'conceptual text retrieval' are examined. Students design and create their own legal data bases, document generators and expert systems using programs provided.

Two postgraduate (coursework LLM) courses are also based on the theory and practice of computer use by lawyers: *Legal Computer Applications Development (A) & (B).* The 'A' course, subtitled *Data Base and*

Data Communications Applications, requires each student to design and implement a computer application in an area of law of the student's choice, using data base techniques. Topics include: principles of concordance-based retrieval; deficiencies of existing retrieval techniques; 'interventionist' interfaces; hypertext retrieval systems; 'conceptual' retrieval systems; measuring the performance of retrieval systems; data bases of primary and secondary legal materials; development of litigation support systems; government registry data bases; electronic filing of documents and documents exchange; and legal problems in the exchange of computerised legal information.

The 'B' course, also known as *Knowledge-based Applications*, has a similar mix of theory and practice, and evaluates and applies a variety of approaches to developing legal expert systems. Topics include: the nature of legal knowledge and reasoning and its capacity for computerised representation; relationship between formal logics, legal reasoning and expert systems; differences between legal document generators, decision network expert systems, rule-based expert systems and non-deductive expert systems; the communications aspects of knowledge-based technologies; special problems of case-law representation and reasoning; and implications of knowledge-based technologies for the delivery of legal services and the rule of law.

Each of the last three courses mentioned involve the use of a variety of data base programs (fixed field, full text, and hypertext) and expert system 'shells', some of which have been developed by the DataLex Project (Andrew Mowbray of UTS, Alan Tyree of Sydney and myself).

Another LLM course, which will commence in 1991, *Data Surveillance and Information Privacy Law*, examines the implications of data surveillance (the techniques of social control through the use of information technology) in both public and private administration, and information privacy (or 'data protection') law as a response.

The Faculty also offers related undergraduate courses on *Communications Law* and *Industrial & Intellectual Property* and postgraduate courses on *Issues in Intellectual Property, Technology Transfer, Electronic Communications Law*, and *Media Law*.

The Faculty welcomes miscellaneous enrolments by suitably qualified applicants in both undergraduate and postgraduate subjects. All of the courses mentioned run for one session (14 weeks). Priority for course places must of course be given to those enrolled in the LLB or LLM degrees, and there is a limit of 25 for courses which take place in the Microcomputer Lab. Inquiries concerning the coursework LLM program may be addressed to Kerrie Stone, and concerning the LLB program to Jane Trethewey, both of whom may be contacted at the Faculty of Law (tel: (02) 697 2227, fax: (02) 663 3753, DX 1328 Sydney).

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