## THE DEUST - A NEW SCIENTIFIC, TECHNICAL & PROFESSIONAL DIPLOMA IN THE DOMAIN OF LAW, COMPUTING AND INFORMATION SYSTEMS

#### by

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The DEUST-DISI<sup>1</sup> was created in 1984 in response to the growing need for graduates with a comprehensive training in the use of substantive technologies in the field of law. One of us, a French legal researcher in charge of a CNRS computing, law and linguistics laboratory (IDL), has worked towards developing this diploma to correspond to the evolving demands of the judiciary world. The other, an Australian with a basic training in both business law and computing and an everyday application of both through the management of a Paris-based language company, has endeavoured to transpose the studies to an international context.

### A Technical Diploma at Tertiary Level

This tertiary-level technical diploma, which comes under the jurisdiction of the Faculty of Law, is awarded to students who successfully complete a two-year University course aimed at initiating them in scientific methods and fundamental computer languages. It has been designed to provide a comprehensive professional training which will enable graduates either to immediately embark upon their career, or to continue on a further cycle of university studies.

From the total number of applications received each year, only twenty-five students are admitted. As a prerequisite, applicants must have either the *baccalaureat*, an equivalent level of education, or a total of 4 years' professional experience in the field of "legal information".

Besides the limited number of students admitted per year, the course is characterised by the inclusion of both theoretical and practical training, a teaching team comprising professionals both from the private and university sectors and a compulsory in-company training period at the end of each year.

Although the DEUST DISI is basically intended to provide law students with specialist training in the use of data processing systems, it is also adapted to the needs of specialists seeking training in the use of legal computer systems, which are playing an increasingly large role in today's legal world. The profession of legal computer expert, which has only recently come into existence, is already in great demand by law firms, legal publishers, legal analysts and legal advisory services.

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### **Activity Sectors**

Designed to keep pace with the evolutions that have taken place in information-processing-related professions over the past decade, the ultimate goal of the DEUST-DISI is to train jurists and administrative agents capable of designing and using computer and information systems in their professional life. With this in mind, the programme has been developed to provide both an extensive basic training in law and an in-depth understanding of the ever-more complex and diversified technological means available.

Extensive research has been carried out on the interaction of these two disciplines over the past few years, resulting in what is now known as "legal information technology", defined as the science of processing legal information. This encompasses all the techniques which facilitate the use of wider economic, statistical and linguistic models in the management of legal documentation.

The course highlights the double-sided effect of legal knowledge in the analysis of such systems and in the study of communication in general. Law plays an implicit role in the economic and cultural repercussions of computerisation, whilst the use of computers has far-reaching effects in both strictly legal fields (administrative, jurisdictional) and in the area of management activities (public companies). Therefore, when it comes to setting up information systems, computer experts alone cannot be left to dictate legal practices, this should be done by legal system technicians and engineers possessing a multi-disciplinary training.

## Syllabus Content<sup>2</sup>

A large part of the syllabus is consecrated to the study of law in both the public and private sector.

The second section examines the basic concepts of artificial intelligence and provides an introduction to IT through the study of the architecture of a computer, programming languages (LISP, PROLOG, TURBO-PASCAL), operating systems and applications. Data bases and banks, data models and processing procedures are covered under a sub-section entitled "Information Systems" which also introduces the student to the MERISE method. This section also covers the specificities and the means of structuring legal information and documentation. Second year students are asked to create a data base and a module of an expert system, working with a programme developed by the IDL laboratory.

The student is led to discover the multiple uses of the computer in law firms, ranging from computerised management tools to computerised documentation and expert systems, with special attention paid to the analytical techniques involved in the use of management systems, legal data bases and reasoning aids. Students are also trained in modern office procedures through practical exercises on the micro-computer.

<sup>&</sup>lt;sup>2</sup> Details of the course syllabus are set out in the Appendix appearing at the end of this article.

A section on organisation and communication examines the structure and dynamics of administrative institutions and private companies (functional analysis, service networks), characteristics of institutional data, data-handling functions and public legal data policies.

English is an integral part of the DEUST-DISI syllabus and aims at both examining these concepts in a European framework and training students in the use of the technical vocabulary indispensable in the fields of law and computing.

Linguistics and cognitive engineering studies deal briefly with the history of linguistics and the basic notions involved, before moving into more complex fields such as distributional linguistics, generative grammar, automatic linguistics, lexico-statistics and the analysis of speech.

A practical training course, either in a company or in an administrative service, completes the programme of studies each year.

### Assessment of the DEUST-DISL.

Results so far have highlighted the advantages and the drawbacks of a course turned towards experimentation, improvisation and creativity. Although any conclusions drawn at present can be of no more than a temporary nature, as the diploma was introduced only in Autumn 1989, feedback from the first class of graduates is more than encouraging. By late Summer 1991, all had been offered a permanent position in the company in which they completed their final training period, to work on projects varying from the conception of a legal information retrieval system to the use of data-processing applications in the publication of a professional newsletter.

The limited class-size is an obvious advantage, as this enables the teaching team - all possessing a wide experience in scientific or professional fields - to effectively follow the progress of students over the whole two-year period and even offer them in-company training or involve them in professional activities. Moreover, students can benefit from individual use of computer equipment readily available at the University.

From a teaching point of view, the multi-disciplinary approach permits a more rapid discrimination in concepts and methods presently in use in legal and IT fields. Linguistic courses, rarely seen in legal studies, enable students to discover law through language and reasoning. Courses on information systems (project assignment) have even drawn students enrolled in other courses.

A major criticism from students is that the number of teaching hours in the 25 week programme is poorly adapted to the professional obligations of working students.

Out of the 50 students at present enrolled in first and second year, two thirds have come directly from secondary school and the others from either professional experience or from studies in fields other than law. In 1992, a field trip to Great Britain will inaugurate Franco-British exchanges between the Law Faculty of the University of Kent and the DEUST section of the University of Paris I.

Early experiences in the DEUST-DISI have produced an interesting paradigm through the emergence of an active contract between students and teachers, bringing with it reciprocal rights and obligations, responsibilities and initiatives, both personal and collective.

# **APPENDIX**

## **COURSE SYLLABUS**

- 1. Law Public/Private
- 2. Legal Information Systems

General Design of Information Systems

Information and data Data bases and data banks Data models and processing procedures Relation model (SGBD) Initiation to the MERISE method

#### Specifities of legal information and documentation

Legal information, data and knowledge Means of structuring legal information Legal documentation

Computerisation in law

Computerisation in management, computerisation of documentation, expert systems Legal data banks (names, methods, contents) The different ways of employing reasoning aids Computerisation of law; computerisation in legal cabinets Statistics

### Design and use of a legal information system

### Information technology and artificial intelligence

Introduction to IT Architecture of computers Programming languages (LISP, PROLOG, TURBO-PASCAL) Operating systems Basic concepts in artificial intelligence Applications 3. Organisation and communication

Study of the structures and dynamics of administrative institutions and private companies (functional analysis, service networks) and description of data-handling functions. Public legal data policies Analysis of the role of communication; characteristics of communication and institutional data.

4. Linguistics and cognitive engineering

Basic notions of linguistics : what is grammar? What is a word, a sentence, a text? History of linguistics Distributional linguistics; generative grammar; automatic linguistics; lexico-statistics; statements and analysis of speech. Methodology in the analysis of legal texts : indexing, summary, lexicon.

5. Foreign language (English) :

Technical language pertaining to Law and IT.