ICT law and undergraduate law studies compliant with the European Tuning initiative

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I. - Introduction to the subject area

This description of undergraduate computers and law programmes (bachelor level) is based on a general understanding of the societal need and necessity of such programmes. Law, in particular in terms of general rules, government rules and regulations, and private contracts (cf. public, private and NGO law), is relevant for a great number of aspects of both professional and private life. Computers and other information network units are developing into tools that constitute an increasingly integral part of still more activities of human life. These fundamental observations lead to some basic (not exhaustive) conclusions regarding the interrelationships between law and computers:
- Law may constitute the framework of development and use of computers/computer systems ("law as framework", "computer as object of law")
- Law may constitute content of computers/computer systems ("law as content"/"law in computer programmes")
- Computers/computer systems may be tools for lawyers and others relating to the legal system ("computers as tools").
- Computers/computer systems may produce legal dogmatic and legal political effects ("computers as catalytic agent")

These and others connections between law and computers need to be addressed in every European country, and may be held as common reference points. As we are evolving towards an “Information” and a “Knowledge Society” appropriate regulation of computers/computer systems becomes of crucial importance as does a profound knowledge of those rules, at least by those deemed to apply law and make it progress. For countries in an early phase of computerisation, computer and law studies are
important as part of a proactive approach. For countries on a more advanced stage of computerisation, these studies are even important for reactive processes, where previous insufficient policies and developments may be reconsidered and resolved.

The interest from governments and business is significant and increasing, but varies between countries and according to the political and marked situation. Data protection, E-commerce, digital rights management (DRM), E-government, telecommunications and computer crime are examples of problem fields which have received (and still are receiving) considerable attention.

The academic institutions have only showed modest interest in the computers and law field, and this with regard to research as well as with regard to the development of curricula in this field. One possible problem is that it has been difficult to expand activities within a "new" academic field in a situation when many traditional academic subjects are under pressure and fight for status quo or to avoid decrease of activities. Another challenge to the academic society is that the computers and law field – by far – calls for a multi-disciplinary or even inter-disciplinary approach. Even if law may considered to be the academic basis, computer science, economics and social science may often be regarded as requisite supplementary approaches. Input of those disciplines is anyway needed for research and teaching in the field of computer law as they represent the “raw material” rules have to deal with. These requirements may be hard to pursue within (typical) rather traditional faculties of law, but may be easier to handle within (typical) more flexible and younger institutions (e.g. business schools).

Notwithstanding the assumed reluctance of some academic institutions, there is a rather strong European research environment within the computers and law field, and a rather close collaboration within teaching activities, first and foremost facilitated by student and staff exchange programmes (e.g. Socrates) and the thematic network of Lefis. Collaboration includes well-established institutes and research centres with a numerous staff, as well as (novel) research and education activities conducted by a small group of people. Building of international networks and collaboration between institutes, centres and individuals working within the computers and law field, may partly be motivated by the insufficient/varying support by the mother institutions. Arguments connected to international relations and Pan-European needs and approaches may be decisive in the discussions with national academic institutions and government authorities.

It should finally be noted that the current integration of ICT-Law elements in bachelor courses has consequences for (complementary) master programmes, in particular if they are specialised in computers and law. If those programmes are open only for students which have already a legal background, then some courses (e.g. a course on e-commerce law) can draw on elements addressed during bachelor degree and provide “true master contents”, while nevertheless others will still remain limited to basic issues as usually they have not been addressed before (e.g. telecommunications law). If the master is also open to students with a non-legal background, it may be a risk that requirements for

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1 It should however be noted that some progress is made by the fact that LEFIS gathers some 70 universities with small units which are carrying out research and teaching in the field of ICT law.
legal competence will be adjusted down - at least within master courses based on legal courses at bachelors level). Notwithstanding this, educational and didactical means may by far prevent such effects.

II. - Degree profiles

At the level of bachelor degrees, the issue of computers and law and more generally of ICT-, Internet- and Information Society Law can be taken into account in two ways.

Both kinds of programmes are characterised by the fact that they are based on fundamental legal/political principles of the European legal culture, such as democracy, privacy, rule of law, freedom of contracts and freedom of information. On this basis, the programmes discuss:

- implication of ICT on legal principles and regulations, and/or
- implications of legal principles and regulations on ICT.

II. 1. General bachelor degrees in law should take into account the environment in which law is created and applied. Therefore it should address the issue of computers and law as well as the emerging Information Society. These programmes discuss implication of ICT on legal principles and regulations, and also implications of legal principles and regulations on ICT. These programmes have multi-disciplinary elements as the description and understanding of ICT is an important feature of these programmes. But multi- or inter-disciplinarity is not per se their aim and basic approach.

The objective of a general bachelors degree in law should be to train good general practitioners in law with direct access to labour market. It should therefore aim at providing a complete coverage of the necessary basic legal topics (where the definition of the concept of “basic” may surely be discussed and vary from country to country). The approach adopted is therefore to deliver rather a broad overview than an in-depth analysis. It is understood that, as a lawyer needs to understand and to take into account the environment in which law is created and applied legal courses are to be complemented by other courses like economics. This includes the competence to be able to identify the implications of computers and computer systems on general fields of law. Specialisation is in principle an issue for Master programmes.

The following aspects should be addressed:

- law as framework and
- law as content discovered by means of computers as tools

II. 2. Specific bachelor degrees in computers and law are also possible. They should be one of two types:

1) Degrees within traditional law programmes

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2 At least to a certain extent, as for some professions like barristers, judges or notaries there will, at least in some countries, still remain the need for having accomplished "complete" law studies, including a master degree.
2) Degrees within inter- or multi-disciplinary programmes
These programmes have multi- or inter-disciplinarily as aim and basic approach. A typical example is the Degree of Operator in Law and Information Technology. Its objective is to educate law operators who are able to integrate legal knowledge with ICT capabilities and insight to manage the penetration of ICT in any sector of law studies and practices.

Students should acquire subject-related competences regarding at least two examples that systematically may be categories under the interrelationships between law and computers (cf 2, above):
- law as framework
- law as content
- computers as tools
- computers as catalytic agent

III. – Role of subject area in other degree programmes
ICT-, Internet- and Information Society Law plays also an increasing role in degree programmes other than law, and this already at the level of first cycle. As an example may be considered a degree: in Business and Management which educates experts in the resource management aspects in a business organization. Other examples are graduate degrees in ICT teaching the design and development of software and ICT systems. Legal norms ruling ICT are a basic input for the exercise of a profession in those fields.

It should be noted that teaching law to lawyers is different from teaching law to non-lawyers. This is not the least the case for computer and law topics that should be addressed in other degree programmes, something which may call for a different pedagogy (see also supra, point I.).

IV - Learning outcomes & competences

IV. 1. In general
Concrete subject topics should be dynamically selected and shaped according to the shifting needs of society, although with reference to common legal principles and culture, cf. section 2 (above). Institutions should preferably make choices to mirror specialities of their academic community or country and/or particular topics within which the institution has chosen to specialise. Programmes should preferably be given a distinct profile and facilitate student exchange between institutions in Europe and elsewhere.

Students should have knowledge of legal rules concerned and be able to update this knowledge. On this basis and in addition they should acquire generic competences regarding at least ability to:
- Carry out independent and critical retrieval and processing of relevant information;
• Carry out independent and critical analyses of problems containing legal dogmatic and/or legal political elements and take decisions on this basis;
• Formulate and communicate relevant questions, methods, analyses, grounds and results in an eligible way, both orally and in writing, individually and in groups.
• Relate to people with another cultural and/or linguistic background, either in course of student project work or through student exchange programmes included in the domestic programme;

More specifically with regard to teachings related ICT law students in the area should be able to
• demonstrate an understanding of ideas and concepts of the roles and use in the information systems of: software, archives and data base, telecommunications; organizational and business processes; connected legal issues;
• show understanding of the mutual influence between ICT and law;
• show insight in normative issues concerning the proper scope and application of public and private law to the area of ICT;
• demonstrate elementary ICT skills.

IV. 2. Within a general bachelor in law degree, (elements of) ICT Law should be taken into account at the bachelors level in two ways:

• General Law courses (e.g. contract law, criminal law, procedural law) thought at Bachelors level should take into account the development of an Information Society and the increasing use of computers/computer systems and integrate related elements. As an example, the contract law course should also take into account the conclusion of contracts through the use of computers or the status of e-mails with regard to the qualification of proof. Other examples are that the criminal Law course should also address computer crime issues and that in procedural law the use by courts and solicitors of ICT (and their value) should be thought.

A case of specific importance is a course on Legal Methodology. In general such a course aims at giving to students an introduction to legal methodology and reasoning, esp. to familiarise them with sources of information materials (acts, case-law, articles,…), to introduce them to the analysis of court rulings and to teach them how to search for (and use in a senseful way) documentation. The course should emphasise on both, the technical and the intellectual control of the information gathered.

• Even a general bachelor’s law degree should today contain specific courses dedicated to computer (systems) and to ICT-Law. A general knowledge in this field is to be considered today as “basic knowledge”. To provide students with such global knowledge and "digital culture" as well as general usage capacities two courses, thought in second or third year, could be useful:
  - a (technical) introduction to legal informatics. The course would give an introduction to computer science terminology and help law students to understand and use basic tools (text processing, legal data bases, internet, …). Among the issues addressed by the course would be basic concepts of hardware, software, networks, databases and purchases.
- computer law. The course would give a general overview of legal issues raised by the development and use of informatics and communications networks. It would be complementary to the integration of ICT aspects in general bachelor courses as it allows for a more systematic and in-depth approach. Among the issues addressed by the course would be general questions like software protection, liability of intermediary Internet service providers, advertisement on the web, electronic signature, and computer crime. Again, the precise content has to be reviewed especially with regard to computer law elements thought in other courses of the bachelor in law degree.

IV. 3. Programmes of a specific bachelor’s degree in computer law should have courses equivalent to 10 ECTS-credits that address some of the following problem areas: E-democracy and freedom of information; E-government and rule of law; E-business and e-contracting; Intellectual property; Privacy, data protection and data security; Computer-crime and security; e-Justice.

V. - Workload and ECTS

V. 1. General bachelor in law degree.

The overall workload of a general bachelor in law degree is of 180 ECTS. Within these 180 credits we suggest that courses specifically dedicate to ICT and ICT Law should represent some 6 credits (e.g. technical introduction to legal informatics: 3 ECTS-credits and computer law: 3 ECTS-credits). Beyond these specific courses, we assume that within all general law courses ICT aspects and elements could be represented for an equivalent value of approximately 12 to 20 credits (including a course on Legal Methodology).

V.2. Programmes of a specific bachelor’s degree

Also for specific bachelor degrees the overall workload is of 180 ECTS. The legal courses discussed above would represent between 40 and 80 credits. In addition, at least 10 ECTS should be attained in connection to the generic competences and/or skills mentioned above.

VI. - Learning, teaching and assessment

Teaching and learning methods should comprise lectures (with taking appropriate notes being considered as part of the learning process), seminar groups, exercise sessions (with special emphasis on the application of rules to cases) and homework (with an efficient feedback) both with written and oral presentations (individually or in groups). Textbooks should be delivered to students. We would finally like to stress, that ICT and computer (systems) should increasingly be used as a support for pedagogy.
and teaching and active use of Internet and/or other advanced ICT should also be offered to every student on campus.

VII. - Quality enhancement

VII. 1. In the field of the Information Society, technology and markets evolve in a very fast and unpredictable way. Teaching contents of both, the general bachelor in law and the specific bachelor’s degree in computers and law should therefore be submitted to permanent scrutiny and evaluated every two years. For doing so, Faculty staff should be assisted by practitioners (lawyers like barristers and judges but also computer scientists, economists, sociologists, …). In this way, ideally especially the teaching of a specific bachelor’s degree in computers and law should rely upon the input of research conducted by specialised research centres. Those centres should be involved in evaluation of course contents. The evaluation of the content of bachelor courses should also take into account the relationship with master programmes and with continuing education (see also supra).

VII. 2. Programmes respecting the specifications made above present with regard to general programmes in Law an additional quality as they provide students with additional qualifications:

- Subject knowledge: a) students should add to the knowledge of the principal features of the ICT system studied a general familiarity with similar systems; b) know principles & implementations in similar settings; c) some in-depth knowledge of specialist areas.
- Subject application/problem-solving: ability to apply dynamic ICT knowledge to situations which are useful for legal concerns; able to provide state of the art ICT solutions which are appropriate to the legal issue.
- Subject sources and research: ability to identify the market solutions and the adequate experts to address the novel ICT issue (e.g. Internet governance).
- Analysis, evaluation, critical judgement and synthesis: a) ability to identify the conceptual view of an ICT system; ability to understand the rationale of the initiative; b) ability to relate the project with status of art of the discipline.
- Autonomy: ability to act in the conceptual and logical phases of the project under the limited guidance of a more expert ICT professional.
- Communication and literacy: ability to describe an ICT project or implementation in clear and professional manner, guaranteeing its legal soundness.