
Master studies on libre software Work already done and some proposals

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Background: the European Higher Education Space

- After the “Bologna declaration” European countries are adapting to some common rules in higher education studies
- The process requires legislative changes
- Each country has its own calendar: Spain is right now adapting legislation
- Common framework: graduate, postgraduate, PhD
- This is meant to be a postgraduate study

http://www.bologna-berlin2003.de/pdf/bologna_declaration.pdf

<http://www.bologna-berlin2003.de/>

The call for proposals

- December 2002: Open call for proposals by the Regional Government of Madrid (Spain)
- Framework: design of postgraduate studies for the European Higher Education Space.
- Constraints: very little (two Universities in the Madrid area, two in other EU countries)
- Open to experimentation
- No formal commitment to implement the final design
- Deadline for having a design: January 2004

The proposal: partners

- Universidad Rey Juan Carlos (Spain, coordinator)
- Universidad Politécnica de Madrid (Spain)
- Universidade do Porto (Portugal)
- École Nationale Supérieure Électronique, Informatique et Radiocommunications de Bordeaux (France)
- Université Paris Dauphine (France)
- Open to others, some have already expressed intention to join

The proposal: base ideas

- Libre software is more and more important, but almost no specific studies deal with it
- Knowledge about libre software is maturing
- Industry and society are showing interest in professionals with this profile
- Mainly targeted to IT engineers (informatics, telecom, etc.), but open to other backgrounds
- Provide a comprehensive, multidisciplinary education on the matter
- “To reach, as a result of the master, the level of a person with good knowledge of the libre software world”
- Taught in English, by several collaborating European Universities.

The procedure for working on the design

- Based on the proposal
- Open to participation (in several stages)
- Intended to be suitable for implementation by non-partners
- A continuous process
- Could lead to several implementations (hopefully coordinated)

Academic program: main structure

- 90 ECTS credits (1.5 academic years)
- 30 “core” credits (compulsory)
- 30 “specialization” credits (optionals)
- 30 practicum credits
- Some credits could be needed before starting the master (depending on background)

Academic program: core credits

- Introduction (4): general background
- Economy and business models (4): economic models, business cases
- Legal matters (4): licensing, legislative initiatives, legal implications
- Sociology and ethics (4): motivation, communities, ethics of the libre software movement
- Development environments and tools (4): what is used in libre software development
- Project management (4): how are libre software projects managed
- Case studies (6): broad and comprehensive study of libre software projects, companies, organizations, etc.

Academic program: optional credits

Open, according to the offer of implementing institutions and to the expected profile. Some possible subjects (all of them devoted to libre software in those areas), 3-4 credits each:

- Languages common in libre software projects
- Advanced project development; Version control and configuration management
- Installation and administration of usual libre software platforms
- Libre software web based systems
- Security; Office tools; Multimedia; Mathematic tools
- Database systems; Embedded systems

Academic program: practicum

- Goal: to let students have real first hand experience of the libre software world
- If possible, participation in real projects
- About 10 credits: general experiences related to libre software (multi-disciplinary)
- About 20 credits: master's thesis

Implementation: “intensive” scenario

- Three semesters
- At the beginning/end of each, an in-place period
- The rest of the semester, distance learning with local tutors.
- Students and teachers move to an in-place location every six months
- Possibility of stances of about 4 months during the “rest” of the semester (specially for master’s thesis)

In-place period

- Students and teachers together at the same location for about two months, twice a year
- About 6 hours of class each day
- Two subjects in parallel (usually morning and evening)
- About 30 hours of in-place lectures and practice per subject
- First period (beginning of term): about 18-24 hours
- Second period (end of term): about 6-12 hours
- Exams at the beginning of the following term, back at home Unis

Other issues

- First part of practicum in 2nd semester, master's thesis in 3rd semester
- Optional subjects do not overlap (and are offered during 2nd or 3rd semester)
- Students can approach prospective tutors for master's thesis during in-place periods

In short...

- This is just a proposal
- Achieving a consensus on the basic academic structure would be interesting
- All of this is open to collaboration
- Other implementation scenarios are possible
- Come and join us:
<http://www.nongnu.org/masterlibre/>

Current interested institutions

- URJC (ES), UPM (ES), UP (ES)
- UOC (ES), Lincoln (UK), AUC (NO), Dauphine (FR)
- Paris VII (FR), Bolzano (IT)
- Pissa (IT), UL (LV), Salford (UK)

Proposals for discussion

- Joint implementation, joint degree (whenever possible)
- Mixed learning (in part distance, in part in-place)
- All educational material (texts, videos, etc) free (libre)
- Use of libre software for supporting mixed learning
- Support for the translation of the material
- Collaboration with the libre software community, companies and administrations
- Quality assurance both the traditional and the libre software way

Funding opportunities (private funding)

- Interested individuals
- Companies offering grants to students
- Subjects and sets of subjects offered to intensive students (maybe from companies)
- Companies collaborating with publishing of educational materials

Funding opportunities (public funding)

- Calls for proposals:
 - Erasmus Curriculum Development Projects (CD)
 - Erasmus Mundus (CFP March 2004)
 - Socrates eLearning (CFP March 2004)
 - Cooperation programmas for Higher Education Canada/EU, USA/EU
 - Cooperation programs with Latin America (Spain, EU)
 - Nordplus (Nordic countries, Baltic countries, NW Russia)
- Interested administrations:
 - Grants, offerings of locations (eg. Creofonte, Extremadura)