

EMCL

European Master's Program in Computational Logic

Duration: 2 years

Course description:

Computational Logic is a wide interdisciplinary field having its theoretical and practical roots in mathematics, logic, computer science and artificial intelligence. Its wideness of scope anchors in the power and generality of logic based reasoning systems across the spectrum of scientific disciplines, and in its practical use in the form of computer supported automated tools. As a consequence, it has applications in computer science itself, mathematics, the engineering sciences, humanities and social sciences including law, as well as in the natural sciences, and in interdisciplinary fields like cognitive science.

The objective of the European Master Program in Computational Logic is to impart to the master student the profound theoretical and practical knowledge required for professional practice in the field of Computational Logic, to make him/her acquainted with the individual disciplines of Computational Logic and to develop his/her ability to work according to scientific standards. To acquire in-depth knowledge he/she may choose appropriate combinations of advanced modules. Students may focus on basic research by selecting theory-oriented advanced modules and doing their project work and master thesis as part of an on-going research project, or they may focus on application-oriented research by selecting more practical-oriented advanced modules and doing their project work and master thesis in collaboration with an industrial partner.

In the first year, students will be treated as a cohort while studying at the Technische Universität Dresden in the first semester and at the Libera Università di Bolzano-Freie Universität Bozen in the second semester. In the second year, students will study either in Dresden, in Bozen-Bolzano, at the Technische Universität Wien or at the Universidade Nova de Lisboa.

The European Master Program in Computational Logic consists of four common and compulsory basic modules, two of them are taught in Dresden and the other two are taught in Bozen-Bolzano, selected advanced modules, which are based on the specific strength in research of the partner universities, a presentation and communication skills module which includes language training, a project module and a master thesis. The project module may be completed at the National ICT Australia or at an industrial partner institution.

The European Master Program in Computational Logic is based on common study and examination regulations culminating in the defence of the master thesis in front of a joint committee. Marks are given in a common grading schema. After successful completing their studies, students will receive a joint Masters degree from the universities where they have physically studied. The degree is officially recognized.

Website: <http://www.emcl-study.eu/>

Partners:

DRESDEN UNIVERSITY OF TECHNOLOGY, Germany (Co-ordinating Institution)
VIENNA UNIVERSITY OF TECHNOLOGY, Austria
NATIONAL ICT AUSTRALIA LIMITED, Australia
FREE UNIVERSITY OF BOLZANO-BOZEN, Italy
NEW UNIVERSITY OF LISBON, Portugal

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Grant:

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522 000 € (30 000 € consortium + 492 000 € scholarships), 2012