European Master’s Program in Computational Logic

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- EMCL
- Curriculum
- EMCL vs MCL
- Some Hints

"Logic is everywhere ..."
The European Master’s Program in Computational Logic (EMCL)

► EMCL is a distributed European Master’s Program
  ▶ Free University of Bozen-Bolzano (unibz)
  ▶ Technische Universität Dresden (TUD, coordinating institution)
  ▶ Nova Universidade de Lisboa (NOVA)
  ▶ Technische Universität Wien (TUW)
  ▶ National ICT Australia (Data61)

► Joint MSc degree from the European universities at which a student has physically studied

► Supported by the European Union within the Erasmus Mundus Program from 2004 until 2017
Curriculum 2016 – Mandatory Modules and Master Thesis

► Basic Modules (34 cr)
  ▶ Foundations (first semester, 9 cr, TUD)
  ▶ Logic and Constraint Programming (first semester, 9 cr, TUD)
  ▶ Advanced Logic (second semester, 8 cr, unibz)
  ▶ Integrated Logic Systems (second semester, 8 cr, unibz)

► Presentation and Communication Skills
  (second and third semester, 4 cr any European university)

► Project (third semester, 16 cr, any European university and Data61)

► Master Thesis (forth semester, 30 cr, any European university)
Curriculum 2016 – Advanced Modules

- Advanced Modules (12cr each; select at least three; first - third semester)
  - Constraints (NOVA)
  - Computational Logic for Information Technology (TUW)
  - Computer Science Engineering (all European universities)
  - Knowledge Representation (TUD, NOVA, TUW)
  - Logical Foundations (TUW)
  - Logics and Languages for Software Reliability and Security (NOVA)
  - Modelling and Verification (TUW)
  - Ontology and Database Systems (unibz)
  - Principles of Computation (unibz, TUW)
  - Principles of Data Management (unibz)
  - Principles of Inference (TUD, TUW)
  - Semantic Technologies (unibz, NOVA)
  - Theoretical Computer Science and Logic (TUD)
Curriculum 2017 – Mandatory Modules and Master Thesis

- **Basic Modules (32 cr)**
  - Foundations (first semester, 8 cr, TUD)
  - Logic and Constraint Programming (first semester, 8 cr, TUD)
  - Advanced Logic (second semester, 8 cr, unibz)
  - Integrated Logic Systems (second semester, 8 cr, unibz)

- **Communication Skills (4 cr any European university)**

- **Presentation Skills (6 cr any European university)**

- **Project (third semester, 12 cr, any European university and Data61)**

- **Master Thesis (forth semester, 30 cr, any European university)**
Curriculum 2017 – Advanced Modules

- Advanced Modules (12cr each; select at least three; first - third semester)
  - Constraints (NOVA)
  - Computational Logic for Information Technology (TUW)
  - Computer Science Engineering (unibz, TUW, NOVA)
  - Knowledge Representation (TUD, NOVA, TUW)
  - Logical Foundations (TUW)
  - Logics and Languages for Software Reliability and Security (NOVA)
  - Modelling and Verification (TUW)
  - Ontology and Database Systems (unibz)
  - Principles of Computation (unibz, TUW)
  - Principles of Data Management (unibz)
  - Principles of Inference (TUD, TUW)
  - Semantic Technologies (unibz, NOVA)
  - Theoretical Computer Science and Logic (TUD)
  - Artificial Intelligence (TUD)
  - Free Electives (TUD)
Distribution

- First semester: TUD
- Second semester: unibz
- Third and forth semester: any European university
- Project Work may be done at Data61 during the break between the second and third semester (see EMCL booklet for details of the procedure)
EMCL versus MCL

- The International Master’s Program in Computational Logic (MCL)
- Curriculum of MCL is identical to the curriculum of EMCL
  - All mandatory modules are offered by TUD
  - Only the advanced modules offered by TUD can be selected
  - The master thesis is offered by TUD
- MSc degree from TUD
Service Center for International Students (SCIS)

► Organises the registration to written examinations upon application
► Hands out the documents for oral examinations/master’s thesis
► Administers the results of examinations and announces the grade
► Issues transcripts of records and further documents in connection with residence authorisation on enquiry


► Contact
  ▶ Mrs Romy Thieme (MCL), Mrs Sylvia Wünsch (EMCL)
  ▶ room 2018, Mondays 10am-noon

► Please study the SCIS web pages and consider the rules related to
  ▶ registration to the exams
  ▶ cancellation of exams
  ▶ deadlines
  ▶ forms
Second Year Students

► Please consider the rules and deadlines for
  ▶ the start of the master thesis procedure
  ▶ the application for the defence of the master thesis
Some General Hints (1)

- Read the EMCL booklet carefully
- Check out the EMCL web pages carefully and regularly
- Check out the notice board on the wall outside of this lecture hall
- Check your emails regularly
- Our mailing lists contain your private addresses, please inform us about any changes
- All students must register each semester online at TUD, you will not receive the current students’ identity card sent by mail without this registration
Some General Hints (2)

- Address questions concerning examinations, transcript of records, etc to the SCIS during the announced office hours
- Address questions concerning individual modules to the respective module representatives
- Address questions concerning individual lectures to the respective lecturers
- Address all other questions to Sylvia Wünsch (EMCL) or Romy Thieme (MCL)
- Visa prolongation must be applied for on time
- Don’t enter an EU country without a valid visa
- Don’t leave the EU without a valid visa or residence permit
Some Hints for EMCL Students (1)

- You must pay the reduced students service fee to TUD each semester while you study at one of our partner universities.
- In February 2018, an EMCL students workshop is organized at TUD.
- 2nd semester at unibz is likely to start on Feb 23, 2018.
- In order to carry out the enrollment at unibz you must provide a declaration of equivalent value (see: www.study-in-italy.it/studying/info-07.html). This document must be applied for in the countries where you have received the bachelor degree and submitted to unibz upon arrival.

- You will travel to Bozen-Bolzano with the valid German residence permit and a letter issued by TUD confirming the participation in the EMCL program. You must apply for the residence permit (permesso di soggiorno) in Bozen-Bolzano within the first 8 days after entering Italy. The unibz International Relations Office supports students regarding this procedure.
Some Hints for EMCL Students (2)

- How to apply for the second year university?
  www.emcl-study.eu/fileadmin/emcl_booklet_tree/msss_jc_placement_second.html

- How to apply for the project work at Data61?
  www.emcl-study.eu/fileadmin/emcl_booklet_tree/mss_jc_projects_nicta.html
Some More Specific Hints

► For Beginners

▷ Focus initially on the two mandatory basic modules
▷ If you can follow the lectures and the tutorials of the basic modules then add an advanced module
▷ At each university try to complete modules because modules are automatically accepted at all European universities
▷ Individual lectures are not automatically accepted at the European universities; you must negotiate with the module representatives

► For Second Year Students and Beyond

▷ Please see the coordinator personally during his consultation hours; bring an up to date transcript of records and your current plan of studies
▷ Projects are negotiated individually between students and supervisors; you must become active
Some Even More Specific Hints for Foreign Students

- We assume that you have come to Germany because you want to be exposed to Germans, a German university and German culture
  - Avoid your fellow countrymen and -women; you can meet them when you are back home
  - Make contact with Germans in the university, in the dormitories, in the city, during your studies, during shopping, during sports, during leisure etc
  - Learn the German language by speaking to Germans
    - German language classes as part of the Communication Skills module (4 SWS / 2 cr)
  - A German is likely to be as shy as you in approaching a foreigner; be brave; if you make contact it is likely to be an advantage for both of you
Finally

- The Knowledge Representation and Reasoning group will organize a weekly open house (Wednesday, 2:30 pm - 3:30 pm in ABP 2008)
  - All EMCL/MCL students are welcome to join
- Logic Exam: Dec 9, 2017
- You may contact the coordinator (Steffen Hölldobler) anytime
  - Office phone number: +49 351 46 33 83 40
  - E-Mail: sh@iccl.tu-dresden.de
  - Mobile phone number: +49 151 27 02 36 23 (in case of emergency)
- In case you experience any problems whatsoever please contact us immediately; don’t wait; problems will usually not go away, we will just have less time to solve them