

















Data and Programming: A Formal and Research-oriented Approach

Training Objectives

The department of Computer Science (INFO) trains high-level research and development (R&D) engineers in the field of Information and Communication Technologies (ICT). It offers a spring semester, taught in English, to M1 level students. It is centered on formal aspects of Data and Programming. In parallel to academic courses a research project will be conducted at [IRISA](#), a research center of international reputation, in one of the following teams (please contact to the corresponding person to make sure that a project is still available).

- Asap: As Scalable As Possible ▪ *Contact: Marin.Bertier@irisa.fr*
- Celtique: Certification de logiciel par analyse sémantique ▪ *Contact: Barbara.Fila-Kordi@irisa.fr*
- Diverse: DIVERsity-centric Software Engineering ▪ *Contact: Arnaud.Blouin@irisa.fr*
- Dream: Diagnosis, REasoning and leArning, Model-building ▪ *Contact: Laurence.Roze@irisa.fr*
- Hybrid: Virtual reality for improved innovative immersive interaction ▪ *Contact: Bruno.Arnaldi@irisa.fr*
- Intuidoc: Intuitive User-Interaction for Document ▪ *Contact: Eric.Anquetil@irisa.fr*
- Kerdata: Gestion de données réparties à de très grandes échelles ▪ *Contact: Alexandru.Costan@irisa.fr*
- Lis: Logical Information Systems, Semantic Web ▪ *Contact: Mireille.Ducasse@irisa.fr*
- Myriads: Large-scale autonomous environments and systems ▪ *Contact: Jean-Louis.Pazat@irisa.fr*
- Texmex: Techniques of EXploitation of Multimedia documents - EXploration, indexing, searches in very large databases ▪ *Contact: Pascale.Sebillot@irisa.fr*

Syllabus

Available Course	Written Material	Oral Class	ECTS
Big Data			2.5
Formal Specification and Verification			3.0
Constraint Programming			2
Symbolic Methods in Knowledge Acquisition			2.5
Research Project			15
Sport			1
French as a Foreign Language			4

The spring semester starts end of January and finishes end of May. Courses are given in English.

The use of ECTS makes studies more flexible. A normal semester quota for an INSA student is 30 ECTS. The student's choice has to be approved by both the home university and INSA. INSA Rennes departments have designed a consistent package of credit courses in English to enable international students to undertake a period of study at INSA and obtain credits. Exchange students may select other courses in replacement of the ones listed above, provided that those courses are compatible with the spring semester calendar.

Practical information

Application deadline: May 1st, 2015

This non-fee-paying autumn-semester programme works on the basis of an exchange between the applicant's home University and INSA Rennes. Therefore, in order for fees to be waived, an agreement (Erasmus or other) must be established beforehand.

For further information: www.insa-rennes.fr/data-programming

Contact: deptinfo@insa-rennes.fr