



## Invitation to Courses

### **Formal Methods (Half Module Computer Science)**

**Instructors: Krishnendu Chatterjee and Thomas Henzinger**

#### **Course Description:**

We present formal modeling languages and analysis tools for discrete-event dynamical systems, with special emphasis on applications from computer science and biology.

The languages we discuss are based on mathematical logic, rewrite rules, automata, circuits, and programming constructs. The analysis methods include model checking, theorem proving, and abstract interpretation.

We give brief introductions to advanced models incorporating time, probabilities, game-theoretic aspects, and continuous behavior.

#### **Course Requirements and Exams:**

Lectures and recitations, weekly homework, 75-min-exam at the end of the half-term

#### **Course schedule:**

2 weekly 75 min lectures Tuesdays and Thursdays, 1 weekly 50 minute recitation

Lectures: Tuesday, Thursday: 1.45 – 3.00 pm

Recitations: Thursday: 3.10 – 4.00 pm

#### **Course Academic Credits:**

3 ECTS

#### **Course Website:**

<http://pub.ist.ac.at/courses/2011/formalmethods>

**This course starts on Thursday, December 1, 2011 (1.45 -4.00 pm)  
Seminar Room Mondi 3, IST Austria Central Building, 1st floor**

**Please register for the course a week in advance with Academic Affairs  
([Marie.Trapp@ist.ac.at](mailto:Marie.Trapp@ist.ac.at))**



2011-12-01

This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage (note that the IST Shuttle times are highlighted in dark green):  
[http://www.ist.ac.at/fileadmin/user\\_upload/pdfs/IST\\_shuttle\\_2011.pdf](http://www.ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_2011.pdf).

The IST Shuttle bus is marked IST Shuttle (nr. 242) and has the Institute Logo printed on the side.