**Title**: Petri Nets

**Organisational unit**: Department of Computer and Information Science

**Course Type**: Online course

**Format**: Digital

**Form of examination**: Active participation in the exercises and, depending on number of participants, oral examination (20 min) or written exam (60 min)

**Language**: English

**Course coordinators**: Prof. Dr. Falk Schreiber  
Dr. Karsten Klein

**Course dates**: Oct 25, 2021 - Feb 7, 2022, Mondays 10:00 am to 11:30 am (online lecture) and  
Oct 25, 2021 - Feb 7, 2022, Tuesdays 17:00 am to 18:30 am (online exercises)

**ECTS**: 6

To receive the credits for this course, you are required to pass an exam at the end of the course. Depending on the number of students, Prof. Schreiber will decide whether the exam will be oral or written. A written exam may be taken at your home university, if your departmental coordinator or a responsible representative of your department agrees to supervise you during the exam and send your exam papers directly to Prof. Dr. Falk Schreiber.

**Level**: Master level, higher Bachelor level (in 2. or 3. Year)

**Prerequisites**: Solid knowledge in the fundamentals of Computer Science (Algorithms and Data Structures, Theoretical Computer Science)

**Number of places for ERUA students**: 5

**Application**: Please apply by writing an e-mail to erua@uni-konstanz.de  
(subject: Course : Petri Nets)  
until 11th October 2021

**Contents**: Petri nets (named after C. A. Petri) are a well-known and often used structure for the modelling and simulation of different processes in engineering, science, economy and other areas. This course presents a theory for the modelling with Petri nets and different techniques for the analysis of Petri nets. A number of examples enrich the theoretical understanding. Beside elementary Petri nets this course will also deal with Petri net extensions.

**Remark**: 
- Course Literature:
- Rene David, Hassane Alia: *Discrete, Continuous, and Hybrid Petri Nets*, Springer, 2005