## Seminar Topics for the Proseminar "Formal Modelling"

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## 1 List of Possible Topics

In the frame of this proseminar the task is to formalize some "real world set of regulations", e.g., the rules that guide the grading of the course "Logic for Computer Science" at JKU, into the language of first-order predicate logic. More concretely, this task comprises

- the *formulation* of all facts and rules that are given in the language of first-order predicate logic,
- the *implementation* of the formalization within the *Theorema system*, and
- of *proving* selected simple facts in the considered domain based on the formalization in the Theorema system.

The results will be summarized in a short scientific paper and an accompanying talk.