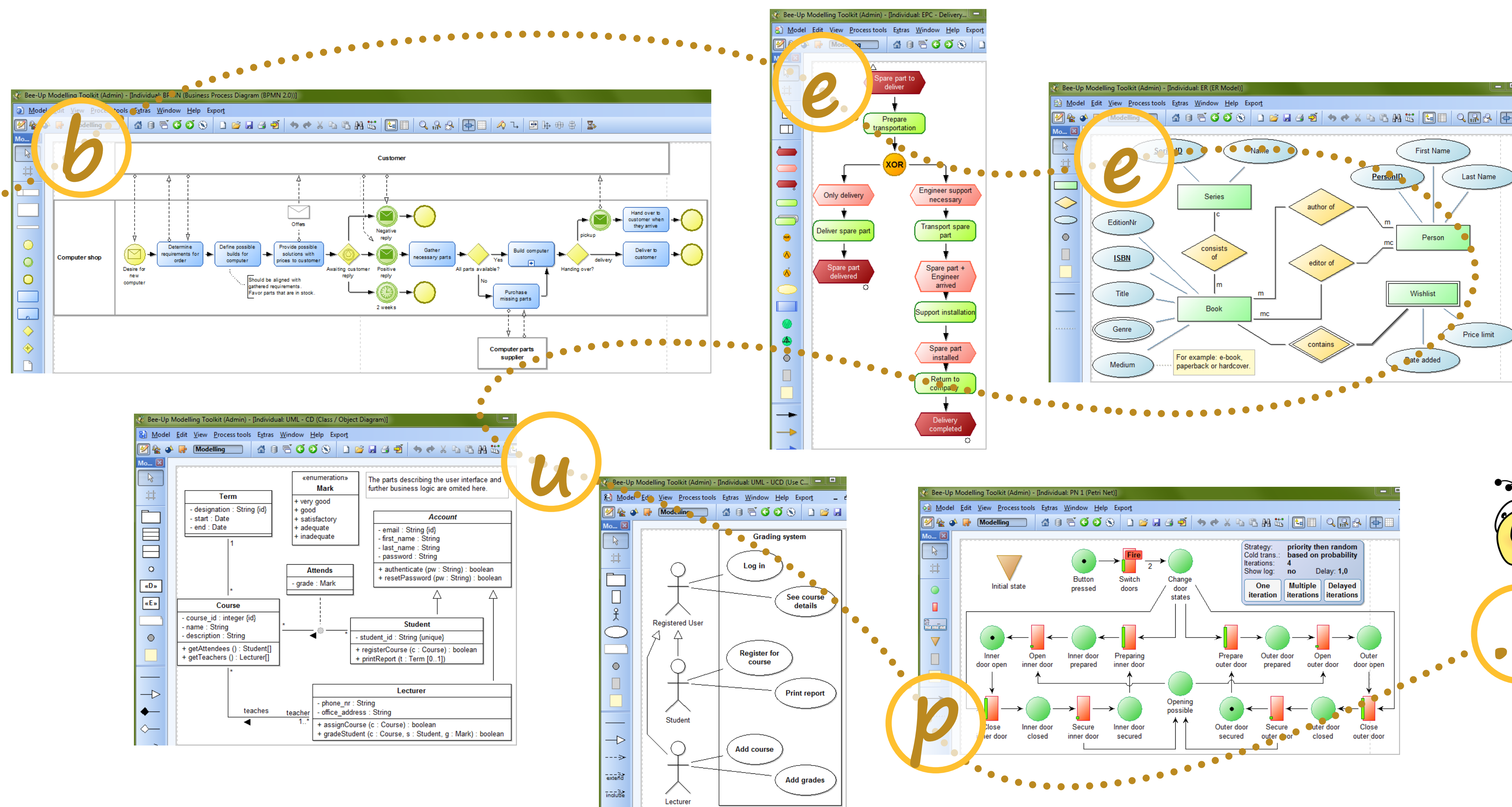


# CONCEPTUAL MODELING WITH *bee-up*

## A Tool for Fundamental Conceptual Modeling Languages\*



*bee-up* is a tool realized using a meta-modeling approach, which integrates and extends several modeling languages that gained wide popularity in the community within one overarching, hybrid meta-model. It does not enforce a specific procedure when solving a problem. Instead it provides various functionalities for utilizing models. In addition different types of models are available, which can be employed according to the requirements of the task at hand.

### Annotate

Annotate text to extract relevant information as a preparation for modeling.

### Use

Use models with functionalities, like Simulation or RDF export, to gain value.

- Simulate: BPMN
- Generate: SQL
- Syntactic Transf.: XML
- Semantic Transf.: RDF

### Apply

Apply modeled scenarios with other environments, like cyber-physical systems.

### Extend

Extend available functionality through open interfaces, web- or micro-services etc.

Natural Language Interaction

e.g. ADOxx speech

### Teaching

The "IMKER" case study uses the domain of bee-keeping to provide students with a setting for the design of different system aspects through modeling with the *bee-up* tool. Various modeling languages for different views on the system, like data, processes or IT, can be employed in this setting. Additionally the setting can be used for the application of models together with different environments, which can include objects like robotic arms or aerial drones.

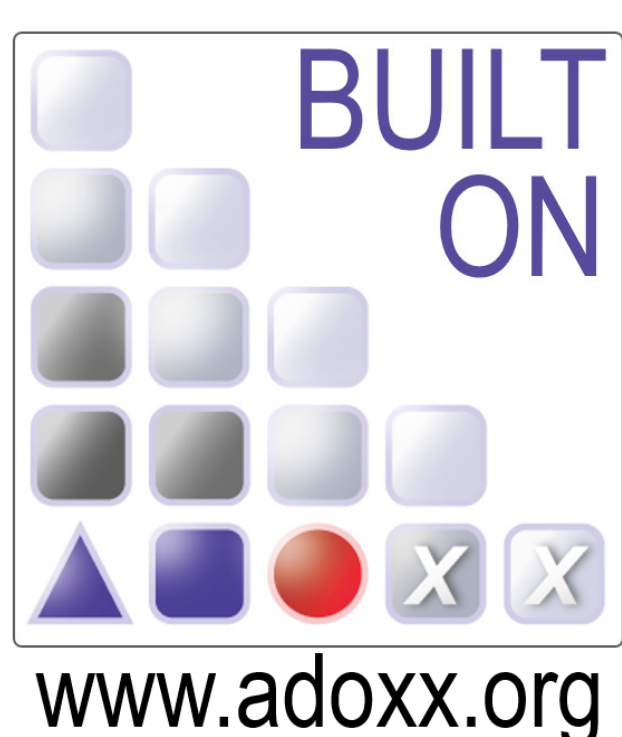
OPEN | MODELS  
LABORATORY

The "IMKER" Case Study  
Practice with the Bee-Up tool

Download from  
the *bee-up* page

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\* Find out more in: D. Karagiannis, R. Buchmann, P. Burzynski, U. Reimer, M. Walch (2016) **Fundamental Conceptual Modeling Languages** in OMiLAB, in Domain-Specific Conceptual Modeling, Springer, ISBN 978-3-319-39417-6



Visit *bee-up* at  
[www.omilab.org/bee-up](http://www.omilab.org/bee-up)

