

# Bionics4Education: Learning Path

## Bionic Flower



2 hrs.

### Pure practice

- Assembly with brief instructions



2-6 hrs.

### Theory and practice

- Biology background knowledge
- Team building
- Project planning
- Control via mobile devices
- Be creative and design your own petals



6-16 hrs.

### Strengthen digital skills

- Digital tools with online CAD - design of components or spare parts
- 3D printing - print your own components and spare parts e.g. the bowl (partly Open Source materials available)
- Coding Bionic Flower with the Open Roberta Lab or Coding activities on GitHub Bionics4Education
- Course materials on the Festo Learning Platform (LX)



16-25 hrs.

### Advanced learning fields

- Scrum - agile project management method and teaching of the 4 C competencies
- Information about interdisciplinary teams in Bionics and possible STEM career pathways