



# Internship / Bachelor / Master Thesis (m/f) industrial optimization

Looking for a taste of working life in an international, future-focused corporate group? Then complete an internship with us, or come to us to write your thesis. Both options are open for 3-6 months, depending on your course of study and subject to approval. ABB will provide you with wide-ranging, professional and expert support to help you complete your thesis. Expand your network now, and learn about our company as you undertake a practically focused thesis or internship.

<b>Location:</b>	Ladenburg, Baden-Wurttemberg, Germany
<b>Job Function:</b>	Research and Development
<b>Employment Contract Type:</b>	Internship, Full-Time
<b>Division/Function:</b>	Country Staff Research & Development
<b>Business unit:</b>	NA
<b>Publication ID:</b>	DE59659572_E1

## Tasks

Students at ABB are high potential students and developers who strive to create and implement new solutions for industry.

- As part of the operations management group at ABB Corporate Research Center Germany you will investigate mathematical optimization approaches and solutions for production planning, asset management and energy management in logistics, process plants and manufacturing plants.
- This implies industrial planning and scheduling problems as well as optimization of energy efficiency in industrial applications.
- We expect that you show readiness to tackle difficult problems, above-average motivation to implement and test developed models and algorithms and pro-activeness to come up with new ideas on how to overcome possible challenges.

## Requirements

- You are in the final phase of your bachelor or master education in Industrial/Automation/Control/Chemical Engineering, Mathematics, Operations Research, Computer Science or related.
- You are interested in solving complex industrial optimization problems.
- You are well acquainted with mathematical optimization and algorithms.
- You have experience with modeling languages (e.g. GAMS, OPL, AMPL), Algorithms and/or solvers (CPLEX, Gurobi).
- Knowledge in object oriented programming (e.g. C#, Java) is of advantage.
- You can communicate fluently in English or German in verbal and written form.

## Additional Information

Internships:

We believe in fairness, so interns (m/f) who join us will benefit

from our expertise as they expand their own knowledge. We give you the scope to try things out for yourself and obtain practical experience. Your time is valuable, so you will receive appropriate remuneration for the duration of the internship. Please note that internships are generally limited to six months, while voluntary internships during a bachelor course are for a maximum of three months.

Please state whether you are applying for a voluntary internship or undertaking a mandatory internship, and be sure to enclose your certificate of enrolment. In the case of mandatory internships, please include the corresponding extract from your university's internship guidelines.

#### **Thesis:**

With the approval of your university, you can complete your bachelor or master's degree by spending three or six months with us as you work on a practically focused thesis. You define the subject matter with us, with the support of the right contacts in various departments.

Interested? Then we look forward to receiving your informative application (cover letter, CV, certificate of enrolment, current transcript of grades and other supporting documents) through our online careers tool.

ABB AG  
Recruiting Center  
Sabine Schedler

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Strong position in research & development are a prerequisite for ABB's business success. Essential contributions grow out of the collaboration of ABB's research and operational organization. Our Corporate Research Center close to Heidelberg in Germany is one of nine ABB Corporate Research Centers worldwide.

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Your legacy.

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