

Research Associate (m/f/d) – Electronics and Signal Processing

Job-ID: 2025-05-PTMT-WMA

About Us

The Institute for Applied Construction Research (IAB) Weimar is one of Germany's leading industry-oriented research institutes. For more than 30 years, we have been developing innovative equipment, methods, and materials for the construction industry in close cooperation with our partners from both industry and academia. With more than 120 employees, we focus on practice-oriented research and development to shape the future of construction.

To support our Mechanical Engineering department, we are seeking to recruit a Research Associate in the field of Electronics and Signal Processing at the earliest possible date.

Your Tasks

- Engaging in exciting and challenging development and research tasks in electrical, plant, and process engineering, particularly in the fields of 3D concrete printing, mineral foam technology, and construction material recycling technologies
- Acquisition of measurement data, development of measurement concepts and solutions
- Development and testing of simple electronic circuits: adapting industrially available sensor technology to specific research tasks as well as implementing simple control tasks for actuators
- Programming of basic measurement, data acquisition, and control solutions using LabVIEW on industrial PCs, or hardware-related programming languages such as C/C++ in environments like Raspberry Pi or Arduino
- Recording and evaluation of process variables ranging from analog and digital signals to bus systems (e.g., Modbus/TCP, RS485, or other common fieldbuses)
- Career development opportunities: potential qualification for leading a team as (initially deputy) head of department

Your Profile

- Successfully completed degree in Electrical Engineering, Electronics, Mechatronics/Automation, Computer Science, or comparable qualifications with a focus on IT-based solutions in signal and data acquisition and control technology; basic electronics development (test circuits, prototypes)
- Desirable: Experience with LabVIEW or programming in C/C++; alternatively, strong knowledge of PLC environments with IEC programming (CODESYS: Beckhoff, WAGO, Festo-CPX, etc.)
- Enthusiasm for solving IT-related challenges
- Experience in measurement data acquisition and processing is advantageous
- Optional: Experience with Eagle or Autodesk Fusion for circuit design

Contact person

Dr.-Ing. Justus Lipowsky
Head of research department
Process Technology
+49 3643 8684-156

Start of employment

at the earliest possible date

Duration of employment

permanent

Job location

IAB – Institut für Angewandte
Bauforschung Weimar gGmbH,
99428, Weimar, Thüringen

Working hours

Full-time (39 h) / part-time

Fields of expertise

Mechatronics / Electrical
Engineering / Computer Science

Date posted

28. August 2025

- Independent and results-oriented way of working
- Strong communication and teamwork skills: ability to clearly explain work processes and proposed solutions
- Good German skills (level B2) and English skills (level B1), spoken and written
- Optional: Experience in personnel management

Our Benefits

- Permanent employment at an industry-oriented research institute
- Mobile working options and flexible working hours (flextime)
- Opportunities for further education and doctoral studies alongside work
- Additional social benefits (company pension scheme, company kindergarten)
- Company bike leasing (Business Bike, Euro Rad, Linexo)
- Job ticket (Germany Ticket)
- Company fitness program (Hansefit)
- Special bonus payments
- 30 days of annual leave

Application

Have we sparked your interest? Even if you only have experience with some of the programming languages or environments listed, we would be glad to hear from you!

Please send your detailed application documents, including your salary expectations, to:

karriere@iab-weimar.de