

How to find an Internship

Student Group

First Name	Surname	Matrikel Nr.

Table of Contents

How to find an Internship	2
<i>via Job Portals</i>	2
<i>“Indirect” directories (great for SMEs)</i>	2
<i>Google operators</i>	3
Keywords	3
Add the region smartly	3
filter urls	3
Examples search strings	4
<i>Examples for SME Jobs</i>	4
<i>Job Fairs</i>	4
Calendar (between 01.10 – 31.12, recurring / usually each year)	5
How to use these fairs to find “hidden gem” internships (fast playbook)	5
<i>The big List</i>	5

How to find an Internship

Be aware, that - depending on the economical situation - it might take up to 200 outreaches to find a suitable internship.

So, it is good to make a structured list (e.g. in EXCEL), to track how far the outreach proceed.

via Job Portals

In the following some relevant search engines are shown.

Be aware that the following links are already partially filtered by:

- vicinity to Heilbronn
- Praktikum

You might also look for keywords like

- Elektrotechnik, Elektronik, Electronics
- Embedded, Microcontroller
- ECAD,
- EMC, EMV

The following list covers relevant job search sites:

1. [Stepstone](#) - strong in Germany; good filters by city/region
2. [Xing Jobs](#) - Germany-heavy.
Refine the search by the "hamburger menu" with
 1. Search radius: as you wish
 2. Employment type: Student
 3. Career level: Student/Intern
3. [LinkedIn Jobs](#) - best for "embedded/firmware" and direct networking
4. [Jobware](#)
5. [GlassDoor](#)
6. [XING - Praktikum Jobs](#)
7. [Absolventa](#)
8. [Bundesagentur für Arbeit - Jobsuche \(Praktika\)](#) - often overlooked, but does not have as much results
Refine the search by clicking onto "Arbeit" below "Was suchen Sie?" and change it to "Praktikum/Trainee/Werkstudent"

"Indirect" directories (great for SMEs)

The following websites are good spots to find small and medium enterprises ("**SME's**") which might look for engineers.

An initiative application to them would a a good idea.



1. [get in Engineering job search](#)
2. [Fachverband microtec-suedwest](#)
3. [Clusterportal BW](#)
4. [Korporative Mitglieder des VDE Württemberg](#)

Also via the B2B supplier directory one can find EMS/automation integrators fast:

1. [wlw.de: Elektronik-Fertigung \(Heilbronn\)](#)
2. [wlw.de: Elektronik-Fertigung \(Stuttgart\)](#)
3. [wlw.de: Elektronik-Fertigung \(Karlsruhe\)](#)

Additionally, exhibitors are companies which are actively selling & building new products. They often hiring quietly.

also companies from there are suitable for an internship

- [embedded world exhibitors](#)
- [SPS \(automation\) exhibitors](#)
- [Control \(quality/testing\) exhibitors](#)
- [Motek \(production/automation\) exhibitor directory](#)
- [All About Automation](#)
- [Expo for Electronics Manufacturing](#)

Google operators

Keywords

Suitable keywords for electronics topics:

- Entwicklungsingenieur, Elektronikentwicklung, Hardwareentwicklung, Automatisierung,
- Prüftechnik, Prüfstand, Testautomatisierung, Hardware-in-the-Loop
- Mikrocontroller, Embedded Software, firmware
- EMV, EMC, EMS, Pre-Compliance
- Leistungselektronik, power electronics, DC/DC, Inverter, Motorsteuerung, BMS, Batterie Management, SiC, GaN, power electronics, Schaltnetzteil
- PCB Layout, Leiterplattenlayout, Altium, kiCAD, ECAD, Leiterplattenbestückung,

Suitable keywords for roles:

- ("Internship" OR "Working student" OR "Bachelorarbeit" OR "Masterarbeit" OR "Abschlussarbeit" OR "Pflichtpraktikum" OR "Werkstudent" OR "Praxissemester" OR "Praktikum")

Add the region smartly

Append one of these blocks:

- (Heilbronn OR Neckarsulm OR "Region Stuttgart" OR Ludwigsburg OR Böblingen OR Sindelfingen OR Esslingen)
- (Karlsruhe OR Ettlingen OR Bruchsal OR Pforzheim OR "Technologieregion Karlsruhe")
- (Mannheim OR Heidelberg OR Ludwigshafen OR "Rhein-Neckar")

filter urls

Often the URLs of the companies have "job-relevant" keywords, like:

- `inurl:karriere`

- inurl:jobs
- inurl:stellen

Examples search strings

Search **career pages** directly:

- ("Praktikum" OR "Praxissemester" OR "Werkstudent") (Embedded OR Elektronik OR Prüftechnik) (Heilbronn OR Stuttgart OR Karlsruhe OR Mannheim) inurl:karriere
- (Praxissemester OR Abschlussarbeit) Elektronik inurl:jobs
- (Prüftechnik OR EMV OR EMC) Praktikum inurl:stellen

Exclude giants (reduce noise):

- ("Praktikum Embedded" Stuttgart) -Bosch -Porsche -Mercedes -Daimler -SAP -ZF -Continental

General search for suitable companies

- ("Leiterplattenbestückung" OR EMS OR "Elektronikfertigung") (Heilbronn OR Karlsruhe OR Mannheim)

Search LinkedIn via Google

- site:linkedin.com/jobs ("Werkstudent" AND Embedded AND Stuttgart)
- site:linkedin.com/company ("Elektronik" AND "Karriere") Stuttgart

Examples for SME Jobs

Examples for possible jobs beyond the big players (from 16.12.25):

1. ATS Automation - Praktikum in Engineering & Design
2. Schulz Group - Praktikant / Werkstudent (m/w/d) Produktentwicklung – Konstruktion & Elektronik
3. Carrybots - Installation und Deployment Mobile Roboter, Softwareentwicklung Robotik ROS
4. VEGA Grieshaber - Abschlussarbeit/Praktikum/Werkstudententätigkeit: Hardware oder Software im Bereich Embedded Systems

Job Fairs

Important: dates shift slightly each year - start checking **Aug/Sep** and bookmark the "event calendar" pages.

A quick list of the job fairs that regularly deliver SMEs and "hidden gems"

- **MeetING (HHN, Heilbronn)** – engineering-focused, very regional (Oct)
- **CareerContacts (HKA, Karlsruhe)** – multiple days, includes engineering faculties (Oct)
- **IT-Mittelstandstag (HS Esslingen)** – explicitly SME-focused (Nov)
- **StepIn (Uni Stuttgart)** – all engineering, annual (Nov)
- **bonding Firmenkontaktmesse Karlsruhe** – big student fair; many suppliers/SMEs participate (late Nov)

Calendar (between 01.10 - 31.12, recurring / usually each year)

When (usually)	Event	Where	Why it's useful for electronics/embedded internships	Link
October (early/mid)	MeetING (Firmenkontaktmesse für Ingenieur-Studierende)	Hochschule Heilbronn (TechCampus)	Regional employers, suppliers, engineering services; easy to ask for Praxissemester/Praktikum	MeetING (HHN)
October (20-23-ish)	CareerContacts	Hochschule Karlsruhe (HKA)	Multi-day career fair; includes engineering & IT; good for "quiet hiring"	CareerContacts (HKA)
October (mid/late)	Karrieretag Karlsruhe (open fair)	Karlsruhe (e.g., Schwarzwaldhalle)	General fair, but often many regional SMEs + direct CV checks	Karrieretag Karlsruhe (Stadt-Kalender)
October (mid/late)	CareerSprint Mittelstand	TH Mannheim	Campus-based "Mittelstand" format; good for internships/theses	CareerSprint Mittelstand (TH Mannheim)
October (mid/late)	Aalener Industriemesse (AIM for students)	Hochschule Aalen	Classic engineering student fair; many tech companies from BW	AIM for students (Aalen)
Oct-Dec (lecture series)	Hohenheimer CareerDays	Universität Hohenheim (Stuttgart)	Company talks + networking; some industrial/tech companies show up	Hohenheimer CareerDays
November (early)	MeetIT	Hochschule Heilbronn (TechCampus)	Great for embedded/IoT/software-near-hardware internships	MeetIT (HHN)
November (early, Wed)	IT-Mittelstandstag	Hochschule Esslingen	SME-heavy by design; ideal for "hidden gems"	IT-Mittelstandstag (HS Esslingen)
November (mid)	Informatik-Kontaktmesse	Universität Stuttgart (Informatikgebäude)	Not only IT: many embedded/automation employers recruit here too	Informatik-Kontaktmesse (Uni Stuttgart)
November (mid/late)	StepIn - Firmenkontaktmesse	Universität Stuttgart (Campus Vaihingen)	Annual engineering fair; practical for Praktikum/Bachelor/Master topics	StepIn (Uni Stuttgart/TRACES)
Late November	bonding Firmenkontaktmesse Karlsruhe	Karlsruhe	Very big student fair; many SMEs, suppliers, engineering services	bonding Karlsruhe
December (early)	Firmenkontaktmesse (e.g., SimTech / Uni Stuttgart)	Universität Stuttgart (Campus Vaihingen)	Often niche/tech-specific companies; good for R&D internships	SimTech Firmenkontaktmesse (example page)
December (support events)	Career Service workshops (CV checks etc.)	Uni Stuttgart / online	Not a fair, but boosts application quality fast (useful for internationals)	TRACES event calendar
December (networking)	VDE After Work Stuttgart	Stuttgart	Short networking evening; good for informal contacts + hidden roles	VDE After Work Stuttgart

How to use these fairs to find "hidden gem" internships (fast playbook)

1. 2-3 weeks before

1. Download exhibitor lists; pick **20 target SMEs** (suppliers, test houses, automation integrators, EMS/PCB, energy/storage).
2. Prepare a **30-second pitch** + 1-page CV (German-style).
3. Book time slots if the fair uses a matching platform.

2. At the fair

1. Ask **directly**: "Do you supervise Praxissemester/Praktikum projects even if nothing is advertised?"
2. Ask for **the technical hiring person** (team lead / lab engineer), not only HR.

3. Within 24-48 hours

1. Send follow-up email: "Nice meeting you + 2 internship project ideas I can execute in 12 weeks."

The big List

In recent years, the "big players" have been more cautious about hiring employees and posting job openings, even for internships.

So you can look around there—but don't feel sorry for yourself if you get rejected.

Company size	Company name	Short description
Big	ABB	Power & automation company with industrial drives, robotics and embedded control engineering.
Big	Agilent Technologies	Analytical instruments and lab automation with embedded electronics and control/software roles in BW sites.
Big	ALSTOM	Rail systems (signalling, rolling stock) with safety-critical electronics and embedded software roles.
Big	AMETEK	Diversified instrumentation group with electronics, sensing and embedded-adjacent engineering roles.
Big	Airbus	Aerospace and defence systems with avionics, embedded SW/HW and systems engineering.
Big	Audi	Automotive OEM with ECU/vehicle electronics, infotainment and embedded software development.
Big	B. Braun (Aesculap)	MedTech devices and production systems with embedded electronics and safety/regulatory engineering.
Big	Bosch Rexroth	Factory automation and hydraulics with motion control electronics and embedded software.
Big	Bosch	Large R&D footprint in sensors, ECUs, industrial automation, and embedded SW/HW development.
Big	BSH Home Appliances	Connected appliances with electronics, control firmware and IoT product development.
Big	BorgWarner	Automotive e-mobility and power electronics with embedded control and validation roles.
Big	Continental	Automotive and industrial technology with embedded software, sensors and electronics development.
Big	Daimler Truck	Commercial vehicles with powertrain, electrification, ECUs and embedded systems engineering.
Big	Diehl Group (incl. Diehl Aviation)	Aviation/defence products with embedded electronics, systems and certification topics.
Big	Eaton	Power management (e-mobility, power electronics, industrial) with engineering and embedded-adjacent roles.
Big	ebm-papst	Electric motors and fans with embedded control, power electronics and validation roles.
Big	Endress+Hauser	Process instrumentation with sensors, measurement electronics and embedded firmware.
Big	Festo	Pneumatics/automation with mechatronics, sensors, embedded control and industrial IoT.
Big	FORVIA (Faurecia)	Automotive interiors and electronics with embedded and electronics roles (incl. BW sites).
Big	FORVIA HELLA	Automotive lighting/electronics with ECUs, sensors and embedded software development.
Big	Getinge	Medical technology (incl. OR systems) with electronics, software and verification work.
Big	HARMAN	Automotive audio/infotainment with embedded Linux, DSP and electronics development.
Big	Herrenknecht	Tunnel boring machines with heavy-duty automation, drives and embedded control engineering.

Company size	Company name	Short description
Big	HENSOLDT	Sensors and defence electronics with radar, optronics and embedded SW/HW engineering.
Big	IBM	Software and engineering roles incl. embedded-adjacent systems, security and edge/IoT projects.
Big	ifm	Industrial sensors and automation with embedded firmware, electronics and edge/IIoT development.
Big	John Deere	Off-highway machinery with embedded control, sensors, autonomy and electrification topics.
Big	Kärcher	Mechatronic cleaning systems with electronics, motor control and embedded software roles.
Big	Knorr-Bremse	Braking systems for rail/commercial vehicles with functional safety and embedded electronics.
Big	Liebherr	Industrial machinery and appliances with embedded control, drives and electronics design.
Big	MAHLE	Powertrain and thermal systems with electronics, e-mobility components and embedded control.
Big	Magna	Automotive supplier with electronics, mechatronics and embedded software across many product lines.
Big	MANN+HUMMEL	Filtration and industrial solutions with electronics, sensors and product/embedded roles.
Big	Marquardt	Mechatronic systems supplier with electronics, embedded software and product cybersecurity roles.
Big	Mercedes-Benz	Automotive R&D with vehicle electronics, embedded platforms and software-defined vehicle roles.
Big	Pepperl+Fuchs	Industrial sensing and explosion protection with embedded firmware and electronics development.
Big	Parker Hannifin	Motion and control technologies with electronics, sensors and embedded/control engineering.
Big	Porsche	Sports cars and e-mobility with ECUs, embedded software and vehicle electronics engineering.
Big	Rheinmetall	Defence and automotive tech with embedded electronics, systems engineering and testing.
Big	Roche Diagnostics	Diagnostic instruments with embedded control, electronics, software and verification/QA.
Big	Rohde & Schwarz	Test & measurement and secure comms with RF electronics and embedded/software roles.
Big	Rolls-Royce Power Systems	Large engines and energy systems with ECU/controls, power electronics and embedded SW.
Big	SAP	Industry software and IoT/edge solutions; good entry point for embedded-adjacent software roles.
Big	Schaeffler	Automotive/industrial supplier with e-mobility, mechatronics and embedded systems roles.
Big	SICK	Sensor technology (machine vision, LiDAR) with embedded firmware, electronics and systems.
Big	Siemens	Industrial digitalization and automation with embedded, controls and electronics engineering.
Big	STIHL	Power tools and e-drives with motor control, battery systems and embedded firmware.

Company size	Company name	Short description
Big	Stryker (incl. Freiburg/Tuttlingen)	MedTech products and manufacturing with electronics, embedded and engineering internships.
Big	Syntegon	Packaging/processing machinery with industrial automation, controls and embedded software.
Big	TRUMPF	Laser and machine tools with industrial electronics, controls and embedded software.
Big	Valeo	Automotive technology supplier with sensors, electronics and embedded systems development.
Big	Voith	Drive technology and automation with embedded control, electrics and industrial software.
Big	ZEISS	Optics and medical/industrial systems with electronics, embedded SW and automation roles.
Big	ZF Friedrichshafen	Automotive/industrial systems with e-drives, ECUs, sensors and embedded software.
Big	ZIEHL-ABEGG	Fans/motors and drive/control tech with electronics and embedded system development.
Medium	AMETEK CTS	EMC testing and instrumentation with electronics, measurement and embedded-adjacent engineering roles.
Medium	Balluff	Industrial sensors and IO/communication hardware with embedded firmware and electronics design.
Medium	Baumer	Sensor and encoder solutions with embedded firmware, electronics and application engineering.
Medium	Bertrandt	Engineering services for automotive/industry, often hands-on with embedded SW/HW projects.
Medium	Bizerba	Weighing/inspection systems with embedded electronics, software and automation topics.
Medium	Bosch Engineering	Engineering services for mobility/industry with embedded platforms, calibration and electronics.
Medium	Bosch Sensortec	MEMS sensors and embedded solutions; internships/theses often via the Bosch job portal.
Medium	Bürkert	Measurement/control for fluids with sensors, electronics and embedded control firmware.
Medium	BDT Media Automation	Automation systems and mechatronics with electronics, testing and embedded software opportunities.
Medium	Delta Energy Systems	Power electronics (AC/DC, DC/DC, charging) with embedded control and hardware engineering roles.
Medium	dSPACE	Tooling for HIL/SIL and control development; great for embedded validation and simulation.
Medium	Dürr Group	Automation and production systems with industrial controls, sensors and embedded/software roles.
Medium	Eberspächer	Automotive thermal and exhaust tech with ECU development, electronics and embedded software.
Medium	E.G.O.	Appliance controls and components with embedded software, electronics and testing topics.
Medium	ElringKlinger	Automotive components and e-mobility systems with electronics integration and testing roles.
Medium	ETAS	Automotive software tools and middleware with embedded, AUTOSAR and diagnostics topics.

Company size	Company name	Short description
Medium	Freudenberg Sealing Technologies	High-tech sealing solutions; mechatronics and testing roles around sensors and materials.
Medium	Hansgrohe	Smart sanitary products with electronics, connectivity and embedded development roles.
Medium	Hekatron	Fire detection and safety systems with embedded electronics, connectivity and testing.
Medium	Heidelberger Druckmaschinen	High-end printing systems with motion control, industrial electronics and automation.
Medium	HIMA	Safety automation (process/rail) with embedded, safety PLCs and functional safety engineering.
Medium	Hirschmann Automation & Control (Belden)	Industrial networking with embedded Linux, switching, protocols and hardware design.
Medium	IMS CHIPS	Custom microelectronic systems (ASIC/sensors) with mixed-signal design and embedded work.
Medium	IPG Automotive	Vehicle simulation and test systems with HW/SW development and automation in test benches.
Medium	Jetter (Bucher Automation)	Industrial and mobile automation controllers with embedded firmware and electronics.
Medium	KARL STORZ	Medical devices and imaging systems with electronics, embedded software and verification.
Medium	Kurtz Ersä	Electronics manufacturing and automation equipment with control electronics and embedded software roles.
Medium	Leuze	Optical sensors and safety components with embedded firmware and electronics roles.
Medium	LEIBINGER	Industrial inkjet/printing systems with embedded software, electronics and automation roles.
Medium	LAPP	Connectivity solutions (cables/connectors) with electronics, testing and industrial product roles.
Medium	Murrelektronik	Industrial connectivity and automation components with electronics and embedded development.
Medium	Pilz	Automation and safety systems with embedded control, industrial networks and validation.
Medium	Physik Instrumente (PI)	Precision motion systems with controllers, embedded control and electronics engineering.
Medium	R. STAHL	Explosion protection systems with electronics development and industrial product engineering.
Medium	SCHUNK	Automation and gripping systems with mechatronics, sensors and embedded control topics.
Medium	TDK-Micronas	Hall sensors and automotive ICs with mixed-signal design and embedded applications.
Medium	Testo	Measurement technology with sensors, embedded firmware and connected instrumentation.
Medium	VEGA Grieshaber	Process sensors (level/pressure) with embedded systems, radar tech and electronics.
Medium	Vector Informatik	Automotive software and tools (AUTOSAR, networking) with embedded and systems focus.
Medium	WITTENSTEIN	Mechatronic drive systems with motion control, embedded control and system integration.

Company size	Company name	Short description
Medium	Würth Elektronik	Electronic components and EMS with hardware design, power electronics and embedded topics.
SME	ALTEN	Engineering services with embedded software, electronics and validation projects in the region.
SME	Akkodis	Engineering and IT services with embedded, automotive software and testing roles in BW.
SME	Bucher Automation	Industrial/mobile automation solutions with electronics, embedded and DHBW thesis options.
SME	Capgemini Engineering	Engineering services with embedded software, electronics and systems engineering tracks.
SME	Cinemo	Embedded and infotainment software products (automotive/consumer) with C++ and Linux focus.
SME	EDAG	Engineering services for vehicle/industry development incl. embedded, electronics and testing.
SME	embeX	Embedded engineering services (SW/HW) with internships and thesis topics in BW projects.
SME	emtrion	Embedded systems and electronics engineering services (automotive/industry) with thesis-friendly roles.
SME	Exxeta	Digital engineering; some IoT/edge roles relevant for embedded-adjacent starts in BW.
SME	FERCHAU	Engineering services; many entry roles in embedded SW/HW, test and automation in BW.
SME	Fraunhofer-Gesellschaft (BW institutes)	Applied research network with many internships and theses in sensors, automation and embedded systems.
SME	FZI Research Center for Information Technology	Applied research (robotics/AI/embedded/IoT) with many student projects and theses.
SME	Hahn-Schickard	Applied microsystems and medical/industrial electronics R&D with embedded and sensor focus.
SME	HEINZMANN	Control and drive technology with embedded firmware, motor control and electronics engineering roles.
SME	HighTec EDV-Systeme	Embedded toolchain and compiler tech (AUTOSAR/MCUs) with low-level software engineering.
SME	Fraunhofer IOSB	Applied R&D in security, sensor systems and embedded/edge software (often thesis-friendly).
SME	Fraunhofer IPA	Applied manufacturing/automation R&D with robotics, sensors and embedded/control topics.
SME	IAV	Automotive engineering with ECU development, calibration, embedded SW and validation.
SME	Porsche Engineering	Engineering services with embedded SW/HW, E/E architecture and e-mobility development.
SME	P3 Group	Consulting/engineering with embedded systems, functional safety and electronics projects.
SME	NewTec	Safety-critical embedded systems (aerospace/rail/industry) with verification and embedded SW.
SME	AVL	Powertrain and e-mobility engineering with control, embedded SW and test systems.
SME	SensoPart	Industrial sensor and vision-sensor manufacturer with electronics and embedded firmware roles.

Company size	Company name	Short description
SME	Synapticon	Motion-control electronics for robotics with embedded control, power electronics and testing.
SME	Wibu-Systems	Embedded/industrial cybersecurity and licensing with roles around secure software and device protection.
SME	Vector Consulting Services	Engineering & consulting around automotive software toolchains and embedded processes.

From:

<https://wiki.mexle.te.hs-heilbronn.de/> - **MEXLE Wiki**

Permanent link:

https://wiki.mexle.te.hs-heilbronn.de/how_to_find_an_internship?rev=1765931943

Last update: **2025/12/17 01:39**

