

How to find an Internship

Student Group

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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

The big Ones

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	Automation, drives, robotics and industrial electronics with strong embedded/controls engineering.
Big	Airbus Defence and Space	Aerospace/defence electronics (avionics, comms, sensors) and safety-critical embedded software.
Big	Audi	Automotive E/E, ECUs, vehicle networks and embedded software for powertrain/ADAS/infotainment.

Company size	Company name	Short description
Big	BMW Group	Vehicle electronics, e-mobility, control units and embedded software development in South Germany.
Big	Bosch	Major hub for sensors, ECUs, IoT devices, and embedded SW/HW across many domains.
Big	Continental	Automotive electronics, ADAS, connectivity and embedded platforms for modern vehicles.
Big	Daimler Truck	Commercial-vehicle electronics, control systems and embedded software for powertrain/ADAS.
Big	Endress+Hauser	Industrial measurement and process instrumentation with sensor electronics and embedded firmware.
Big	Festo	Factory automation, pneumatics/mechatronics, controllers and embedded motion/control software.
Big	Infineon Technologies	Semiconductors (power, sensors, security) with roles in embedded systems and electronics design.
Big	IBM	Software/AI/IoT and industry solutions with opportunities around embedded and systems engineering.
Big	Kärcher	Mechatronic products with embedded control, electronics, connectivity and firmware development.
Big	Knorr-Bremse	Rail/vehicle systems with embedded safety/control electronics and real-time software.
Big	MAHLE	Automotive supplier with electronics, e-mobility, thermal systems and embedded controls.
Big	Mercedes-Benz Group	Vehicle software and electronics, connected car platforms and embedded control systems.
Big	Porsche	High-performance vehicle electronics, control units, diagnostics and embedded software.
Big	Roche Diagnostics	Medical devices and diagnostics systems with embedded firmware, electronics and signal processing.
Big	Rohde & Schwarz	Test & measurement, RF/communication systems and embedded software/hardware engineering.
Big	SAP	Industry software, IoT and digital manufacturing—good for software-heavy theses/internships.
Big	Schaeffler	Mechatronics, sensors/actuators and control systems with embedded electronics roles.
Big	SEW-EURODRIVE	Drives, inverters and industrial automation with power electronics and embedded control software.
Big	Siemens	Industrial automation, electronics and embedded systems across mobility, energy and factory tech.
Big	SICK	Sensor technology and industrial vision with embedded firmware, electronics and safety systems.
Big	TRUMPF	High-tech machines/lasers with motion control, industrial electronics and embedded software.
Big	ZEISS	Optics, imaging, metrology and sensor systems with embedded and electronics development.
Big	ZF	Automotive systems, ECUs and software-defined vehicle platforms with embedded SW/HW roles.
Medium	Aesculap (B. Braun)	Medical technology with electronics/mechatronics and embedded development for devices.

Medium	AIM Infrarot-Module	IR detector modules and sensing systems—strong fit for electronics and embedded HW/SW.
Medium	AVL	Powertrain/ADAS engineering with embedded control, testing and electronics topics.
Medium	Balluff	Industrial sensors/IO-Link and automation components with firmware and electronics design.
Medium	Bertrandt	Engineering services (automotive/industry) with many embedded SW/HW project roles.
Medium	Bizerba	Mechatronic products (scales, inspection) with embedded control and electronics engineering.
Medium	Bosch Engineering	Engineering services for automotive/industry with embedded SW/HW and system integration work.
Medium	Bosch Sensortec	MEMS sensors with firmware, algorithms and low-power embedded development.
Medium	Dürr Group / BBS Automation	Factory automation and production systems with control engineering and embedded topics.
Medium	Eberspächer	Automotive systems with electronics, control units and embedded software roles.
Medium	ElringKlinger	E-mobility components and systems with electronics and embedded controls relevance.
Medium	ETAS	Automotive software tooling, middleware and embedded platforms (Bosch Group).
Medium	Fraunhofer IAF	Applied R&D (electronics, photonics, systems) with thesis-friendly research projects.
Medium	Fraunhofer IPA	Production/automation research with robotics, sensors and embedded/industrial software topics.
Medium	Fraunhofer IOSB	Applied research in sensors, security and autonomous systems with embedded/software focus.
Medium	GEMÜ	Valves and control systems for process industries with electronics and embedded control.
Medium	Hahn-Schickard	Microelectronics, sensors and medical/industrial systems—great for embedded theses.
Medium	Heidelberger Druckmaschinen	Complex mechatronic machines with drives, controls and embedded/automation engineering.
Medium	Hekatron	Safety technology (fire detection) with embedded electronics and firmware development.
Medium	HENSOLDT	Defence/surveillance sensors and electronics with embedded and signal-processing topics.
Medium	Hirschmann Automation and Control (Belden)	Industrial networking/IIoT hardware with embedded firmware and electronics development.
Medium	IDS Imaging Development Systems	Industrial cameras and machine vision hardware with embedded/Linux and electronics roles.
Medium	IMS CHIPS	ASIC/sensor systems and mixed-signal electronics with strong embedded/EE opportunities.
Medium	Jetter AG	Industrial/mobile automation controllers with embedded software and electronics development.
Medium	KARL STORZ	Medical endoscopy systems with embedded, electronics and mechatronics engineering topics.
Medium	Kübler Group	Encoders/sensors and automation components with electronics and firmware work.

Medium	LAPP	Cables/connectivity and industrial communication—relevant for hardware/system engineering.
Medium	Lauer & Weiss	Automotive engineering services with embedded SW/HW and E/E system development projects.
Medium	Leuze electronic	Industrial sensors/safety systems with embedded firmware and electronics design roles.
Medium	Murrelektronik	Automation connectivity and I/O systems with embedded development and electronics roles.
Medium	Pepperl+Fuchs	Industrial sensors and explosion protection with embedded firmware and electronics engineering.
Medium	Pilz	Safety automation with embedded controllers, fieldbus systems and firmware development.
Medium	Porsche Engineering	Engineering projects in embedded systems, E/E architecture and e-mobility.
Medium	P3 Group	Technology consulting with embedded SW/HW, automotive systems and validation topics.
Medium	Swoboda	Automotive electronics and software (incl. Karlsruhe) with ECU/network tech and embedded roles.
Medium	TDK-Micronas	Sensor/semiconductor development with embedded, electronics and signal-processing topics.
Medium	Testo	Measurement instruments with embedded firmware, electronics and connectivity development.
Medium	Vector Informatik	Tools/middleware for automotive embedded systems (AUTOSAR, networking, testing, etc.).
Medium	VARTA	Batteries and energy systems with BMS electronics, testing and embedded topics.
Medium	Würth Elektronik	Electronic components, PCBs and IoT modules with hardware/embedded opportunities.
SME	Baudisch Electronic	Electronics manufacturing/development with opportunities in HW, test and production tech.
SME	burster	Precision measurement and sensor electronics with analog/digital HW and embedded interfaces.
SME	csi entwicklungstechnik	Mobility engineering services with embedded SW/HW and E/E development support roles.
SME	embeX	Safety-focused embedded development (functional safety) with internships and thesis topics.
SME	Embedd-ING	Embedded software/hardware engineering (Stuttgart) with hands-on low-level development work.
SME	emtrion	Embedded modules and custom HW/SW design—great for firmware and hardware thesis topics.
SME	FZI	Applied research (robotics, mobility, embedded/AI) with many thesis and student positions.
SME	Kurz Elektronik	Electronics development and systems engineering with embedded and hardware design roles.
SME	MESCO Engineering	Automation and embedded systems engineering with project work suited for theses.
SME	Nantis	Embedded systems development in Stuttgart with strong C/C++ and real-time focus.
SME	NEURA Robotics	Robotics (BW) with embedded software, sensing and AI-perception engineering roles.

SME	NewTec	Safety-critical embedded systems (automotive/industry) with structured internships/theses.
SME	Steinbeis Embedded Systems Technologies	Embedded HW/SW engineering projects with clear thesis and internship offerings.
SME	Valyue Consulting	Engineering consulting with embedded/software roles (often Stuttgart/Munich region).
SME	ViGEM	High-end data logging systems for autonomous driving with embedded HW/SW development.
SME	Vision Devices	Electronics-focused roles (incl. training/entry paths) around device hardware and systems.
SME	Wibu-Systems	Software protection/licensing with low-level development and security engineering roles.

- Procter & Gamble Manufacturing
- Siemens AG
- Caterpillar Energy Solutions
- Audi
- John Deere
- Robert Bosch GmbH
- Collins Aerospace
- Mercedes Benz / Daimler Truck AG
- ABB
- Magna / Magna Spiegelsysteme
- Rheinmetall KS Gleitlager
- BorgWarner Transmission Systems
- Sulzer Pumpen
- R. Stahl Schaltgeräte
- ALSTOM
- BITZER SE
- BJ Automotive
- BLANC & FISCHER
- Dieffenbacher
- Dt. Signalinstrumentenfabrik Max B. Martin
- FIBRO / FIBRO Rundtische
- FLT Automation GmbH — Operativer Cashflow: k.A.
- GE Power GmbH — Operativer Cashflow: k.A.
- Gottlob-Rommel-Gruppe — Operativer Cashflow: k.A.
- Granzow — Operativer Cashflow: k.A.
- Heidelberger Druckmaschinen AG — Operativer Cashflow: k.A.
- HIMA Paul Hildebrandt — Operativer Cashflow: k.A.
- KACO GmbH + Co. KG — Operativer Cashflow: k.A.
- Lämpfle Automotive GmbH — Operativer Cashflow: k.A.
- Neff GmbH — Operativer Cashflow: k.A.
- Rosenbauer Karlsruhe GmbH — Operativer Cashflow: k.A.
- SEW-Eurodrive GmbH & Co. KG — Operativer Cashflow: k.A.
- Vollert Anlagenbau GmbH — Operativer Cashflow: k.A.
- Walter Perske GmbH — Operativer Cashflow: k.A.
- WEBER-HYDRAULIK GMBH — Operativer Cashflow: k.A.
- Witzenmann GmbH — Operativer Cashflow: k.A.

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.”

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