

# Internship brochure

Internship assignments

Engineering and Automotive 2024

**HAN** UNIVERSITY  
**OF APPLIED SCIENCES**

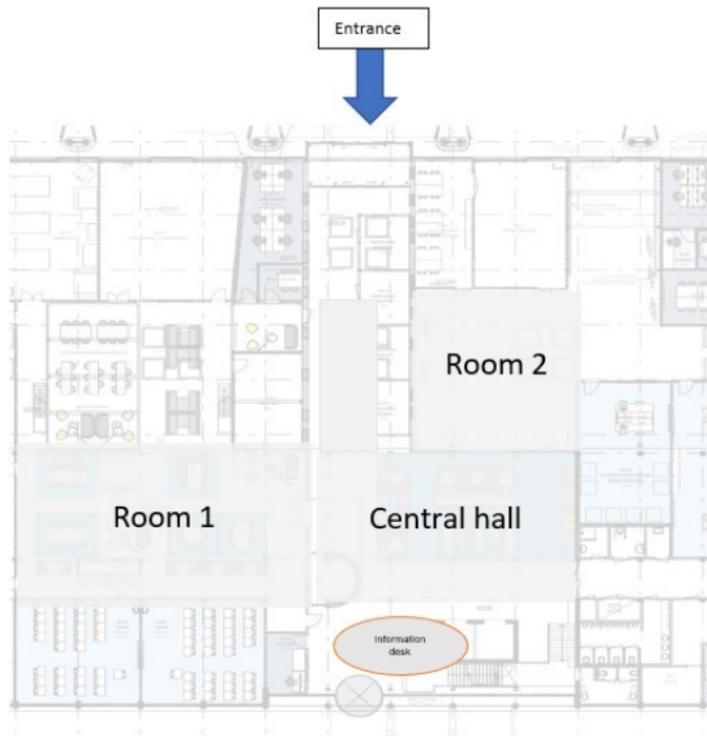
Automotive

Electrical and Electronic Engineering

Embedded Systems Engineering

Mechanical Engineering

Standnr	Company	AU	ELT	ESE	MEC
1	HAN Balanced Energy Systems		x	x	x
2	Master Engineering Systems	x	x	x	
3	Innovatiehub Achterhoek Liemers		x		x
4	Innovatiehub IIME		x	x	x
5	Innovatiehub Innovar	x	x	x	x
6	Innovatiehub Doetinchem				x
7	Von Gahlen	x	x	x	x
8	Canon Production Printing		x		x
9	Menting Energietechniek B.V.		x	x	
10	Bronkhorst High-Tech B.V.			x	x
11	Alewijnse		x	x	
12	Iv		x	x	x
13	Moekotte		x	x	
14	NEDCON				x
15	Ottevanger Milling Engineers				x
16	KEMA Labs		x		
17	Kremer Techniek		x	x	
18	ACE Mobility	x			
19	Absolute Cycling		x	x	
20	TenneT		x	x	
21	SmartHub Achterhoek	x	x	x	x
22	Nexperia		x	x	
23	ENDUTEQ		x		x
24	DAF Trucks N.V.	x	x	x	x
25	Allego	x	x	x	x
26	Nelipak Healthcare Packaging				x
27	Firestone Airide	x			x
28	BECKHOFF Automation B.V.	x	x	x	x
29	Mitsubishi Turbocharger and Engine Europe B.V	x			



#### Central Hall:

1. HAN Balanced Energy Systems
2. Master Engineering Systems
3. Innovatiehub Achterhoek - Liemers
4. Innovatiehub IIME
5. Innovatiehub Innovar
6. Innovatiehub Doetinchem
7. Von Gahlen
8. Canon Production Printing Netherlands

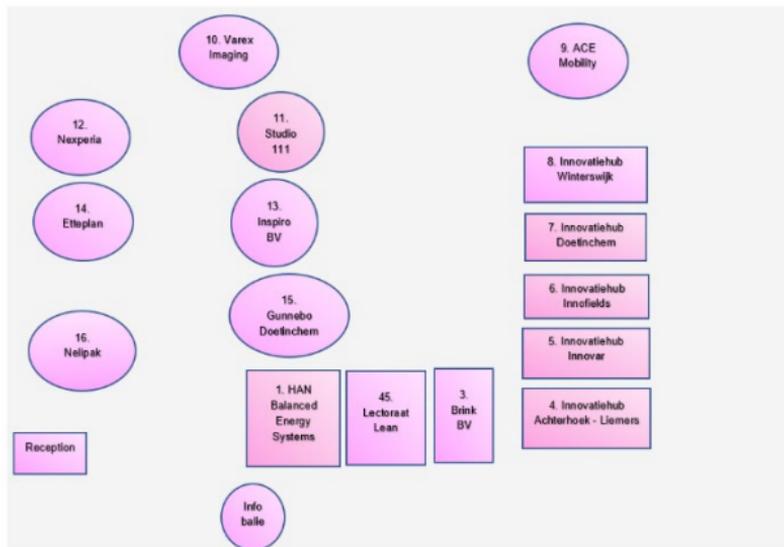
#### Room 1:

9. Menting Energietechnik
10. Bronkhorst High-Tech B.V.
11. Alewijnse
12. Iv
13. Moekotte
14. NEDCON
15. Ottevanger Milling Engineers
16. KEMA Labs
17. Kremer Techniek
18. ACE Mobility

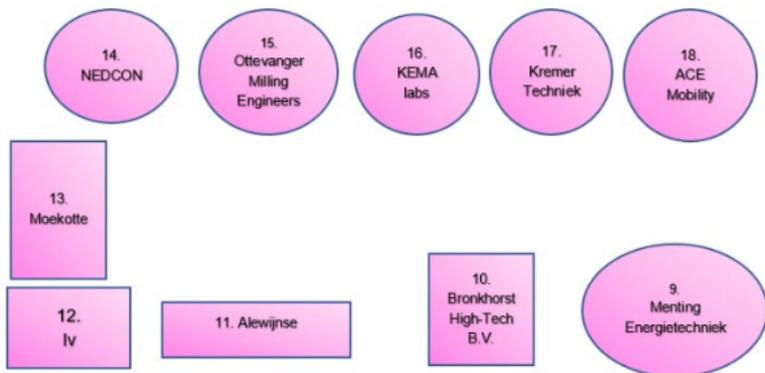
#### Room 2:

19. Absolute Cycling
20. TenneT
21. SmarHub Achterhoek
22. Nexperia
23. ENDUTEQ
24. DAF Trucks N.V.
25. Allego
26. Nellipak Healthcare Packaging
27. Firestone Airride
28. BECKHOFF Automation
29. Mitsubishi Turbocharger and Engine Europe B.V.

**Central hall:**



**Room 1:**



Room 2:

25.  
Allego

24.  
DAF Trucks  
N.V.

23.  
ENDUTEQ

22.  
Nexperia

26.  
Nelapak Healthcare  
Packaging

27.  
Firestone  
Ainde

28.  
BECKHOFF  
Automation  
B.V.

29.  
Mitsubishi  
Turbocharger and  
Engine Europe B.V

21.  
SmarHub  
Achterhoek

20.  
TenneT

19.  
Absolute  
Cycling



1. **HAN Balanced Energy Systems**  
Location in Arnhem

ELT/ESE/MEC

*Various assignments in the field of hydrogen and electrical infrastructure*

2. **Master Engineering Systems**  
Location in Arnhem



AU/ELT/ESE

*The HAN offers an applied full-time and part-time master's in engineering systems with tracks in automotive systems, cyber-physical systems and sustainable energy. The course is taught in English and has an international classroom.*

3. **Innovatiehub Achterhoek - Liemers**  
Location in Doetinchem



ELT/MEC

*Various assignments at Ubbink, Von Gahlen en Vink Kunststoffen*

*ELT – Assignment shielded camera system for process control, integrated in hot cell (PLC) control*



4. Innovatiehub IIME  
Location in Doetinchem

ELT/ESE/MEC

*MEC – Developing a new drive for the HAN Solarboat*

*ESE – Integrating height sensor into the CAN Bus system for the HAN Solarboat*

*ELT – Testing various electric motors for performance for the HAN Solarboat*



5. Innovatiehub Innovar  
Location in Varsseveld

AU/ELT/ESE/MEC

*Various assignments at Contour Advanced Systems, Van Raam and Waterkracht*

*AU – Designing an independent suspension for tricycles*

*ELT – Development of Large Energy Scale Storage*

*ESE – Development of a programmable controller*

*MEC – Designing of a mobile control*

6. Innovatiehub Doetinchem  
Location in Doetinchem



MEC

*Various assignments at ACEL, Hosokawa Micron, Rensa and Wopereis*

*Designing a multifunctional platform for continuous and batch machines from the product range*

*Improving the engineering and production technology/methodology of dryer (pressure) boilers*

*Investigate what predictive maintenance can mean for Hosokawa Micron and how it could possibly be implemented*



7. Von Gahlen  
Location in Zevenaar

AU/ELT/ESE/MEC

*Mechatronic assignment: shielded camera system for process control integrated in hot cell (PLC) control*

*MEC – Making lead-filled steel constructions transportable internally (between departments).*

*Calculating frames in FEM package, weighing options for transport*



8. **Canon Production Printing**  
**Location in Venlo**

**ELT/MEC**

*You will have the opportunity to gain valuable experience in the field of real estate while contributing to the success of our department. The ideal candidate for this internship is an Electrical- or Mechanical student who is a team player and interested in the different aspects of the constructional, electrical- and mechanical installations of buildings. You should possess good written and verbal communication skills and be comfortable working in a team environment.*

*You will be responsible for researching and analyzing the maintenance calls data, identifying areas for improvement, and developing new strategies for optimizing our approach for (preventive) maintenance. current organization structure regarding these calls and the way of working both from our contractors and the internal organization and come up with improvement proposals*



9. **Menting Energietechnik B.V.**  
**Location in Eersel**

**ELT/ESE**

*Implementation of ISO 9001, VCA\*\* and Safety Ladder  
Analysis of IEC 61850 and implementation of GOOSE protocol  
Implementation of BEI-BLS Practical Course: Development, Setup,  
Ordering and Construction*

10. **Bronkhorst High-Tech B.V.**  
Location in Ruurlo

ESE/MEC

***Efficiency monitoring:***

*Efficiency of an Electrolyser system*

*Efficiency of a Fuel Cell system*

***Micro laser welding process improvement:***

*Vision System for positioning*

*Vision to determine approval and rejection*

*Light diode measurement during welding to determine approval and rejection*

11. Alewijnse  
Location in Nijmegen

**ELT/ESE**

*Thermostat with display including integration with AV System*  
*Steward Call Button including integration with AV System*  
*Temperature and humidity sensor with display and integration with monitoring system*  
*Men overboard system (no CCTV)*  
*Light show controller system*  
*Info board System (programming)*  
*AVIT Sales suitcase (IPad, screen, VoD player, Apple TV, 8p Switch)*  
*Pharos Sales suitcase (Light show controller + various lighting)*  
*2D/3D model yacht with lighting integration (3D printer design, Lutron, Pharos, iPad for control)*  
*Tiltable screen portrait/landscape incl. video processing*  
*LED wall or projector wall solution incl. video processing (for the hallway at the AV office or showroom)*

12. lv  
Location in Papendrecht



**ELT/ESE/MEC**

*Development of Submarine Power Cables (SEC&IAC) Sizing Software*  
*Exploring the Viability of Floating Substations an In-depth Feasibility Study*  
*Feasibility Analysis of Offshore Green Hydrogen Production from Wind Energy*  
*Hybrid Offshore Power Plants a Comprehensive Feasibility Study*

13. **Moekotte**  
Location in Enschede



**ELT/ESE**

*Internship assignment Alternative user interface*

*Internship assignment Dashboard reception*

*Internship assignment Moekotte general*

*Internship assignment Development GUI for Unified Panels Siemens*

14. **NEDCON**  
Location in Doetinchem



**MEC**

*Wide Span Shelving market mapping and an in-depth technical analysis of a system within NEDCON*

*Setting up a standard format user and installation manual for different systems*

*Designing test setup*

15. **Ottevanger Milling Engineers**  
Location in Aalten



**MEC**

*Redesign slider using Sensor Technology*

*Redesign mixer from 1200 liters to 20.000 liters*

*Improvement of environmentally friendly packaging process*

16. **KEMA Labs**  
Location in Arnhem

**KEMA** Labs

**ELT**

*Research into a new machine control  
PLC with Energy Meter (research)  
Current amplifiers*

17. **Kremer Techniek**  
Location in 's Heerenberg

 **Kremer**  
*Passie voor techniek*

**ELT/ESE**

*Various assignments available*

18. **ACE Mobility**  
Location in Helmond



**AU**

*Various assignments available*

 **absolute**  
cycling

19. **Absolute Cycling**  
Location in Arnhem

**ESE**

*ESE - Improve performance and stability for The One cycling computer*



20. Tennet  
Location in Arnhem

ELT/ESE

*A suitable assignment will be determined together with the student*



21. SmartHub Achterhoek  
Location in Doetinchem

AU/ELT/ESE/MEC

*Various assignments available*



22. Nexperia  
Location in Nijmegen

ELT/ESE

*Automated sweep measurement tool*



23. ENDUTEQ  
Location in Westervoort

ELT/MEC

*ELT - Development and integration of Precitec sensors in control systems*

*MEC - Design and development of a High-Torque RBF Test System*

24. DAF Trucks N.V.  
Location in Eindhoven



AU/ELT/ESE/MEC

*Various assignments available*

25. Allego  
Location in Arnhem



AU/ELT/ESE/MEC

*AU/MEC - Adjusting our canopy designs to accommodate solar panels*

*AU/MEC – Support design of XL canopy*

*ELT/ESE – Busbars architecture on charging hubs*

*ESE – Digital video recognition of on-site events and alert triggering*

*ESE – Automatic site install validation based on uploaded pictures*



26. **Nelipak Healthcare Packaging**  
Location in Venray

MEC

*Designing tooling*



27. **Firestone Airide**

AIRIDE

AU/MEC

*Firestone Airide produces air springs for Automotive, Commercial Vehicle, Industrial, and the Rail transportation markets*

*This Engineering intern role is within the Engineering team to assist with the design of OE and aftermarket air spring assemblies for suspensions used on Automotive OEM, semi-trucks, trailers, buses, and other non-Automotive applications.*

*The Engineering intern can also take part in lean continuous improvement projects of the company*

A red square logo with the word "BECKHOFF" in white, bold, uppercase letters.

28. BECKHOFF Automation B.V.

Location in Eindhoven

AU/ELT/ESE/MEC

*Selecting a 5D Delta Robot and 6-axis agriculture robot*

*Swing-up pendulum*

*Ball rolling with Xplanar*

*Ball bouncing with Xplanar*

*Double inverted pendulum*



29. Mitsubishi Turbocharger and Engine Europe

Location in Almere

AU

*Multi-disciplinary approach to turbine housing material selection*

*Define the standard connection between bearing housing and compressor cover*

The following companies are not present, but they are looking for YOU!

TCPM

ELT/MEC

**TCPM** INGENIEURS  
& ADVISEURS

*Working at TCPM means that you are part of a unique, forward-thinking organization. We work together and encourage each other to perform at the highest level. As far as we are concerned, things can always be a little better, stronger, more convenient or smarter.*

Contact details: [solliciteren@tcpm.nl](mailto:solliciteren@tcpm.nl) or call 088-2201500



## Equans

**Gevestigd in Arnhem**

### ELT/MEC

*Equans is the world leader in technical services and is part of the international Bouygues group. We help customers realize and accelerate the 3 major transitions: the energy, digital and industrial transition. We do this in the Netherlands with 5,500 employees at 29 locations.*

### **Assignment:**

*Are you looking for an internship in your area for your technical higher professional education? Where you learn a lot and work with the latest tools and techniques? That's exactly what we have for you at Equan's Arnhem branch! We have internships as work planner, service coordinator, project leader and contract manager in the utility and industry. You agree with us on the content of your internship and it is tailored to your personal development needs, interests and background. You will have a supervisor who supports and coaches you in your work.*

*Website: [www.equans.nl](http://www.equans.nl)*

*Contact person: Nick de Bondt*