Vocational training in Germany (Ausbildung)

Technical product designer (Technischer Produktdesigner/in)

Technischer Produktdesigner / Technische Produktdesignerin

You design machines and products with CAD software and prepare the documents for manufacturing: a paid 42-month training in a design office and at vocational school.

LEVEL	DURATION	GERMAN	PAY DURING TRAINING
Baccalaureate required	**3.5 years** 42 months	**B2** required level	**€1,119 to €1,441** gross / month, during the training

We are by your side from day one until you arrive in Germany.

GERMANY
+49 (0) 7033 694 18 80

CAMEROON
+237 622 20 81 64

www.campus-allemagne.org

Douala office : Rond-point Maetur Bonamoussadi – Nice Cream building (4th floor), opposite the COGENI hardware store, Douala, Cameroon

View the full sheet online

THE OCCUPATION IN 30 SECONDS

What a technical product designer does

They design machines, plant or products to the customer's wishes, create 3D models, choose materials and standard parts, then produce drawings, parts lists and assembly plans.

Design

Use CAD to create precise models of machines, plant or products, following standards.

Dimension

Choose materials and standard parts, calculate and plan for economical manufacturing.

Document

Produce drawings, parts lists and assembly plans, manage versions and back up the data.

This occupation is for you if...

- ✓ you like drawing, building and picturing objects in three dimensions
- ✓ you are precise and careful in your drawings and calculations
- ✓ you want to understand how machines work
- ✓ you like working at a screen, in contact with customers and workshops

Less suitable if...

- – you do not want to spend the day at a screen
- – you dislike calculations and the rigour of standards
- – you mainly want manual work in a workshop

A TYPICAL DAY IN THE WORKSHOP

08:00 **Meeting with the design team** : Review current projects, change requests and the priorities of the day.

08:45 **Freehand sketching** : Sketch a part by hand to clarify an idea before moving on to modelling.

10:00 **Modelling the part in 3D CAD** : Build the part in 3D, taking into account the material and how it will be manufactured.

13:00 **Calculations and choosing components** : Calculate the forces, select standard parts and check that the solution is economical.

14:30 **Drawings and parts lists** : Produce the manufacturing drawing, parts list and assembly plan to send to the workshop.

16:00 **Managing versions** : Save the new version of the model, update the documents and back up the data.

2D and 3D CAD | Standardised technical drawing | Design calculations | Material selection | Parts lists and assembly plans | Product data management | Precision | Spatial sense | Logic | Customer focus | Rigour

THE TRAINING

How the Ausbildung works

In Germany you learn by working: this is the “dual system”. You are an employee of a company and a student at a vocational school (Berufsschule) at the same time.

3 to 4 days a week at the company | **1–2 days school**

Year 1
The fundamentals
- Technical drawings and sketches
- CAD basics
- Materials and manufacturing processes

Year 2
Design
- Designing parts and subassemblies
- Calculations and simulations
- Part 1 of the final exam

Year 3
The specialisation
- Designing machines or products
- Choosing manufacturing processes
- Projects with customers

Year 4 (6 months)
Towards the exam
- A complete design project
- Manufacturing documents
- Part 2 of the final exam

Exams and qualification

The final exam (Abschlussprüfung) has two parts. Part 1, towards the end of the second year, covers technical documents. Part 2, at the end of training, comprises a work assignment, development and design, then economics and social studies. You obtain the IHK final certificate from the Chamber of Commerce and Industry.

YOU ARE PAID DURING THE TRAINING

What you need to apply

- ✓ Baccalaureate level is required.
- ✓ The required level is B2. Good technical vocabulary for the trade is a real plus.
- ✓ The work is mainly screen-based in offices, with visits to production halls where machine noise is present.

Documents to prepare

- ✓ CV and cover letter in German
- ✓ Translated baccalaureate diplomas and transcripts
- ✓ German B2 level certificate

AFTER THE TRAINING

Where it can lead

STRAIGHT AWAY

Draughtsperson in a design office

Work in industry, in a design office or for an industrial services provider.

WITH EXPERIENCE

Technician (Techniker)

Train as a mechanical engineering technician through further training.

LONGER TERM

Studies or own design office

With university entrance qualification: a bachelor's in mechanical engineering; or set up a design office.

YOUR PATHWAY WITH CAMPUS GERMANY

We are by your side from day one until you arrive in Germany

1

CHECK MY ELIGIBILITY

Take the test online or at the office

The eligibility test is done online on our website, or by visiting our Douala office directly.

2

TALK TO AN ADVISOR

Talk to our team

Germany: **+49 (0) 7033 694 18 80**
Cameroon: **+237 622 20 81 64**

3

PREPARE YOUR GERMAN

DZK, our language centre

Deutschzentrum KAGEDEV (DZK) is our own language centre in Douala. Outside Douala: partner language centres, call us to find the nearest one.

4

GET THE CONTRACT

AZUFA is always us

AZUFA is our platform: it connects you with German companies that recruit apprentices and follows your application through to the training contract.

Douala office

Rond-point Maetur Bonamoussadi – Nice Cream building (4th floor), opposite the COGENI hardware store, Douala, Cameroon

From German A1 to the first day of training in Germany

Each step is run by one of our structures. You keep the same contact from start to finish.

1 — **Check my eligibility**
The test is done online on our website or at our Douala office.
RUN BY CAMPUS GERMANY

2 — **Talk to an advisor**
Review your profile, your wishes and the chosen occupation.
RUN BY CAMPUS GERMANY

3 — **Learn German, from A1 to B2**
Courses adapted to your starting level, up to the required B2 level. In Douala at our own language centre; elsewhere, with our partner centres.
RUN BY DZK

4 — **Prepare the application file**
CV and cover letter in German, translated baccalaureate diplomas and transcripts, B2 level certificate.
RUN BY CAMPUS GERMANY

5 — **Find the company and sign the training contract**
We connect you with German companies that recruit apprentices, and follow your application through to the contract.
RUN BY AZUFA

6 — **Prepare the visa and paperwork**
Support to gather the documents and complete the administrative steps.
RUN BY CAMPUS GERMANY

7 — **Prepare your departure and settling in**
Travel, housing and first steps in Germany: we prepare you before you leave.
RUN BY KAGEDEV E.V.

8 — **First day of training in Germany**
You arrive prepared and supported, with a team that has known you since day one.
RUN BY AZUFA

Contact us

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