



Internship Book **2024/2025**

Discover, Learn, Thrive: Embracing the future

Bako in a nutshell:

Bako Motors is the first **Tunisian** company specialized in the development and manufacturing of **Solar Electric** vehicles.



HOW TO APPLY ?

1.

Choose
your topic

Find the topic in the
next pages.

2.

Send your
CV

Send your CV with the
reference topic to:
hr@bakomotors.com

3.

Pre-selection &
Interview

After the acceptance,
we will welcome you
for the interview.

2023/2024 Internship fields:

- Product design
- Mechanical engineering
- Electrical engineering
- Industrial Engineering
- Industrial-Quality Engineering
- Sales
- UX design
- Artificial intelligence
- Finance
- Administration



Subject: 1

Product Design

- Number of trainees: 1
- Period: 3-4 months

What you will do:

- Create high-quality freehand sketches and digital renderings
- Communicate effectively with different teams to ensure a seamless workflow.
- Employ creative thinking to provide innovative design solutions.
- Utilize technical knowledge to support the design process and project requirements.
- Gain valuable insight into industrial processes related to automotive design.

Required Expertise:

- Free hand sketch and/or digital sketch.
- Modeling software: Blender, SolidWorks, Alias...
- Technical background.
- Teamwork skills and flexibility.
- Good creative mindset, under pressure work capability.

Subject: 2

Mechanical engineering

Dynamic stability study

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Study the suspension behavior on different roads.
- Study the gravitational dynamics.
- Optimize the results to the better vehicle stability.

Required Expertise:

- 3D simulation.
- Matlab.
- Good analyzing skills.
- Teamwork skills and flexibility.

Subject: 3

Reverse engineering & aerodynamic study

Surfacing

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- 3d scan cleaning
- Creation of surface from 3d scan
- Generate an assembly from surfaces
- Aero dynamic study

Required Expertise:

- Catia surfacique or equivalent
- Ansys simulation or equivalent
- Good analyzing skills
- Teamwork skills and flexibility

Subject: 4

Electrical engineering / Mechatronics

Battery cooling system

- Number of trainees: 1
- Period: 4-6 Months

What you will do:

- Create a battery cooling system.
- Calculate the energy consumption.
- Validate the results through test.

Required Expertise:

- PID regulation.
- MATLAB / ANSYS
- Good analyzing skill.
- Team work skill and flexibility.

Subject: 5

Industrial Engineering

Value stream mapping of the current state of the production system by representing the three main points:

- Information flow
- Material flow
- Lead time

- Number of trainees: 1
- Period: 4-6 Months

What you will do:

- Added value Analysis.
- Waste identification & reduction.
- Eliminate bottlenecks.
- Line balancing.
- Minimize and buffer variation.

Required Expertise:

- Teamwork & flexibility.
- Strong analytical and problem-solving skills.
- Good knowledge of lean tools: VSM, 5S, JIT, Kaizen, Kanban, VA.
- Software: Arena, Visio, Excel.

Subject: 6

Industrial Engineering

Analysis and optimization
of the supply chain strategy.

- Number of trainees: 1
- Period: 4-6 Months

What you will do:

- Work on Product Supply-related data.
- Manage & optimize information flows & material flow.
- Inventory reduction.
- Supplier leadtime management into ERP.
- Warehouse reorganisation.

Required Expertise:

- Teamwork & flexibility.
- Strong analytical and problem-solving skills.
- ERP Knowledge, JIT, Kanban...

Subject: 7

Industrial/Quality Engineering

ISO 45001

What you will do:

- Analysis of performance indicators before certification.
- Impact on employee health and safety.
- Methodology for identifying and assessing risks in the workplace.
- Proposal of an action plan to minimize these risks.

Required Expertise:

- Industrial Engineering Basics
- Analytical Skills
- Documentation and Reporting
- Communication and presentation Skills

- Number of trainees: 1
- Period: 3-4 Months

Subject: 8

Industrial/Quality Engineering

Problem Solving Methodologies

- Number of trainees: 1
- Period: 3-4 Months

What you will do:

- Study of common methods (such as PDCA, DMAIC, 5 Whys) and their application in a real case.
- Analysis of the effectiveness of these methods on specific problems.

Required Expertise:

- Industrial Engineering Basics
- Problem-Solving Methodologies
- Analytical Skills
- Documentation and Reporting
- Communication and presentation Skills
- Team Collaboration
- Project Management Basics

Subject: 9

Quality Engineering

IATF

- Number of trainees: 1
- Period: 3-4 Months

What you will do:

- Understand the requirements of ISO 22301 for business continuity.
- Analyze the specific risks of a selected organization.
- Develop a comprehensive emergency plan, including response, recovery and communication procedures.
- Risk analysis: Identify potential threats (natural, technological, human) and assess their impact.
- Develop the plan: Develop operational procedures, communication plans and recovery strategies.

Required Expertise:

- Good communication level.
- Sense of leadership.
- Analytical and critical thinking abilities.
- Knowledge of quality management concepts, tools and methods.

Subject: 10

Industrial Engineering

KSA Plant design



What you will do:

- Study automotive production needs.
- Assist in designing and implementing process flow and quality checkpoints.
- Conduct a safety assessment of the assembly process and recommend improvements to meet automotive industry standards.
- Establish value stream mapping.
- Identify potential bottlenecks.

Required Expertise:

- Industrial Engineering Basics
- Analytical Skills
- Documentation and Reporting
- Communication and presentation Skills

- Number of trainees: 1
- Period: 3-4 Months

Subject: 11

Software engineering

App dev

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Upgrade the existing vehicle App.
- Integrate AI into the mobile app to perform lightweight data analysis on vehicle data.
- Ensure low-latency, seamless interaction between the app, server, and vehicle for real-time feedback,

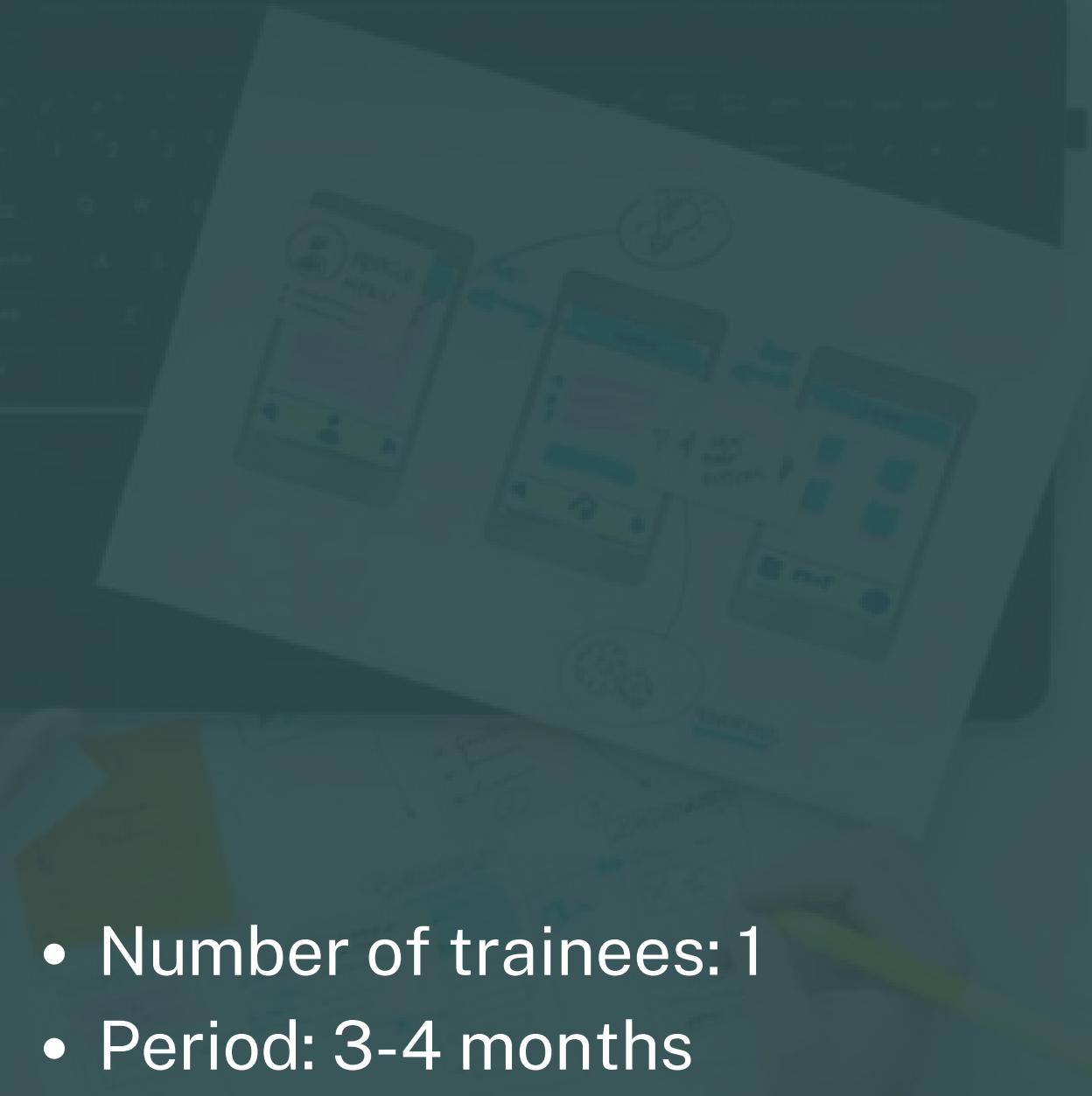
Required Expertise:

- AI/ML Development: Experience with integrating AI models into mobile apps.
- Mobile App Development: Proficiency in mobile frameworks (Android/iOS) to embed AI models and handle real-time communication.
- Real-Time Communication Protocols: Expertise in WebSocket and MQTT for real-time data transfer

Subject: 12

UX design

Bee owner App

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- Number of trainees: 1
 - Period: 3-4 months

What You Will Do:

- Collaborate with our design and engineering teams to create an intuitive mobile app interface that enables Bako Bee owners to monitor their vehicle's performance and maintenance needs.
- Integrate real-time data displays for solar energy usage, battery health, and vehicle diagnostics.
- Develop a booking and management system for Bako Bee rentals within the app.
- Conduct testing and collect feedback to ensure a seamless user experience, focusing on user satisfaction and app reliability.

Required Expertise:

- Strong knowledge of mobile app development.
- Understanding of APIs and backend integration.
- Experience in user interface (UI) and user experience (UX) design, with a focus on creating clean, accessible layouts.

Subject: 13

Generative AI

Automotive development

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Focus on preparing the groundwork for implementing generative AI by gathering critical business requirements, analyzing market and technical data, and collaborating with stakeholders across design, production, and maintenance.

Required Expertise:

- Data Preprocessing & Cleaning
- Creative Problem-Solving
- Natural Language Processing
- Curiosity and Willingness to Learn

Subject: 14

Sales

Market Research

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Conduct in-depth market research to identify trends and emerging opportunities.
- Analyze consumer behavior and preferences in the electric vehicle sector.
- Prepare market reports and provide insights for decision-making.
- Collaborate with the team to develop strategies based on market findings.

Required Expertise:

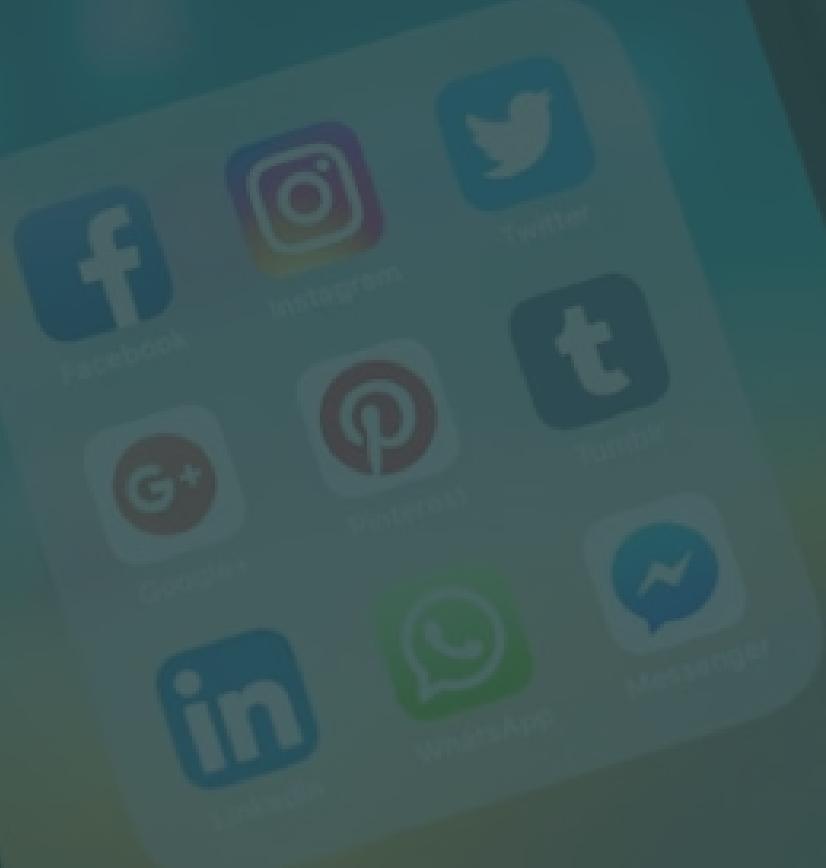
- Excellent research and data analysis skills.
- Attention to detail and ability to draw actionable insights.
- Strong report-writing skills.
- Proficiency in market research tools and methodologies.

Subject: 15

Marketing

Digital marketing

Social Networks



- Number of trainees: 1
- Period: 4 months

What you will do:

- Collaborate with the content and creative teams to produce visuals, videos, and blog posts showcasing the Bako models unique features, benefits, and real-life use cases.
- Utilize SEO techniques to increase the Bako's visibility on search engines, improving organic traffic to Bako Motors' website.
- Analyze campaign performance metrics, using tools like Google Analytics and social media insights, to refine strategies and optimize engagement.

Required Expertise:

- Knowledge of social media management and content creation, particularly in the context of brand storytelling.
- Familiarity with digital marketing tools (e.g., Google Analytics, Facebook Ads Manager) and SEO best practices.
- Strong writing and visual storytelling skills, with a passion for sustainable and innovative technology.
- Basic understanding of branding principles, and creativity in engaging target audiences.

Subject: 16

Sales

Customer Relationship
Management (CRM)

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Assist in the implementation and maintenance of our CRM system.
- Manage customer data, including updates and segmentation.
- Help streamline customer communications and feedback.
- Contribute to CRM best practices and training for the team.

Required Expertise:

- Familiarity with CRM systems.
- Strong organization and attention to detail.
- Good interpersonal skills.
- Basic data management skills.

Subject: 17

Sales

Sales Retail

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Assist in customer interactions, product demonstrations, and inquiries.
- Contribute to retail sales strategies and promotional events.
- Work closely with the sales team to achieve sales targets.

Required Expertise:

- Strong customer service skills.
- Effective communication and sales skills.
- Ability to work in a retail environment.
- Enthusiasm for the product and sales.

Subject: 18

Sales

After-Sales Services

- Number of trainees: 1
- Period: 4-6 months

What you will do:

- Learn about post-purchase customer service and support.
- Assist in managing after-sales inquiries, warranty claims, and service scheduling.
- Collaborate with the after-sales team to ensure customer satisfaction.
- Contribute to the development of after-sales service improvements.

Required Expertise:

- Customer-centric mindset and problem-solving skills.
- Effective communication and interpersonal skills.
- Ability to handle customer inquiries and resolve issues.
- Basic understanding of automotive after-sales services.

Subject: 19

Finance

Financial Performance Metrics

- Number of trainees: 1
- Period: 4-6 Months

What you will do:

- Identify and track key financial performance indicators for the start-up and provide recommendations for improvement.

Required Expertise:

- Metric selection and tracking skills.
- Data analysis and visualization capabilities.
- Reporting and communication skills.

Subject: 20

Finance

Carbon Trading and Emissions Management.

- Number of trainees: 1
- Period: 4-6 Months

What you will do:

- Research, analyze, and develop strategies for carbon trading and emissions management. Explore the financial implications and opportunities associated with carbon credits, offsets, and emissions reduction initiatives within the electric vehicle manufacturing industry.

Required Expertise:

- Emissions data collection and analysis.
- Sustainability reporting and environmental finance skills.

Subject: 21

Administration

HR

- Number of trainees: 1
- Period: 3-4 months

What you will do:

- Update the internal databases with new employees' information.
- Schedule and confirm interviews with candidates.
- Review and share company policies.
- Participate in organizing the company's events and careers days.

Required Expertise:

- Teamwork skills and flexibility.
- Good communication skills.



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FIND US:



Bako Motors



<https://goo.gl/maps/RCDBGJK5P12u4WrMA>