Casco Automotive Tunisia

PFE Book **2025–2026**

Driving Power – Full Solution

INTERNSHIP PROGRAM

Industrial & Engineering Excellence

Agenda

01
Company Overview

02
Automotive Industry & Context

03
PFE Program Overview

04
PFE Topics by Department

05
Application Process

06
Why Choose Casco

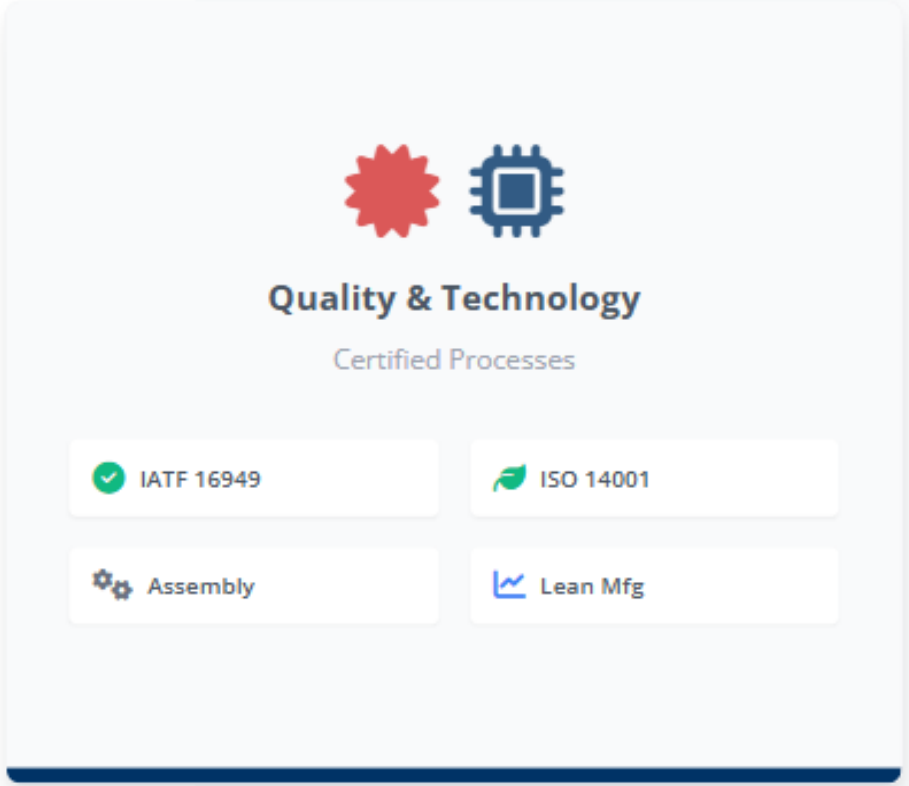
07
Contact Information

Company Overview

- **Automotive components manufacturer**
  Specializing in high-precision parts and systems.
- **Established in 2004**
  Over two decades of industrial excellence in Tunisia.
- **Supplier to major global OEMs**
  Trusted partner for leading automotive brands worldwide.
- **Global Industrial Network**
  Member of Casco group with presence in USA, Europe, and Asia.
- **Corporate Culture**
  Strong focus on quality, teamwork, and continuous improvement.

Certifications & Capabilities

- **ISO TS 16949 / IATF 16949**
  Certified Quality Management System for automotive industry.
- **ISO 14001**
  International standard for effective Environmental Management Systems.
- **Manual & Semi-Automated Lines**
  Flexible production setup adapting to volume and complexity needs.
- **Core Manufacturing Processes**
  Expertise in PCBA, stamping, over-molding, and final assembly.
- **Strategic Industrial Focus**
  Commitment to Digitalization and Lean Manufacturing principles.



Automotive Industry & Internship Context

High quality and cost pressure

Navigating a competitive global market that demands zero defects and cost efficiency.

Short product life cycles

Adapting to rapid technological evolution and accelerated go-to-market strategies.

Focus on digitalization & traceability

Implementing Industry 4.0 standards for complete process control and data-driven decisions.

Real industrial PFE projects

Bridging academic theory with practical application in a demanding environment.

Casco's Value Proposition

Providing hands-on, value-added engineering topics that solve real operational challenges.

PFE Program Overview

Departments Involved

- Production
- Purchasing
- Quality / HSE
- Engineering
- Human Resources
- Logistics
- Laboratory

Profiles Targeted

Industrial Engineering
Process optimization, Lean, Manufacturing

Software & Data Engineering
Power BI, Digitalization, Development

Quality & HSE
Standards compliance, Safety, Risk Mgmt

Supply Chain & Logistics
Flow optimization, Stock management

Production Department – Role

- **Manage manufacturing and assembly operations**
  Overseeing daily floor activities to ensure smooth operational flow.
- **Ensure productivity, quality, and delivery**
  Meeting QCD targets through rigorous monitoring and control.
- **Support new product launches**
  Coordinating industrialization phases for new automotive components.
- **Apply Lean Manufacturing principles**
  Driving continuous improvement and waste reduction strategies.

Operational Excellence

PRODUCTION LINES

PRODUCTION DEPT. PFE PROJECT #1

Power BI Dashboard

Project Milestones Follow-Up

Context

Lack of consolidated visibility on project progress across different manufacturing lines.

Objectives

- ✓ Automated project tracking system.
- ✓ Real-time KPIs and deviation alerts implementation.

Expected Outcomes

- Better data-driven decision-making.
- Improved project governance and transparency.

Skills Required

Power BI | DAX | Excel | Project Management

PRODUCTION DEPT. PFE PROJECT #2

Launch Project Dashboard

Ramp-Up / Ramp-Down Monitoring

Context

Complex production & quality monitoring during critical launch phases (Ramp-up) and end-of-life (Ramp-down).

Objectives

- ✓ Monitor readiness and process stability.
- ✓ Track scrap rates, flow efficiency, and key launch KPIs.

Expected Outcomes

- Secure and smooth industrialization phases.
- Faster reaction time to quality deviations.

Skills Required

Industrial Eng. | Power BI/Excel | Production Basics

PRODUCTION DEPT. PFE PROJECT #3

Kanban Workflow

Optimization & Material Flow

Context

Inefficient material flow between operations causing delays and inventory inaccuracies.

Objectives

- ✓ Identify production bottlenecks.
- ✓ Design and implement an efficient Kanban system.

Expected Outcomes

- Significantly reduced stock levels (WIP).
- Shorter production lead time.

Skills Required

Lean Manufacturing | Problem Solving | Field Analysis

Purchasing Department – Role

Manage Suppliers & Procurement

Strategic sourcing, evaluation, and management of supplier relationships to ensure compliance with quality standards.

Control Purchasing Costs

Optimizing budgets through negotiation, market analysis, and cost-saving initiatives.

Support Production Needs

Ensuring timely availability of raw materials and components to maintain uninterrupted production flow.

PURCHASING DEPT. PFE PROJECT #1

Tool Life Tracker

Usage & Procurement Optimization

Context

Limited visibility on tool consumption patterns and replacement cycles.

Objectives

- ✓ Track tool usage and wear systematically.
- ✓ Optimize purchasing frequency based on data.

Expected Outcomes

- Significant cost reduction on consumables.
- Improved supplier negotiation capability.

Skills Required

Excel / Power BI | Machining Basics | Purchasing

PURCHASING DEPT. PFE PROJECT #2

Purchasing Budget

Investment Tracker

Context

Dispersed purchasing data across systems making consolidation difficult.

Objectives

- ✓ Actual vs planned spend tracking.
- ✓ Budget forecasting and analysis.

Expected Outcomes

- Improved financial control.
- Enhanced visibility on investments.

Skills Required

Finance | Procurement | Excel / Power BI

Quality & HSE Department – Role

Ensure compliance with standards

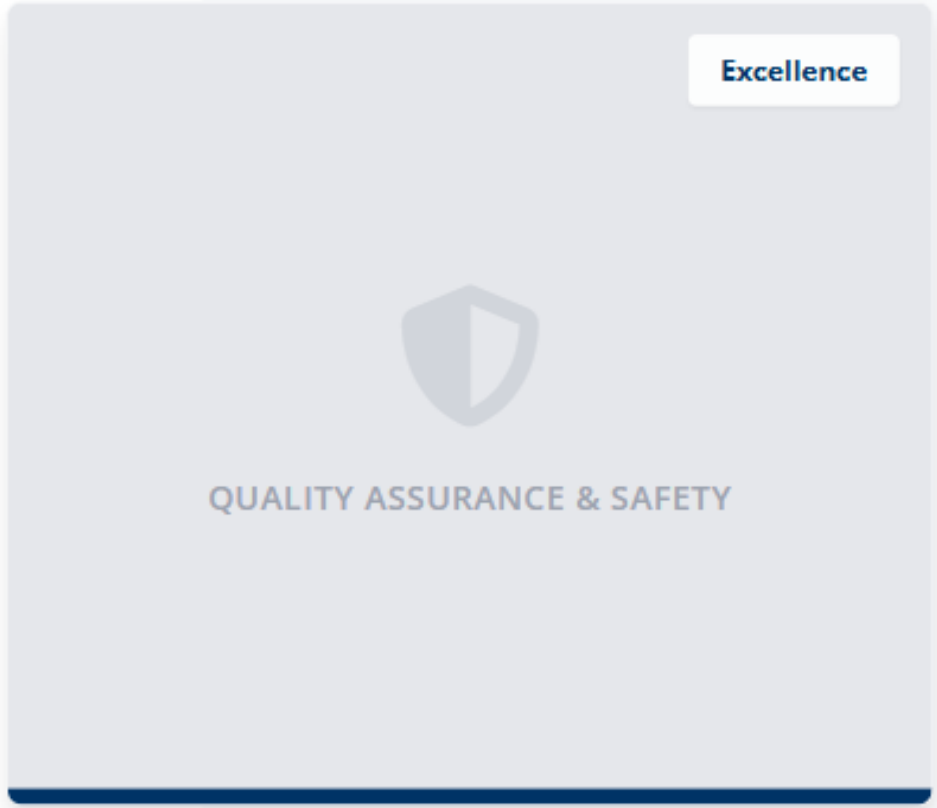
Rigorous adherence to automotive quality norms (IATF 16949), ISO 9001, and specific customer requirements.

Improve safety and environmental performance

Fostering a zero-accident culture and sustainable manufacturing practices through ISO 14001 and ISO 45001 frameworks.

Drive continuous improvement

Leading root cause analysis, implementing preventive measures, and optimizing processes to reduce waste and defects.



Quality & HSE Projects Overview

ISO Systems

Implementation and maintenance of integrated management standards (IATF 16949, ISO 14001).

Risk Management

Proactive risk analysis methodologies including FMEA and SWOT for robust industrial processes.

Digital Quality Tools

Modernizing quality assurance through digitalization, real-time data tracking, and smart reporting.

Safety & Environmental Performance

Driving a zero-accident culture, ergonomic improvements, and sustainable waste management.

Quality Projects (Examples)

- **Lessons Learned Cards digital library**
  Digitalizing knowledge management to prevent recurrence.
- **ISO 50001 Energy Management**
  Implementation of energy efficiency standards and monitoring.
- **ISO 17025 Laboratory Compliance**
  Ensuring technical competence and valid testing results.
- **ISO 27001 Information Security**
  Strengthening data protection and information assets security.
- **Risk Analysis (ISO 45001 & 31001)**
  Integrated risk management for occupational health and safety.

PFE 2025–2026

QUALITY ASSURANCE

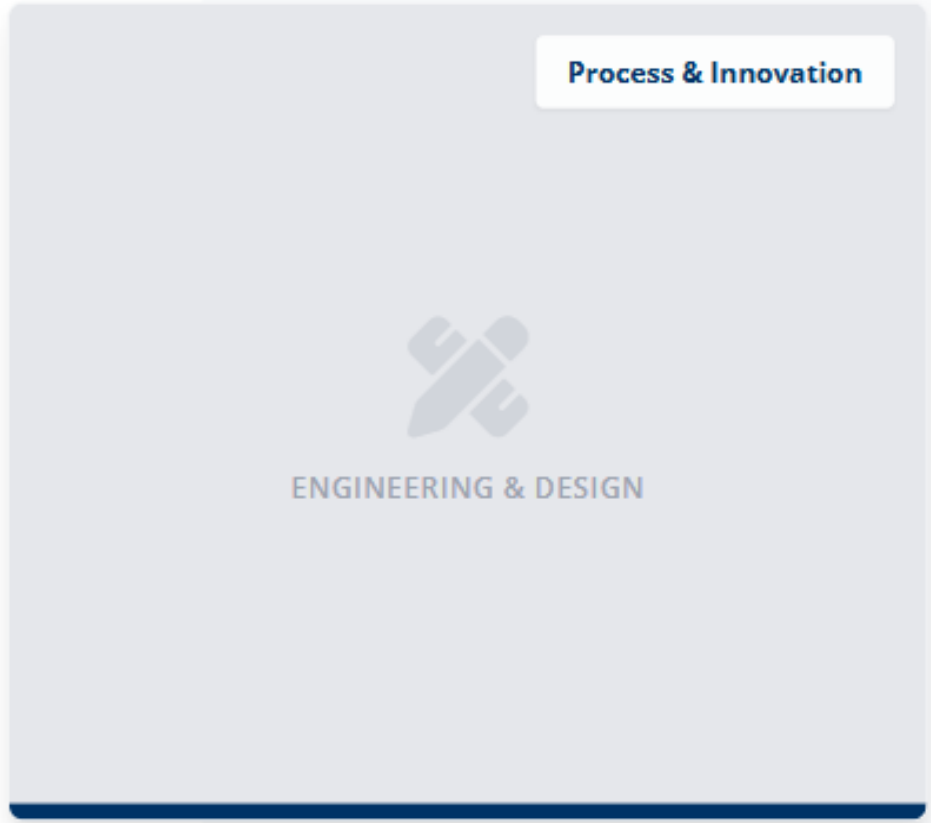
Standards & Compliance

HSE Digital & Analytical Projects

- **Ergonomic workstation studies**
  Digital simulation and assessment of operator posture to prevent MSDs.
- **Workplace accident analysis (Data & NLP)**
  Leveraging Natural Language Processing for deep incident root cause analysis.
- **Mobile safety reporting app**
  Development of a real-time hazard identification and tracking tool.
- **Climate risk analysis (ISO 14090/14091)**
  Strategic framework for climate adaptation and long-term resilience.
- **Waste & chemical management platforms**
  Digitalizing environmental tracking and compliance workflows.

Engineering Department – Role

- **Line design and optimization**
  Creating efficient production layouts, balancing workflows, and optimizing manufacturing processes.
- **Industrial project management**
  Leading technical implementation from concept to industrialization and mass production.
- **Digital tools development**
  Innovating with software solutions to enhance process control, data visibility, and automation.



Engineering Core Projects

Production line balancing (VW Line)

Optimization of workload distribution across stations to minimize idle time and maximize throughput for the Volkswagen production line.

PCBA common operations optimization

Standardization and efficiency improvement of shared processes in Printed Circuit Board Assembly across different product lines.

MTM-based cycle time tools

Development and implementation of Methods-Time Measurement tools to scientifically analyze and reduce standard cycle times.

Process Optimization

Efficiency • Standardization • Analysis

Digital Engineering Platforms

- **IC Price Management Platform**
  Advanced costing and pricing strategy tools.
- **DMPP & DP Management Platforms**
  Digital manufacturing process planning systems.
- **Industrial Project Management**
  Centralized platform for project tracking and governance.
- **Digitalization of Production Docs**
  Paperless shop floor documentation and reporting.
- **MTM Calculation Platform**
  Standardized time measurement and analysis tools.

Industry 4.0

SOFTWARE SOLUTIONS

Human Resources Department – Role

Talent Integration

Streamlining recruitment processes and ensuring smooth onboarding for new team members to foster immediate engagement.

Skills Development

Implementing comprehensive training programs and competency matrices to drive professional growth and versatility.

Workforce Planning

Aligning human capital strategies with production needs and long-term organizational goals.

HUMAN RESOURCES DEPT. PFE PROJECT #1

Digital Onboarding Platform

Streamlining the new hire journey

Objectives

Centralized Process

Consolidate all onboarding documents, tasks, and schedules into a single digital interface.

Automated Follow-up

Implement triggers for reminders and progress tracking for both HR and new employees.

STRATEGIC VALUE

Better Employee Experience

Creating a welcoming, organized, and engaging first impression to improve retention and accelerate integration.

HUMAN RESOURCES DEPT. PFE PROJECT #2

Competency Matrix Platform

Digitalizing skills management and development

Objectives

Skills Evaluation

Assess current employee competencies against job requirements to identify gaps.

Training Planning

Create targeted development plans based on data-driven skill gap analysis.

STRATEGIC VALUE

Strategic Workforce Development

Ensuring the organization has the right skills in the right place to meet future challenges.

Logistics Department – Role

Material flow management

Orchestrating the efficient movement of raw materials and finished goods through the plant.

Inventory optimization

Balancing stock levels to minimize holding costs while ensuring production continuity.

Supply chain performance

Monitoring key performance indicators (KPIs) to ensure timely delivery and supplier reliability.

VSM & Stock Optimization Project

Objectives

Map Current Logistics Flows

Visualize the end-to-end process to understand current state.

Identify Waste & Bottlenecks

Pinpoint inefficiencies and areas causing delays in the supply chain.

Optimize Stock Levels

Balance inventory to reduce holding costs while ensuring availability.

Tools

VSM
Value Stream Mapping

ABC / XYZ Analysis
Inventory Categorization

Kanban
Lean Scheduling System

Power BI
Data Visualization & Analytics

Laboratory Department – Role

Testing and validation

Conducting rigorous material analysis, product validation, and reliability testing to ensure all components meet strict performance criteria.

Compliance with international standards

Adhering to global automotive regulations and quality frameworks, including ISO/IEC 17025, to guarantee certified and traceable results.

ISO/IEC 17025 Accreditation Project

Objectives

- Gap analysis
- QMS development
- Method validation

Outcome

ISO 17025 Accreditation

Formal recognition of the laboratory's technical competence and quality management system.

Ensures international validity of test results.

Application Process

Your journey to joining Casco Automotive Tunisia

CV Submission

Send your resume via our careers email or official university platform.

CV Screening

HR team reviews qualifications against project requirements.

HR Interview

Initial conversation to assess soft skills and cultural fit.

Technical Interview

In-depth assessment with department managers on specific PFE topics.

Note: Successful candidates will receive an official internship offer letter within 1 week of the technical interview.

Why Choose Casco

Real industrial projects

Work on impactful challenges that directly contribute to production and engineering goals.

Strong technical supervision

Benefit from mentorship by experienced engineers and managers throughout your internship.

Digital & Lean culture

Immerse yourself in a modern environment focused on Industry 4.0 and continuous improvement.

High employability value

Gain practical skills and experience that are highly valued in the automotive job market.

Contact Information

Get in touch with our team

Email Address

FOR APPLICATIONS & INQUIRIES

oumayma.lassoued@cascoauto.com

Website

VISIT OUR GLOBAL NETWORK

www.cascoauto.com

Location

CASCO AUTOMOTIVE TUNISIA

Bizerte – Menzel Bourguiba

Industrial Zone

JOIN US IN DRIVING THE FUTURE

THANK YOU

Casco Automotive Tunisia

Driving Power – Full Solution

CASCO
AN AMPHENOL COMPANY