

IE Job Description

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Industrial Engineer/Process Engineer

Boeing Commercial Airplanes

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Main Areas IEs Work In at The Boeing Co.

- **MANAGE PROJECTS**
 - Project Management
 - Project Scheduling
 - Risk Management
- **PROCESS IMPROVEMENT**
 - Lean Manufacturing
 - Engineering Economic Analysis
 - Process Modeling
 - Root Cause Analysis
 - Statistical Methods
 - Six Sigma
 - Time Studies
 - Work Sampling
- **SUPPLY CHAIN ANALYSIS**
 - Supply Chain Alignment
 - Material Logistic
 - Inventory Control
 - Supplier Support
 - Make/Buy Mfg Process
- **OPERATIONS IMPROVEMENT**
 - Ergonomics & Human Factors
 - Operating Plans
 - Recovery Planning
 - Capacity Planning
- **INTEGRATED SYSTEMS**
 - Value Stream Analysis
 - Facilities Layout
 - Production System Design
 - Manufacturing Process Design
 - Systems Thinking
- **DIRECT SUPPORT TO PRODUCTION**
 - Production Scheduling
 - Theory of Constraints
 - Budgets & Forecasts
 - Crew Empowerment
 - Defect Analysis
 - Benchmarking Analysis

Industrial Engineering Functional Work Areas

Product Engineering



- Team Facilitation
- Product Development

Finance



- Make/Buy Analysis
- Comparison of Alternatives
- Cost Estimating

Quality



- SPC/SQC
- DOE
- Supplier Quality
- Queuing Theory
- Six Sigma

Project Management



- Resource Planning
- Risk Analysis
- Project Scheduling

Production Control



- Job Scheduling
- Expedite procedures

Facilities



- Layout Design
- Process Flow Analysis

Factory Operations



- Production Simulation
- Theory of Constraints
- Systems Integration
- OSHA Regulations
- Safety Management
- Linear Programming
- Lean Manufacturing

Transportation



- Logistics Planning
- Material Handling

Training



- Course Facilitation

IE Methods



- Workstation Design
- Ergonomics
- Methods Engineering

Tooling



- Tool Fab process
- Tool Offload procedures
- Tool Repair process
- Tool Room procedures

Inventory



- Inventory Management
- Supplier Selection
- Material Requirements Planning
- Supply Chain Management