Edarabia

Mechanical Engineer (Sample Job Description) PDF

This Mechanical Engineer job description template includes key Mechanical Engineer duties and responsibilities. You can post this template on job boards to attract prospect applicants.

Job Brief:

We are looking for a creative Mechanical Engineer to work on all product stages from research and development to design and manufacture, through to installation and final commissioning. The goal is to design and fabricate mechanical components of innovation and excellence.

Responsibilities:

- Perform a full lifecycle product development (design, develop, test prototypes, manufacture and implement)
- Design systems and components that meet needs and requirements
- Produce outline designs
- Conduct experiments methodically, analyse data and interpret results
- Test and evaluate theoretical designs
- Identify, formulate and produce effective solutions to emerging problems
- Evaluate final product’s overall performance, reliability and safety
- Alter and modify design to meet requirements and to eliminate malfunctions
- Estimate budget and scope of project
- Solicit observations from operators
- Prepare product reports and documentation
- Engage in lifelong learning and develop new theories or methods

Requirements:

- Proven working experience in mechanical engineering

- Working experience with product lifecycle management (PLM), finite element analysis (FEA) and computational fluid dynamics (CFD)
- Hands-on experience with computer-aided engineering (CAM) and computer-aided manufacturing (CAE)
- Familiarity with 2D or 3D engineering design and manufacturing tools (e.g., AutoCAD, ProE or other)
- Adequate knowledge of engineering analysis tools (ANSYS, ProMechanica or similar)
- Mathematical computing and analysis tools knowledge (Matlab, Excel, LabView etc)
- Solid understanding of core concepts including mechanics, kinematics, thermodynamics, materials science etc.
- Creativity and analytical skills
- Ability to communicate technical knowledge in a clear and understandable manner
- Technical writing skills
- BSc degree in Engineering