Automotive Senior Design Engineer - Job Description

Definition:

Design is defined as: Designing systems, processes, methodologies as well as component and vehicle designs to enhance the overall vehicle performance for the customer and environment. Transforming concepts into prototypes for testing, validating and improvement for ultimately mass volume production. This includes designing to meet costs, timing and quality requirements.

Overall Purpose of the Role:

- Research and develop ideas for new products, technologies, components, processes and the systems used to make them.
- Work to improve the performance and efficiency of existing products.
- Very hands on position, demanding high levels of creativity and flexibility.
- Works under general supervision, reviewed at project milestones and on completion.

Key Responsibilities:

General and Task Management

- Ability to capture and specify the design requirements
- Produce design ideas, based on research, into technical plans for prototypes using computer-aided design (CAD) and computer-assisted engineering (CAE) software
- Attend design reviews to present design ideas and to discuss and critique alternative design solutions
- Modify designs based on the analysis to re-test and analyses until design meets specification requirements
- Control of Bill of Materials (BoM), CAD Models and Engineering Drawings
- Write reports and present progress at project meetings and to clients
- Conduct benchmarking studies to determine best practices/designs and future trends

Skills and Attributes:

- Strong analytical and numeracy skills
- A creative, logical approach for generating new ideas and solutions, with the ability to transition through to part development
- A sound knowledge of computer aided design (CAD) software, technical drawings and 3D modelling
- An excellent grasp of engineering and design principles
- An understanding of manufacturing processes and construction methods

Qualifications and Experience Levels:

- Relevant manufacturing/engineering degree preferred, or ONC, A Levels, B. Tech Diploma Level 3 or equivalent NVQ level 3 qualification
- 5-10 years relevant work experience
- Experience of using Auto CAD / Pro Engineer / CATIA V5 / Unigraphics NX
- Experience in BOM (Bill of Material) structures