

# PRODUCT DESIGNER/DEVELOPER

ALSO KNOWN AS: **PRODUCT DEVELOPMENT DESIGNER** **CONSUMER PRODUCT DESIGNER** **DESIGN ENGINEER**

**PRODUCT INNOVATION SPECIALIST**

## SHAPE THE FUTURE OF EVERYDAY OBJECTS AND EXPERIENCES.

As a Product Designer, you'll blend creativity with functionality to create innovative products that enhance people's lives. From concept to creation, you'll be at the forefront of bringing new ideas to life, solving real-world problems through thoughtful design and cutting-edge technology.

### KEY SKILLS

Skills which may benefit anyone considering a job as a product designer/developer include:

- ✔ Analytical skills
- ✔ Creativity
- ✔ Technical comprehension
- ✔ Communication
- ✔ Problem solving

### CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Team Leader
- Production Planner
- Composite Engineer
- Industrial Designer

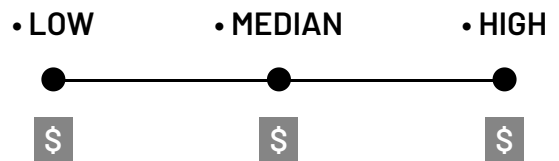
### VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a product designer/developer include:

- ✔ Innovative
- ✔ Collaborative
- ✔ Curious
- ✔ User-focused
- ✔ Adaptable
- ✔ Enterprising – "Persuader"

### SALARY EXPECTATION

The expected salary for a Product Designer can vary across different areas of manufacturing and may vary as you become more experienced.



### RELATED INDUSTRIES

- ▶ Aerospace and Defence
- ▶ Chemicals, Hydrocarbons and Refining
- ▶ Food and Beverage
- ▶ Furniture and Other Products
- ▶ General Manufacturing and Engineering
- ▶ Laboratory Operations
- ▶ Meat and Seafood Processing
- ▶ Pharmaceutical and Medical Technology
- ▶ Polymers, Plastic and Rubber
- ▶ Printing and Graphic arts
- ▶ Process Plant Operations
- ▶ Pulp, Paper and Packaging
- ▶ Renewables
- ▶ Sustainable Operations
- ▶ Textiles, Clothing and Footwear
- ▶ Timber and Wood
- ▶ Transport Equipment and Machinery

### RECOMMENDED SCHOOL SUBJECTS

- Fashion
- Industrial Graphics Skills
- Visual Arts in Practice

### CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Design

## JOB OVERVIEW

Product Designers are the creative minds behind the everyday objects and experiences that shape our world. They work on a diverse range of products, from consumer electronics and home appliances to medical devices, sporting goods, and industrial equipment. As a Product Designer, you'll be involved in every stage of the product development process, collaborating with engineers, marketers, and manufacturers to create products that are not only aesthetically pleasing but also functional, user-friendly, and commercially viable.

A typical day as a Product Designer might involve sketching new product concepts, creating 3D models using computer-aided design (CAD) software, or refining prototypes based on user feedback. You could be brainstorming ideas for a new smartphone design in the morning, conducting user testing on a prototype kitchen appliance in the afternoon, and ending your day by presenting your latest furniture design concept to stakeholders. Throughout these tasks, you'll use a variety of tools and equipment, including digital drawing tablets, 3D printers for rapid prototyping, virtual reality (VR) headsets for immersive design visualisation, and specialised software such as SolidWorks, AutoCAD, or Fusion 360 for 3D modelling. You'll also work with physical materials and hand tools in workshop environments, crafting mock-ups and testing ergonomics.

Your role will require you to balance form and function, considering factors such as ergonomics, materials, manufacturing processes, and sustainability. You'll need to stay updated on the latest design trends, technological advancements, and manufacturing techniques to create innovative solutions that meet user needs and stand out in the market. Whether you're designing a new wearable tech device, reimagining a classic piece of furniture, or developing sustainable packaging solutions, your work as a Product Designer will directly impact how people interact with and experience the world around them.

## WHAT WILL YOU DO?

Your role may include duties as follows:

1. Dive deep into user needs, wants, and pain points to inform design decisions.
2. Create and present multiple concepts that align with project briefs and user requirements.
3. Build prototypes, conduct user tests, and refine designs based on feedback.
4. Work closely with engineers, marketers, and other stakeholders to ensure designs meet both user needs and business goals.
5. Craft aesthetically pleasing and functional designs that stand out in competitive markets.

## HOW TO BECOME A PRODUCT DESIGNER/DEVELOPER

Becoming a Product Designer typically involves a combination of education, skills development, and practical experience. Here's a step-by-step guide:

1. Develop foundational skills: Focus on art, design, and technical drawing in school.
2. Build a portfolio: Create a diverse portfolio showcasing your design skills and creativity.
3. Gain practical experience: Look for internships or entry-level positions in design firms or manufacturing companies.
4. Research potential employers in your area via a search engine, social media or job site. Even if there are no jobs advertised with the employer you're interested in, it can be a good idea to send a cover letter with your resume expressing your interest.
5. Learn industry-standard software: Become proficient in CAD software and other design tools.

## VOCATIONAL EDUCATION & TRAINING

For those seeking a practical, hands-on approach to becoming a Product Designer, Vocational Education and Training (VET) offers valuable pathways:

- Certificate IV in Furniture Design and Manufacturing (MSF40222)
- Certificate IV in Apparel and Fashion (MST40222)
- Diploma of Production Management (MSM50316)

These courses provide practical skills in design processes, 3D modeling, and prototyping, often including industry placements for real-world experience.

## UNIVERSITY & HIGHER EDUCATION

Many universities offer cooperative education programs that combine classroom study with practical work experience in the manufacturing industry. To become an Industrial Designer, you typically need:

- A bachelor's degree in industrial design, product design or related field
- Some positions may require or prefer a master's degree in design or a related field
- Ph.D. for research and development positions or university teaching roles

In addition to design-specific courses, aspiring Product Designers should focus on developing a well-rounded skill set that includes 3D modelling, user experience (UX) design, and sustainability principles. Courses in materials science, manufacturing processes, and design history provide a solid foundation. Many programs now incorporate digital fabrication techniques and virtual/augmented reality tools into their curriculum. Participating in design competitions or collaborative projects with industry partners can help build a strong portfolio and provide networking opportunities. Some universities offer specialised tracks in areas such as automotive design, medical device design, or sustainable product development. Pursuing additional certifications in specific design software or methodologies, such as human-centered design, can further enhance your qualifications and make you stand out in the job market.