

Model Maker

Introduction

Model makers build models or 'mock-ups' to help designers get a better idea of what their design looks like, how it fits into its surroundings and how practical it is. They work with a variety of materials such as wood, plastic and metal.

Also known as

- Rapid Prototyping Technician



Work Activities

As a Model Maker, you will build three-dimensional models or 'mock-ups' to help Designers get a better idea of what their design looks like, how it fits into its surroundings and how practical the design is. Designers need to see or test their design before a decision is made to spend money and time on its production.

After talking to the Designer, you will work from detailed design drawings, plans, photos or computer graphics. You'll skillfully use materials like wood, plastic, metal, plaster, paper or card to produce models. Machine and hand tools are used to shape the materials.

A model can be scaled up or down depending on what it represents and its purpose. A planned motorway flyover system, for example, will be greatly scaled down, whereas a newly discovered molecular structure will be scaled up. Models are also used to create special effects in films, television, theatre and in certain types of exhibition.

Environmental issues are a very big factor. Low carbon research is an exciting area to be involved in.

Protective clothing, masks and gloves may be worn when building the models. The work environment may be noisy.

Being able to read, write and speak Welsh may be an advantage when you're looking for work in Wales.

Personal Qualities and Skills

To become a Model Maker, you need:

- creative, technical and practical skills
- to visualise objects in three-dimensional form
- patience, accuracy, and an ability to meet project deadlines
- good communication skills
- problem-solving skills
- an understanding of the different materials you might use
- knowledge of design-related software
- to work well on your own and with others

Self-employed Model Makers will need business and marketing skills.

Pay and Opportunities

Pay

The pay rates given below are approximate.

- Starting: £19,000 - £20,500
- With experience: £22,000 - £26,000

- Senior Model Makers earn £27,500

Hours of work

Model Makers usually work 39 hours a week, Monday to Friday. Working hours for self-employed Model Makers may be irregular, depending on how much work they have. Late finishes and weekend work may be required from time to time, especially as deadlines approach.

Where could I work?

Employers are firms in:

- civil engineering
- architecture
- film and television
- shipbuilding
- motor car manufacture
- town planning

Opportunities for Model Makers occur with employers in towns and cities throughout the UK.

Self-employment

Although some Model Makers work for an employer, most work on a self-employed, freelance basis, moving from project to project.

Where are vacancies advertised?

Vacancies are advertised in local/national newspapers, on recruitment and employers' websites, and on Find a Job (www.gov.uk/jobsearch).

It's a good idea to build up a network of relevant contacts, as not all model making jobs are advertised.

Social media websites, such as LinkedIn, Twitter or Facebook, are a great way to network, find vacancies and get in contact with possible employers. Make sure that your profile presents you in a professional manner that will appeal to potential employers.

Take a look at our General Information Article 'Finding Work Online'.

Entry Routes and Training

Entry routes

An Advanced Level Apprenticeship is a great place to start. You may be able to study for an NVQ as part of the apprenticeship.

A common route into this career is from a degree. There is a modelmaking degree available at the Arts University Bournemouth.

General three-dimensional design courses may also contain elements of training in model making.

Some people get on to degree courses from a Foundation course, HND, HNC or foundation degree.

You may not need a higher education qualification to get into this career. Practical skills gained in areas like wood working, electronics and engineering will be useful.

Progression

With experience, some Model Makers move into supervisory positions. Many become self-employed.

Work Experience

Previous experience working in architecture, town planning or civil engineering is useful for this career.

Qualifications

To get onto an Advanced Level Apprenticeship, you'll usually need 5 GCSEs at grade C/4 or above, including English and maths, or to have completed an Intermediate Level Apprenticeship.

To get onto a relevant degree course, you'll need:

- 2 or more A levels, or equivalent
- 4/5 GCSEs at grade C/4 or above
- passes in English and maths
- a pass in a design and technology

Alternatives to A levels include:

- a BTEC level 3 qualification in automotive clay modelling
- level 3 City and Guilds certificate or diploma in design and craft
- an Advanced Level Apprenticeship - possibly leading to level 3 NVQ
- the International Baccalaureate Diploma

Many other qualifications are also accepted so check the college/university's website for more details.

The usual entry requirements for a relevant HNDs, HNC's and a Foundation course are:

- 1/2 A levels or equivalent, where you'll need an A level in art or in an art-based subject
- GCSEs at grade C/4 or above in 4/5 subjects

Some courses ask that you have a pass in English. A pass in design and technology (product design) will be useful.

Some universities accept the Welsh Baccalaureate as equivalent to 1 A level.

Adult Opportunities

Age limits

It is illegal for any organisation to set age limits for entry to employment, education or training, unless they can show there is a real need to have these limits.

Skills/experience

Knowledge of the wider industry in which you intend to work, for example, architecture, town planning or civil engineering is useful.

Applicants are normally expected to provide a portfolio of work showing creative ability.

Courses

Universities and colleges of higher education (HE) will usually consider applications from candidates who don't meet their usual entry requirements, especially those with experience in crafts, design or technology. You should check the admissions policy of individual universities and HE colleges.

Further Information

Contacts

- **ScreenSkills**
Skills for the creative industries
Email: info@creativeskillset.org
Website: www.creativeskillset.org
- **Creative Choices**
Publisher: Creative & Cultural Skills
Email: info@creative-choices.co.uk
Website: www.creative-choices.co.uk
- **Creative & Cultural Skills**
Skills for craft, cultural heritage, design, literature, music, performing arts and visual arts
Email: london@ccskills.org.uk
Website: ccskills.org.uk
- **Proskills UK**
Skills for process and manufacturing industries
Address: Centurion Court, 85b Park Drive, Milton Park, Abingdon, Oxfordshire OX14 4RY
Tel: 01235 833844
Email: info@proskills.co.uk
Website: www.proskills.co.uk
- **Prospect4u**
Careers in manufacturing
Website: www.prospect4u.co.uk
- **Crafts Council**
Address: 44a Pentonville Road, Islington, London N1 9BY
Tel: 020 7806 2500
Email: reception@craftscouncil.org.uk
Website: www.craftscouncil.org.uk
- **Arts University Bournemouth (AUB)**
Address: Wallisdown, Poole, Dorset BH12 5HH
Tel: 01202 533011
Email: general@aub.ac.uk
Website: aub.ac.uk
- **Careers Wales - Welsh Apprenticeships**
Tel: 0800 028 4844
Website: ams.careerswales.com/

Related Careers

- Medical Illustrator
- Design Assistant
- Fashion Designer
- Graphic Designer
- Artworker
- Metal Engraver
- Visual Merchandiser
- Commercial Illustrator
- Signmaker
- Ceramics Designer
- Footwear Designer
- Furniture Designer
- Product Designer
- Vehicle Designer
- Interior Designer
- Jewellery Designer
- Packaging Designer

- Textile Designer
- Costume Designer
- Theatre Designer
- Musical Instrument Technician
- Picture Researcher
- Technical/Scientific Illustrator
- Picture Framer
- Designer
- Illustrator
- Artist
- CGI Artist
- VFX Artist
- Nostalgist