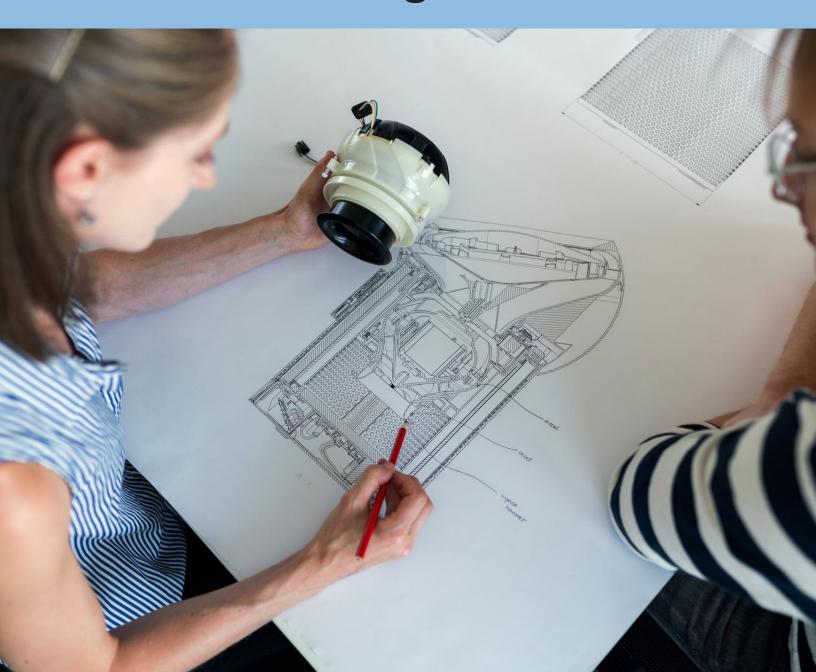
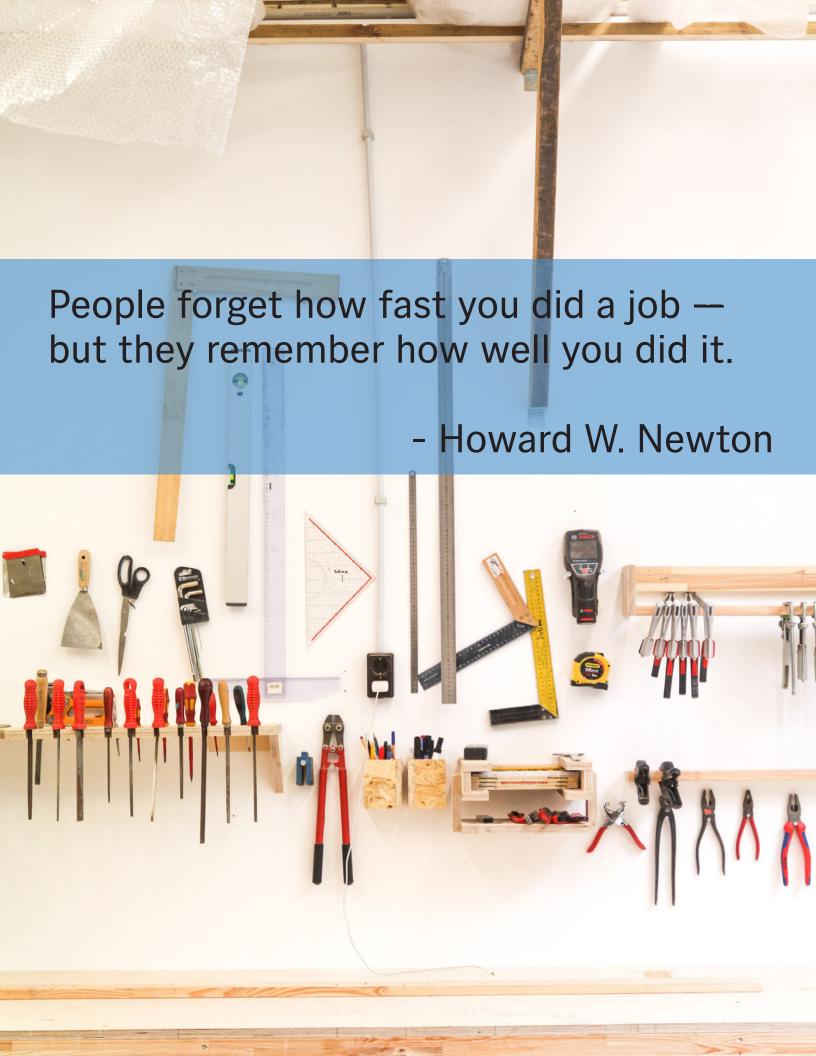
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# Association of PROFESSIONAL MODEL MAKERS

## Model Making as a Career

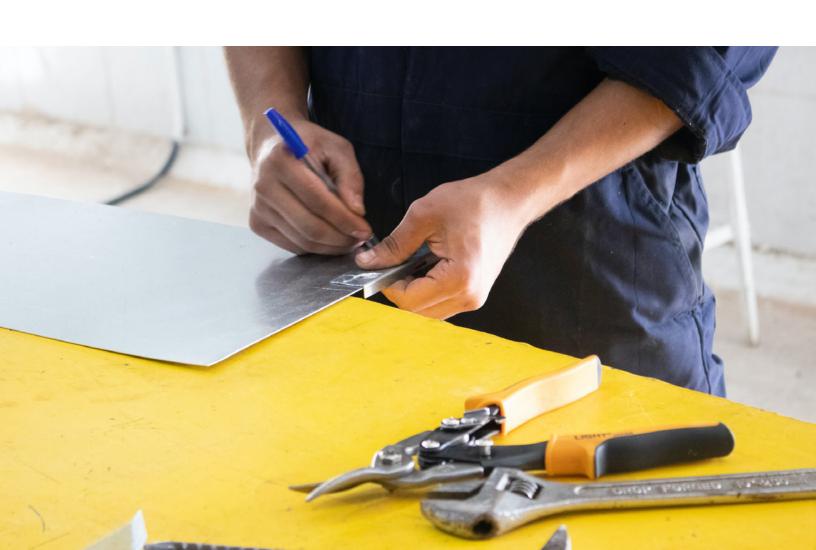




#### What is Model Making?

Model making is the art, skill, and way of thinking employed to bring designs and concepts to life in a very real way that sketches, renderings, and computer models simply can't do. It is the craft of providing the context necessary to sell a creative idea to both corporations and audiences alike in many industries, utilizing both old-school model making practices and new-school advanced manufacturing techniques.

Model making continues to stay relevant in a field of advancing virtual reality technologies. It pulls users into the scene and allows them to experience ideas in ways that VR simply can't, through touch and the emotion of the design.



#### Who is the APMM?

The APMM is a non-profit organization formed in 1993 in Silicon Valley, California. Their goal? To unite and represent model makers across all industries. They educate their members about breakthroughs being made constantly in skills, tools and techniques for model making and prototyping, about managing different aspects of a model making facility, and about opportunities in the field. APMM members can access this information through the <a href="www.modelmakers.org">www.modelmakers.org</a> website, frequent online meet-ups, Social Media updates, and conferences.

Since its founding, there have been 22 conferences pulling in model makers from all over the globe, allowing them to pool and share their knowledge in workshops, find out about new products and services from industry vendors, and visit local model shops in the host city. 2021 saw the first worldwide virtual conference, where the workshops and tours were recorded and archived on the website. Between conferences there are frequent meet-ups online to discuss crucial topics or just share fun and interesting content. The APMM partners with other organizations and operates on several Social Media platforms in order to remain the definitive resource for information about this ever-changing industry.



#### **Professional Model Making**

Model making is a highly rewarding experience for anyone interested in making or design, and this booklet outlines some of the varied types of work that makes model making such a diverse and fulfilling career.

Professional model makers are employed to produce high quality models across a wide range of creative industries, whether needed to test or communicate the designs of products, structures, vehicles or buildings; to create make-believe worlds in film, television, and theatre; or to educate and inform through museums, exhibitions, and advertising, the demand for models is extremely high. Medical prosthetics and forensic reconstructions also rely on model makers, with the career offering many different areas to explore.

Many design and architectural firms employ teams of model makers directly, while there are several hundred commercial model making companies in the USA who supply a range of models for clients all over the world. With the American film industry thriving, thanks to Netflix, Amazon Prime and Disney+, there is also extensive work for model makers developing sets and props for major blockbuster movies.



#### **Model Makers**

Model makers need to be highly adaptable and able to use a variety of materials and processes – whatever best meets the requirements of each specific model they are working on.

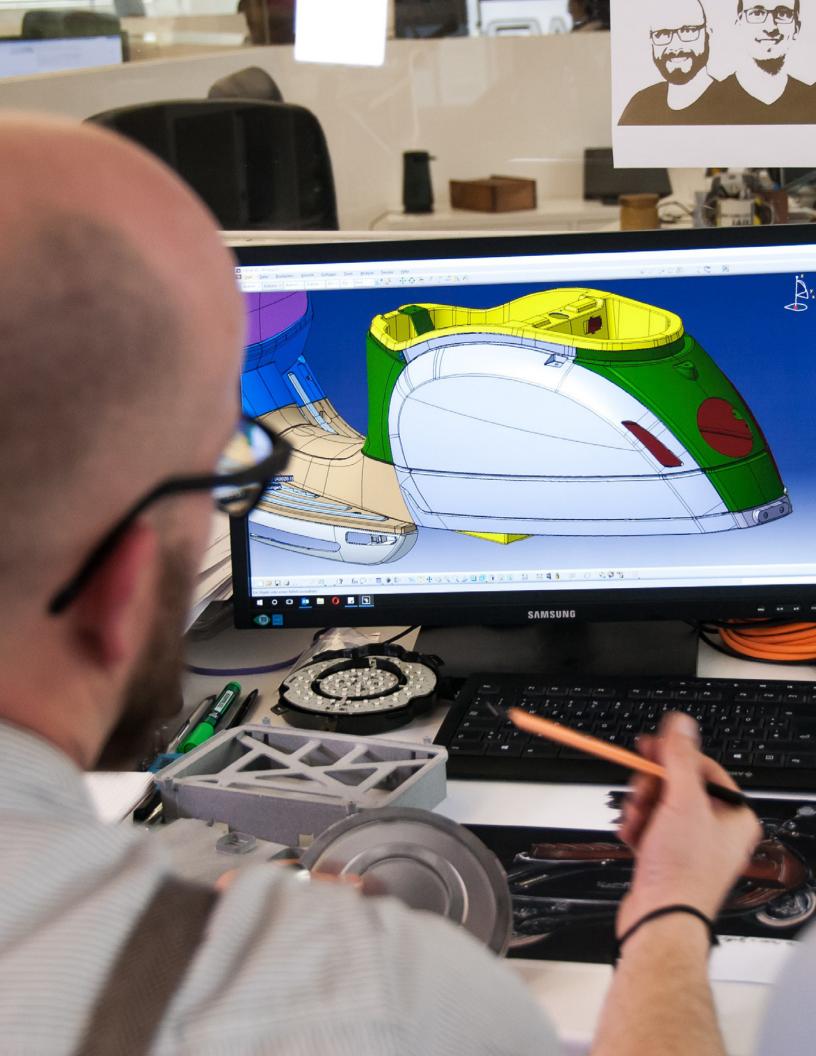
Constantly innovating, model makers are often called upon to develop novel solutions to problems, and their broad skill-set allows them to work on a range of projects. This makes model making an exciting and varied career – one week a model maker might be building a timber model by hand, the next they might be preparing CAD files for 3D printing.

Entry into the profession is normally through studying a specialist degree course such as Industrial Design or related fields at many design schools throughout the USA and around the world.

Many professionals discovered their love of model making as children and have continued their passion through making models for industry.

If you are interested in model making as a career, undergraduate programs in majors such as Design and Technology, Art, Engineering, Photography, Textiles, or Graphics is an ideal place to start.

Develop your problem solving skills, be curious and experiment with different materials, and most of all, just enjoy making things.



#### **Model Making for Design**

If you have ever purchased a car, a mobile phone, a laptop, or even a bottle of shampoo, there were probably many different models made during the development of its design.

Models are widely used in both product and automotive design to test new ideas, and to communicate those ideas to others once the designs have been finalized.

Companies such as Dyson, Bose, Ford, Herman Miller, Toyota, Apple, Jaguar Land Rover, Crown Equipment Corporation, Tech Tronic Industries, and many others, employ model making teams directly. Specialist commercial model making firms also produce countless models for a huge range of global clients.

In making product or automotive models, a professional model maker might find themselves sculpting a car body at full size in clay, designing complex digital models to be 3D printed, or applying a high quality paint finish using a spray gun.

Sketch models – rapidly assembled to test design ideas – form an integral part of the design process, and professional model makers will often be working alongside designers, providing important input into the development of products.



#### **Model Making for Architecture**

Architectural models have been an integral part of the architectural design process for centuries. Many of the major architectural practices such as Foster + Partners, RSHP, Make Architects, SOM, BIG, and AHMM all have in house modelshops where dedicated model makers produce thousands of models each year.

Alongside these, there are many commercial architectural Model Making firms who produce models for architects for use in competitions, planning applications, and public display and marketing.

The demand for architectural models has never been higher, and professional model makers are in great demand. Working as an architectural model maker involves many of the same skills as any other kind of model making, and as with model making for design, often involves working alongside architects during the design process making sketch models. As architectural designs progress, the level of detail required in a model increases, and so the most impressive and complex models are produced at the end of the process to present the final design to the public.



#### **Model Making for Entertainment**

Despite the extensive use of computer-generated-imagery (CGI) in movies today, model makers are still widely used in prop making and set construction. All major film studios globally employ teams of model makers, who work on film and TV productions such as Star Wars, James Bond, Marvel, Doctor Who, The Crown, and Game of Thrones.

Working on a film production can be quite intensive, often working to tight deadlines, however the experience of making a lightsaber or Iron Man's armor is very appealing to many model makers. Work in this part of the industry is often short-term, with contracts lasting for each film, but good model makers and sculptors will always be in demand.

Aside from prop making, there are also career opportunities for professional model makers to work in animation; Laika Studios employs many model makers to work on productions such as Missing Link and Kubo and the Two Strings. Disney, the Tussauds Group, Jim Henson Productions, Hasbro, Merlin Entertainment, and West End theatre productions such as Lion King also employ model makers to produce theatrical and performance sets and props, often at full size.



### Model Making for Advertising and Exhibition

Models are in high demand for use in both advertising and exhibitions — including commercial trade shows and national museums. If you have ever seen the impressive Christmas window displays at Bloomingdales, Selfridges and other department stores, you will have seen the work of a professional modelmaker. Oversized props and set pieces for both windows and in store display are a common projects for model makers to build.

Museums and exhibitions such as the Science Museum, the Stanley Kubrick Exhibition, the Kennedy Space Center, the Eden Project, The Smithsonian Museums, and the Natural History Museum all make extensive use of models from giant dinosaurs to historic replicas to interactive installations.

Professional model makers also produce educational models for both museums and schools and universities, and model making for display often involves working closely with experts from many different disciplines and industries.



#### **Learning about Model Making**

There are many different ways to learn about model making, experience what model makers do, and gain relevant qualifications.

The Boy Scouts of America offers a "Model Design and Building" merit badge that is well planned and geared toward the introduction of the type of models that professionals build.

Additionally, Maker Spaces are a great place to learn in your own backyard.

#### What are Maker Spaces all about?

Maker Spaces have become hugely popular in the past decade as a way to allow ready access to tools and equipment to people who don't have the space to set up their own workshops. They're a great way to learn the skills necessary to bring your designs to life, and a great resource for rapid prototyping information and methods.

Maker Spaces are an affordable way to get into the profession of model making and are virtually everywhere. There's most likely at least one in your closest city, if not several. Your local library may even host one!



#### What about higher education?

Some colleges and universities offer undergraduate programs in model making:

Northeast Wisconsin Technical College offers an Associates Degree in "Prototype & Design." This program is endorsed by the APMM and is well known by model making employers across the USA.

Bemidji State University, MN, offers a 'B.S. Design (Model Making Emphasis).' This bachelors program has helped many professionals today learn their craft.

In the UK, Arts University of Bournemouth offers a 'BA (Hons) Model Making' program. AUB accepts applications from students worldwide, and is also endorsed by the APMM as an effective provider of education in model making.



#### Where Can I Find Out More?

Check out the APMM's website at <a href="www.modelmakers.org">www.modelmakers.org</a> and use our "Ask a Pro!" forum to get all of your technical questions answered. When you decide to join the membership you will have access to regular meet-ups that cover topics such as 3D printing, mold making, marketing, and other fun discussions of film, prop making, and animation.

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