

MS100 Fabrication: Metalsmithing



Traditional metalsmithing has its roots in ancient times. Some techniques invented thousands of years ago are still in use today; others have been refined and modernized to improve efficiency, ease and quality. To supplement students' existing experience with metal clay modelling, this course provides context and practice for the most widely used traditional jewellery metalsmithing techniques.

An ideal complement to the finishing techniques learned throughout the Metal Clay fabrication courses, students understand processes and observe the proper applications of techniques ranging from rolling, sawing and forming metals to soldering and repoussé. Throughout the course, relevant safety precautions are stressed and metallurgical observations made. Students then are guided to reproduce these steps via a series of mini-projects that accentuate their design and fabrication portfolio.

Lessons in this course of study include:

MS101 Making and Rolling Sheet Metal

Most jewellery projects begin with a raw material that must be rolled into usable sheets of consistent thicknesses. The effects of repeated rolling are understood and common techniques to produce usable, even and malleable metal sheets are practised.

MS102 Forming and Drawing Wire

As with rolling sheets, the production of wire is explained and exercised. Students learn how wire hardness is increased through drawing and how to treat hardened metals to regain their softness.

MS103 Sawing and Drilling Techniques

Sawing and drilling are the most essential processes used by any metalsmith; students learn how to saw and drill effectively and cleanly with minimal waste. Accurate drilling using hand tools & power tools is covered.

MS104 Roll Printing and Texturing Metals

Controlling small steel tools called punches to shape metal requires skill and patience. Students are shown how use punches to create texture and learn how to apply various textures through the use of a rolling mill.

MS105 Annealing and Reticulation Procedures

Often before working metals, they need to be softened using a process called annealing. Annealing temperatures and quenching are understood. Reticulation as a means of creating a textured appearance on the metal is also practised.

MS106 Soldering and Fusing

Attaching metals together is commonly achieved using solder. Gas torch soldering is practised and metal and solder compatibilities are understood. Students also learn fusing, the process of bonding metals together at melting point without solder.

MS107 Cold Joining, Mechanisms and Chains

Many mechanisms and joints require movement and thus cannot be soldered or fused. Students learn common cold joining techniques to produce catches and joints by rivetting. When full movement is required, students make use of hinges and universal joints.

MS108 Stone Setting

Simple stone setting styles are practised with traditional materials. Students understand the challenges of more advanced techniques such as channel, flush and pave settings.

MC109 Direct and Lost Wax Casting

Direct casting has been used for millennia. Students introduced to the process as it was used in the past. More modern methods such as wax carving are then discussed as is the lost wax casting process.

MS110 Quality Control and Finishing Techniques

Students learn various methods for hand and mechanical finishing of jewellery and practice systematic procedures that ensure complete polishing, reflective shines and smooth finishes. Different methods are covered with correct order of use to ensure a professional finish.



This course is available as a component of the Specialist Diploma in Jewellery Design & Fabrication and both Advanced Diplomas in Jewellery Design/Management, or as a stand-alone 34-hour certification course. When taken as a certificate or for diploma credit, course fees include materials and some tools of the trade; non-portable tools for shared use are not included.