



# Online Stereotomy – Art du Trait Student Handbook

For the first time ever, Stereotomy - Art of Trait courses are available online in the English language, accessible to learners worldwide.

Our courses cater to a diverse audience, including carpenters, architects, designers, woodworkers, stonemasons, builders, and general contractors, as well as anyone interested in learning about stereotomy and Art du Trait. Whether you are a beginner with little experience or an expert with extensive knowledge, these courses offer valuable insights. Prepare to revolutionize your perception of volumes, depth, and 3D space.

The knowledge gained from these courses will prove invaluable, saving you thousands of dollars by ensuring correct designs, proper installation, and efficient work practices. Mastering the know-how can be the decisive factor in securing projects and completing them on time. Furthermore, opting for our online courses saves you from the expenses associated with traditional in-person learning, such as lost work time, travel, accommodation, and food costs.

Enjoy the flexibility of learning at your own pace and in the comfort of your own home or workshop. Avoid any disruptions to your regular work schedule and expensive out-of-town courses.

To begin your journey with us, you must start with Stage 1 - Drawing on the Draft Board. Familiarity with hand tools is a must. Our courses are designed progressively, becoming more challenging as you advance. Each stage requires the prerequisite previous stage, and tests and exams are conducted to ensure your understanding of the concepts. Our certified professors will be there to guide you through every step of the course, providing valuable feedback on your projects.

Each course comprises over 40 hours of material, equivalent to a full-time one-week course or a semester at a college or university level.

Please note that since our courses have an international reach, we use the metric system for measurements.

After successfully registering and completing the payment process, our faculty will promptly send you a 'welcome email', providing clear guidance on the next steps to begin your thrilling learning journey. To access the course material, we utilize Google Drive, a cloud-based file storage platform. Through Google Drive, you will receive access to the specific Stage you have registered for, allowing you to dive into the course content almost immediately with ease.

The online stereotomy course is organized into stages, with each stage structured into folders labeled as 'steps'. Within each 'step', you'll find additional folders referred to as 'tasks'. These 'tasks' consist of comprehensive learning materials, including an instructional how-to video, a step-by-step handout with photos guiding you through the stereotomical drawing process, 3 - 4 Answer folders to exemplify course expectations, a SketchUp file, and an AutoCAD file.

Join us now to acquire valuable skills and knowledge in the fascinating world of stereotomy and Art du Trait. Let your creativity and expertise thrive with the convenience and flexibility of our online courses.



## How do the online Stereotomy – Art du Trait courses work?

The online Stereotomy – Art du Trait courses offer a flexible and accessible learning experience to students worldwide. These courses aim to replicate the face-to-face learning environment as closely as possible, utilizing recorded lectures, written guides with photos, interactive technologies like Zoom and Sketchup, and video/audio content. It is important to address certain misconceptions about online courses:

1. The online courses are not easier than face-to-face versions. Instructors maintain the same academic rigor and deliver similar course content; the difference lies in the facilitation method.
2. The time commitment for online courses is comparable to in-person courses. Each step of the course takes the same amount of time to complete online as it does in a physical setting.

The online Stereotomy – Art du Trait courses cater specifically to working professionals in various industries, including timber framing, masonry, carpentry, design, architecture, restoration, and contemporary building practices. These courses are designed to enhance design capabilities and provide practical skills relevant to their careers.

Highly qualified instructors bring their expertise in carpentry, timber framing, and Stereotomy to the online student community. The curriculum emphasizes core competencies, such as compound layout understanding and designing complex structures, along with promoting self-reflection and continued professional development.

To progress to the next stage of the course, students must successfully complete the prior stage. All course materials are accessible through Google Drive, a cloud-based storage solution. Students can access the material on any device with internet connectivity, such as smartphones, tablets, or computers. However, access to the Google Drive folder terminates after the appropriate deadline for each stage; it is not indefinite.

By engaging in these online courses, professionals can advance their careers, stay up-to-date with evolving industry demands, and apply their newfound knowledge to real-life situations.

## Flexibility and Choice

Flexibility and choice are key advantages of our online learning programs. We understand that many students have work or family commitments that require a flexible academic schedule. With our courses, students have the freedom to pursue their education from any location and at any time of the day, as long as they have access to a computer and an Internet connection. Faculty support is readily available with just a click, ensuring that students can get assistance whenever they need it.

A standout feature of our program is the opportunity for students to complete their certificate at an accelerated pace. Unlike other institutions with rigid course schedules, our courses are available year-round, including during the summer. This exceptional aspect allows students to obtain their certificate faster compared to traditional institutional settings.



However, it is crucial to bear in mind that each stage of the program has strict deadlines for completion. Here is a breakdown of the deadlines for each stage, along with an approximate number of hours required to complete the respective courses. Although course hours may vary slightly among students, the provided figures represent an average estimate. As more students participate in the program, these numbers may be further refined to better represent the average time taken to complete each stage. **It is essential to acknowledge that these deadlines are contractual and, therefore, the students' responsibility to meet within the specified timeframe.**

- Stage 1 - 4 months (40 hours)
- Stage 2 - 6 months (120 hours)
- Stage 3 - 6 months (120 hours)
- Stage 4 - 4 months (40 hours) - Not including the optional Summerative Task (Proposal to challenge the Professional Certificate - approx. 120 hours)
- Stage 5 - 4 months (40 hours)
- Stage 6 - 4 months (40 hours)
- Stage 7 - 4 months (40 hours) - Not including the optional Summerative Task (Proposal to challenge the Advanced Professional Certificate - approx. 120 hours)
- Stage 8 - Masterpiece (to be determined by proposal but is approx. 650 hours)

Our commitment to flexibility, combined with structured deadlines, allows students to tailor their learning experience according to their individual needs and goals.

## **Guide to Online Learning** - How to be a successful online learner

To help you become a successful online learner, we have compiled the following tips:

- Make sure you have acquired all the tools on the [Online Tool List](#)
- You should be self-motivated, self-disciplined and assertive. Because an online class offers more freedom, it will be your responsibility to keep up with your course.
- An online class should be viewed in the same manner as a face-to-face class. It will not be an “easier” course, nor will it take less of your time or energy.
- You must devote time into your class at least two to three times per week, or as often as required, in a time frame that allows you to complete it on time. Time management is very important. Because there is a deadline to complete the course you must schedule your time wisely. **This is your responsibility.**
- Most interaction in an online class is through emailing, so you should be comfortable with communicating electronically and you should know how to express yourself appropriately through writing. However, Zoom is another technology used to communicate.
- You must be able to use technology properly. You should be familiar with using the Internet and email, as well as downloading, uploading and saving files.
- Know your instructors and how to contact them. It is important for you to contact your instructor, by whatever means the instructor has specified, if you begin to experience any difficulties or have questions.
- Have a drawing area set up at home where you can draw comfortably with proper lighting and free of distractions. We recommend using a large drafting table and a drafting lamp. A 4’x4’ sheet of ¾” MDF is recommended for a drafting table.

The Professional School of Practical Stereotomy

© Copyright 2023 All Right Reserved



- You should have a workshop area dedicated to cutting, preparing, and assembling your projects and exams. We recommend having a workbench with a strong bench vise for working.

## Getting Help

Getting help during an online course can seem like a daunting experience, so we have arranged a list of means you may communicate to your instructor.

- If you do have a question, please first consult the FAQ (Frequently Asked Questions) that has been provided for that task. Most questions are answered in there. So please take a few moments and look in the FAQ before asking your question.
- Email – email is the best form of communication. You can use this form as a means to communicate any questions, comments, or concerns you may have during the course.
- Zoom – Zoom is another form of communication often used. Zoom is a free cloud-based video conferencing service you can use to virtually meet - either by video or audio-only or both, all while conducting live chats. we can share our computer screen with you live. During this time we can use Sketchup to help you visualize the projects or to help answer any questions during the course.
- Walk-ins – Walk-in appointments are generally for students who live close to their instructor and who can talk with them face-to-face. You must communicate with your instructor to set-up an appointment.
- Phone – We can set up an over the phone conversation. However the combination of Zoom and Sketchup offers the best solution to most questions. Although, if talking over the phone best suites you, you must first book an appointment with your instructor.
- Snail mail – Using the post can be a form of communication. Although we highly recommend using email as you will receive a faster response and it's free. But if sending letters through the post is still your thing, then the letter must be sent to the address provided by your instructor. All postal and shipping and handling charges are at the expense of the student.

Netiquette- Below is a list of general netiquette expectations for the online courses:

- Carefully read the email that you receive to make sure that you understand the message.
- Carefully read and reread responses before you send them. Proofread for errors in grammar, punctuation, and spelling as these kinds of mistakes can muddle your message and confuse the reader.
- If you are using humor or sarcasm, clearly label it as such (i.e. :-), “ha ha”, lol).
- Know your audience. Make sure that the person(s) to whom you are sending your message are the appropriate one(s) with whom to communicate.
- Avoid cluttering your message with excessive emphases (such as stars, arrows and the like). They may make the message hard to follow.
- If you are responding to a message, either include the relevant part of the original message in your message, or make sure you refer to the contents of the original message.

The Professional School of Practical Stereotomy

© Copyright 2023 All Right Reserved



- Be as specific as possible, especially when asking questions.
- Include your name in the text of your message, as well as other contact information, such as email address or phone number for a reply. The end of the message is a good place for this information.
- When typing, use upper/lower cases appropriately. ALL CAPS gives the appearance of shouting and can seem rude.
- Just as you should not drive when you are angry, you should not send email responses when you are angry. Type a response, but do not send it immediately. Chances are, when you reread it, you will be glad that you waited.

## Course Grading

Our grading system follows a straightforward pass or fail approach.

Upon completing each task, students are required to submit high-resolution, detailed photos of both the model and drawing, by email. The faculty responds with a clear pass or fail grade, occasionally offering feedback on areas that may need improvement or providing constructive criticism.

## Pros and Cons of the Online Stereotomy Courses

### Pros:

1. **Flexibility:** Online courses offer the flexibility to access learning materials and work on wooden models at the student's own pace and preferred location, accommodating various schedules and commitments.
2. **Accessible to a Global Audience:** Being available online, these courses open up opportunities for students worldwide to participate, eliminating geographical barriers to learning and fostering a diverse learning community.
3. **Hands-On Experience:** The construction of actual wooden models allows students to gain practical, hands-on experience, honing their woodworking skills and understanding of stereotomical principles.
4. **Multimedia Learning Resources:** The inclusion of instructional how-to videos, SketchUp files, and AutoCAD files enhances the learning experience, providing multiple ways to grasp and apply the concepts.



5. **Structured Learning:** The organization of stages and steps in the course ensures a well-structured learning journey, guiding students through a progressive and comprehensive curriculum.
6. **Detailed Instructional Handouts:** Step-by-step handouts provide clear instructions for the stereotomical drawing process, facilitating the construction of wooden models with precision.
7. **Interaction with Course Expectations:** The Answer folders demonstrate course expectations, allowing students to gauge their progress and alignment with the learning objectives.
8. **Cost-Effective:** Online courses often offer cost savings compared to traditional in-person classes, as students can save on travel, accommodation, and other associated expenses.

## **Cons:**

1. **Limited Hands-On Supervision:** In an online setting, students may lack direct, in-person supervision from instructors, which can be challenging when learning complex woodworking techniques.
2. **Technology and Internet Dependence:** Reliable internet access and compatible devices are essential for online learning, and technical issues can disrupt the learning process.
3. **Time Management Challenges:** Self-paced learning may require strong time management skills, and some students may struggle to stay motivated and focused on completing the course.
4. **Limited Social Interaction:** Online courses can have less social interaction compared to traditional in-person classes, potentially reducing networking opportunities and peer collaboration.
5. **Lack of Physical Campus Facilities:** Students may miss out on accessing physical workshop facilities or resources that are typically available in traditional woodworking courses.
6. **Limited Real-Time Feedback:** While the courses may have provision for feedback, the absence of real-time, in-person feedback during woodworking tasks can hinder skill development.
7. **Prerequisite Knowledge:** Students with little to no prior woodworking experience may face challenges in keeping up with the pace and complexity of the course.

In conclusion, the online stereotomy courses offer several benefits, such as flexibility and accessibility, hands-on experience, and comprehensive learning resources. However, students should also consider the limitations related to supervision, equipment accessibility, and time management to make informed decisions about their learning journey.



# Online Stereotomy Course Breakdown

## A breakdown of tasks per stage

The online stereotomy course is organized into stages, with each stage structured into folders labeled as 'steps'. Within each 'step', you'll find additional folders referred to as 'tasks'. These 'tasks' consist of comprehensive learning materials, including an instructional how-to video, a step-by-step handout guiding you through the stereotomical drawing process, 3 - 4 Answer folders to exemplify course expectations, a SketchUp file, and an AutoCAD file.

### Stage 1 Breakdown - 4-month deadline (40 hours of coursework)

- Step 1
  - Task #1 – Introduction
  - Task #2 – First Drafting Assignment
- Step 2
  - Task #1 - The study of a King Post Truss
  - Task #2 – First paper net Raccord project
  - Task #3 - All about the hip
- Step 3
  - Task #1 - 2nd Raccord – Exam
  - Task #2 – First wood model a Hip
  - Task #3 - Second model a Valley
  - Task #4 - 3rd Raccord project

### Stage 2 Breakdown – 6-month deadline (120 hours of coursework)

- Step 1
  - Task #1 - Canted half frame with notch
  - Task #2 - Rested Hip
  - Task #3 - Raccord – Exam
  - Task #4 - Valley – Exam
- Step 2
  - Task #1 - Hip with purlin and birdsmouth
  - Task #2 - Raccord 5 - Peak with Purlins
  - Task #3 - Furring Hip
  - Task #4 - Hip with purlin and jack rafter cuts – Exam
- Step 3
  - Task #1 - Hip with struts
  - Task #2 - Raccord 6 - Two Peaks without Ridge
  - Task #3 - Raccord 7 - Sloping Ridge
  - Task #4 - Sloping Ridge
  - Task #5 - Raccord 8 - Sloping Top Plate
  - Task #6 - Sloping top plate and ridge – Exam
- Step 4
  - Task #1 - Hip and sloping top plate - Final Exam



### **Stage 3 Breakdown – 6-month (120 hours of coursework)**

- Step 1 - Last of the Rembarrement
  - Task #1 - Raccord - 10 - Five peaks with ridge
  - Task #2 - Hip with Overhangs
  - Task #3 - Raccord - 11 - Mansard Roof
  - Task #4 - Valley with Overhangs
  - Task #5 - Raccord - 12 - Straight and mansard roof
  - Task #6 - Canted knee brace on broken hip
  - Task #7 - Raccord - 13 - Study of a canted raccord
  - Task #8 - Slatted Valley
  - Task #9 - Raccord - 14 - Study of a raccord at different heights
- Step 2 – Bevel Method
  - Task #1 - Bevel Method - Strayed Hip
  - Task #2 - Bevel Method- Hip with Purlins
- Step 3 – Diverse
  - Task #1 - Dormer Valley Rafter
  - Task #2 - Diverse - Sawhorse – Exam
  - Task #3 - Diverse - study of canted overhang rafter
  - Task #4 - Diverse - Understanding Diverse
  - Task #5 - Diverse - Study of Diversed Hips – Exam
- Step 4 - Real Life
  - Task #1 - Final Exam - Full Build with Documentation

### **Stage 4 Breakdown – 4-month deadline (40 hours of coursework)**

- Task #1 - The North American Moore Trestle
- Task #2 - The Moore Trestle
- Task #3 - The Joiner's Trestle
- Task #4 - Twisted St. Andrews Cross
- Task #5 - The South American Moore Trestle
- Task #6 – Test
- Task #7 - Twisted Tapered St. Andrews Cross
- Task #8 - Final Exam
- Task #9 - (Optional) - Summerative Task - Professional Certification



### **Stage 5 Breakdown – 4-month deadline (40 hours of coursework)**

- Step 1
  - Task #1 - Study of the Cone
  - Task #2 - A Study of the Roman Groin Vault
  - Task #3 - Plywood Groin Vault Model
- Step 2
  - Task #1 - Test - Cone Sectioned on an Angle
  - Task #2 - Straight Top Plate and Purlin in Curved Roof
- Step 3
  - Task #1 - Eyebrow Dormer Raccord
  - Task #2 - Eyebrow Dormer Model - Final Exam

### **Stage 6 Breakdown – 4-month deadline (40 hours of coursework)**

- Step 1
  - Task #1 - Cone and Straight Roof Intersection
  - Task #2 - Ogee and Curved Roof Intersecting a Straight Roof
- Step 2
  - Task #1 - Test - Round Tower on Square Base and Square Tower on Round Base
  - Task #2 - Curved Top Plate and Purlin in Curved Roof
- Step 3
  - Task #1 - Curved Hip Model
  - Task #2 - Cylinder through Cone
  - Task #3 - Two Intersecting Cones
  - Task #4 - Final Exam - Ellipse Roof with Two Cones

### **Stage 7 Breakdown – 4-month deadline (40 hours of coursework)**

- Task #1 - Capucine Raccord
- Task #2 - Capucine Awning
- Task #3 - Guitarde Raccord
- Task #3 - The Guitarde Dormer – Test
- Task #4 - Curved St. Andrews Cross in Cone
- Task 6 - Twisted Spire - Final Exam
- Task 7 (Optional) - Advanced Professional Certificate Challenge

## Online Stereotomy Tool & Equipment List

**Tools & equipment required for the online courses**

*If you have any questions please contact - lamidutrai@gmail.com*

- **Set of sharpened bench chisels**



- **Fine Tooth saw**



- **Eraser and eraser guide**



- **100cm (3') clear plastic ruler**



- **Large drafting triangle (45cm)**



- **Large drafting compass with extension**



- **Fine haired brush**
  - to keep the drawing clean



- **Exacto knife or scalpel**



- **Drafting pencil**
  - 0.3mm mechanical pencil
  - With 2H or 4H leads



- **Fine tip (0.3mm) colored markers**



- **Drafting Table or 4'x4' sheet of MDF with good lighting**
  - capable of fitting A1 size paper (594mm x 841mm) minimum



- **Mallet**



- **Sliding T-bevels**



- **4' wide roll of paper**



- **Knot free dry wood for models**



- **Access to a woodshop with tools to mill wood and assemble models**
  - **Finishing Nailer**
  - **Glue**
  - **Work table with vise**
  - **Sandpaper**
  - **Clamps**

