

**SIEBEL
CENTER
FOR DESIGN**



SIEBEL CENTER FOR DESIGN

THE SHOP

(HANDS-ON, PEER-SUPPORTED LEARNING)

SHOP & LAB SPACES · PARTNER & COURSE GUIDE

THE SHOP

About The Shop

The SCD Shop and lab spaces are where students come to **make**—a place built around learning, not just output. Three ideas shape everything that happens here:

01 Hands-On, Peer-Supported Learning

Student-staffed environments where peers from across campus build hands-on skills that support their prototyping and design processes.

02 Inclusive, Skill-Building Environment

Open to all students, the space encourages exploration and learning—from beginner-friendly tools to advanced equipment that requires deeper training and practice.

03 Skill Development Over Output

We emphasize student responsibility in building competency before gaining open access for personal projects.

OUR GOAL

CREATE SKILLED, CONFIDENT FABRICATORS — NOT JUST FINISHED ARTIFACTS.

SCD THE SHOP

02 /

Access & Training

Access to The Shop is **tiered by training level**, so every guest builds skills safely before moving on to more advanced equipment.

Tiered Training & Access

Equipment is grouped by training level—from basic hand tools to advanced machinery—requiring online orientation and in-person certification to ensure safe usage.

START HERE → go.illinois.edu/SCDtrain

Support & Supplies

Hand tools, clamps, pliers, hammers, and measuring tools are available for checkout at the front desk. Consumable materials are sold onsite or may be brought by guests.

Training Days

Priority goes to guests learning a tool for the first time. Already trained? You can still work on your own projects as space allows.

Production Days

Reserved for trained users who are ready to create on their own, without instruction.

Weekly Schedule

Shop Hours & Weekly Schedule

Mon	● Closed	Maker Workshops by registration only · 4:30–7 PM
Tue	● Training Day	4–10 PM
Wed	● Production Day	4–10 PM
Thu	● Production Day	4–10 PM
Fri	● Training Day	4–10 PM
Sat	● Training Day	1–6 PM
Sun	● Production Day	1–6 PM

● Training Day ● Production Day ● Workshops / Closed

Good to Know

Hours shift between **Training** and **Production** days, so plan class visits around the type of access your students need. Mondays are reserved for registered Maker Workshops only.

PLANNING A VISIT?

*SCHEDULE SHOP WORK OUTSIDE
THE BUSIEST WEEKS OF THE
SEMESTER.*

Best Practices

Bringing a class or program to The Shop? These nine practices help your students learn more, build with confidence, and make the most of their time in the space.

1 Start with Clear, Learning-Aligned Outcomes

Even though makerspaces encourage exploration, students still benefit from knowing why they're making.

BEST PRACTICES

- Tie maker activities to specific course outcomes.
- Frame the activity with “students will be able to...” rather than “students will build...”

2 Design Scaffolded, Open-Ended Projects

Students thrive when constraints and freedom are balanced.

BEST PRACTICES

- Provide scaffolding early—low-fi or structured mini-builds, or draft modeling before coming to The Shop—to support motivation, confidence, and agency.
- Incorporate checkpoints (including confirming proper programs are used) to help with pacing.

3 Teach the Tools Before Students Need Them

You'll reduce frustration, free up cognitive bandwidth, and optimize the time students spend in The Shop.

BEST PRACTICES

- Ensure students complete the Online Orientation at go.illinois.edu/SCDtrain.
- Use low-stakes practice tasks before students arrive so they gain confidence early.

Best Practices

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Use the SCD Human-Centered Design Taxonomy as a Process Framework

Giving students a structured approach leads to better outcomes.

BEST PRACTICES

- Emphasize iteration, not perfection.
- Build in cycles of ideation → prototyping → testing → reflection.
- Provide simple templates for documenting iterations.

5

Promote a Growth Mindset & a Culture of Safe Failure

Failure is a productive part of making—but students often need coaching to embrace it.

BEST PRACTICES

- Normalize iteration; encourage low-fi mini-builds or draft modeling before The Shop.
- Assess process, not just the final product.
- Include reflection prompts: What changed? What failed? What did I learn?

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Consider Collaborative Learning for Larger Projects

Making lends itself to teamwork, but students aren't automatically good at collaboration.

BEST PRACTICES

- Use intentional team-formation strategies (mixed skills, interests, disciplines).
- Assign rotating team roles: facilitator, documenter, builder, tester.
- Have teams create a team contract at the start of the semester.
- Encourage self- and peer-reviews at key points throughout the term.

Best Practices

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Integrate Reflection Throughout

Reflection helps students connect hands-on activity with conceptual learning.

BEST PRACTICES

- Maker journals (weekly or per milestone).
- Photo / video documentation of prototypes.
- End-of-project “post-mortems.”

8

Plan for Logistics: Safety, Time & Materials

Well-run maker activities need thoughtful planning.

BEST PRACTICES

- Build around The Shop’s hours and weekly schedule.
- Estimate how long each activity takes, and make sure students understand the time commitment.
- Schedule Shop-based assessments outside the busiest weeks when possible.
- Ensure all students complete the Online Orientation before arriving (go.illinois.edu/SCDtrain).
- Time assignments so students have enough runway and The Shop is adequately staffed.

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Partner with The Shop Staff

This makes activities smoother and builds student confidence.

BEST PRACTICES

- Co-plan sessions with The Shop staff.
- Invite them to answer student questions during class sessions.
- Share your project prompts early so they can anticipate student needs.

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**Ready to bring your class
to The Shop?**

(LET'S MAKE SOMETHING TOGETHER)

Start at go.illinois.edu/SCDtrain • then co-plan with The Shop staff