Full PI Checklist
Version 5.0 (Fall 2023)

Instructions:
Learn and get checked off on all of the following tools and skills. You are required to learn 3 bonus tools of your choice but can choose to learn more. Each group’s Trained/Staffed box can be checked once you have either staffed that area while on shift or given a training on its section of the Prospective Checklist. Once complete, scan this page and turn it in to the front desk (if not completing digitally). Follow the instructions posted there to schedule a Full PI Interview.

3D Printing
☐ Trained/Staffed
☐ Resin Printing
   Tested: ____________
☐ Unclogging Nozzles
☐ Adjusting Extruder Tension
☐ Advanced Filaments
☐ PVA/Alternate Supports
☐ Items Not to Print

Waterjet
☐ Trained/Staffed
☐ ProtoMAX
☐ GlobalMAX
☐ Turning Hoppers On/Off
☐ Brittle Materials
☐ Clearing Garnet Hose
☐ Changing Path Start/Stop

Wood Room
☐ Trained/Staffed
☐ Nail Gun
☐ Table Router
☐ Trim Router
☐ Track Saw
☐ Crosscut Sled
☐ Drum Sander
☐ Work Holding

Lasers
☐ Trained/Staffed
☐ Rotary Tools
☐ FLP Laser
☐ Cermark
☐ JobControl

Metal Room
☐ Trained/Staffed
☐ Horizontal Bandsaw
☐ Vertical Bandsaw
☐ Cold Cut Saw
☐ Changing Sander Belt
☐ Buffing Wheels
☐ Dremel

Craftland
☐ Trained/Staffed
☐ Button Maker
☐ Printable Stickers

Paint Booth
☐ XTC3D, Bondo, & Primer

Bonuses (3 Required)
☐ __________________________
☐ __________________________
☐ __________________________

Electronics
☐ Trained/Staffed
☐ Oscilloscope
☐ Waveform Generator
☐ Multimeter

Bike
☐ Chain Cleaning
☐ Adjusting Rear Derailleur
☐ Changing Tires

Name: __________________________
Bonus Tools and Skills

The list below contains all the additional tools and skills that are available in the Invention Studio to learn.
* Denotes tool that must be taught by the respective master

Wood Room
- Wood lathe*
- Chisels and hand planes*
- Domino
- Kreg Jig
- Japanese Hand Saws

Laser
- DXF cleanup
- Dithering
- Leather engraving
- Puzzle-making software

Paint Booth
- Air Brush*
- Create a stencil
- Strip paint off an object

Electronics
- PCB Mill*
- Hot air rework station
- Microscope with monitor
- Battery recycling/charge measuring
- Heat shrink
- SMD soldering
- Circuit design software (KiCAD or EAGLE)
- Arduino design and programming

Bike
- Common sources of play (bottom bracket, headset, dropout/axles)*
- Wheel truing*
- Rim/disc brake adjustment
- Pegboard tools

CAE
- SolidWorks Simulation
- NX Nastran
- CAD Upgrades (shortcuts, 3D space mouse, mouse customization)
- COMSOL
- ANSYS

XR
- 3D Scanner*

Waterjet
- Etch/scribe*
- Clearing garnet clog on ProtoMAX*
- Clearing air cylinder clog on Maxiem*
- Waterjet Brick & Alternatives
- Saw Mode

Metal Room
- Metal Lathe*
- Angle Grinder
- Grinding Wheels
- Spot Welder
- Tapping and countersinking holes
- Sand Blaster
- Nibbler
- Reciprocating Saw
- Compact Bandsaw
- Three Wheel Bender

3D Printing
- Markforged*
- Belt Printer*
- Bambu Lab X1C*
- Specialty Filaments
- Dual Extrusion/PVA
- Manual bed leveling

Craftland
- Embroidery Machine*
- Leather Sewing*
- Serger*
- Sublimation Printer*
- Foam cutting tools
- Advanced Vinyl Cutter: Trace Panel, Cardstock, Multiple/Extra Tools, Troubleshooting, etc.

CNC
- Manual Mill*
- Tormach*
- Pocket NC*
- EMCO*
- CAMaster*
- Shaper Origin*