

Preseason 3D Print Menu

Plan an original, useful print. Show your design, test it, and get coach approval before using anything on a robot.

Student: _____

Date: _____

Mentor: _____

Choose a preseason project

Start with an item that solves a real team problem. Check one project, or propose an original idea.

Pick	Project family	Examples / starting point
☐	Workshop organization	Parts-bin divider, labeled tool holder, filament organizer, cable organizer, battery-cart label clip.
☐	Pit and event utility	Pit-cart accessory, practice gauge, small fastener tray, driver-station accessory, protected label holder.
☐	Training and test pieces	Tolerance coupon, material test strip, orientation sample, fit-check mockup, assembly practice model.
☐	Robot-interface mockup	Sensor bracket mockup, wire-routing concept, service-access gauge, noncritical mounting concept.
☐	Vendor-inspired study	Analyze an official AndyMark bracket, RSL/breaker protection concept, radio-mount concept, or drill guide - then design an original version.
☐	Moving-part prototype	Noncompetition spacer, guard, chain-guide concept, pulley prototype, or mechanism motion model.
☐	My original idea	_____

Design and review record

Problem this solves	_____ _____ _____
Printer plan	☐ X1C remote queue ☐ A1 Combo workshop ☐ A1 mini workshop ☐ Not decided
Material / color	_____ Why this material? _____
CAD file / revision	_____ ☐ Units checked ☐ Orientation reviewed
Test plan	How will you measure fit, access, strength, or usefulness? _____ _____
Evidence to upload	☐ CAD source ☐ 3MF/STL/STEP ☐ Slicer project ☐ Print photos ☐ Measurements ☐ Revision notes

Important: A printed part is not approved for robot use just because it printed successfully. A coach must review fit, loads, sharp edges, service access, electrical clearances, and the current FRC rules before use on a competition robot.

Coach Print Review

Use this page after the student submits their evidence. An approved skill and an approved print are separate decisions.

1. Learning review	☐ Evidence is the student's work. ☐ Skill work is approved or feedback is provided. ☐ RP decision is recorded separately.
2. Print-readiness review	☐ Correct file and revision. ☐ Dimensions and units checked. ☐ Material/color selected. ☐ Slicer orientation and supports reviewed.
3. Robot-use review, if applicable	☐ Fit and fastener access. ☐ Expected load/failure mode. ☐ Safety and electrical clearance. ☐ Current official FRC rules and inspection requirements.
4. Queue decision	☐ Needs revision ☐ Print approved ☐ Queue for X1C ☐ Local workshop print ☐ Do not print

Print outcome and pickup

Coach note / revision needed	
Print record	Printer: _____ Material: _____ Color: _____
Result	☐ Completed ☐ Failed / redesign ☐ Ready for pickup ☐ Picked up
Coach signature	_____ Date: _____

Team 3171 workflow: students submit private evidence in the portal. A coach approves learning and rank points. A separate coach-only Print Queue records print approval and status. Sending a job to the X1C remains a coach action in Bambu Studio or Bambu Handy.