

Merchandise & Apparel Design — Workbook

This workbook turns the course into a working toolkit you can use on real merch projects. You will choose print methods against budgets, preflight your files, build a blank shortlist, and assemble a printer-ready spec sheet. Work through one section per module and keep your completed templates as reusable assets.

Print Methods and What They Demand of Your Art

Practice matching designs to the right decoration method and proving the choice with real cost math.

Exercise: Method-Match a Real Brief

Take three different merch ideas (for example a 2-color band logo, a full-color illustrated streetwear graphic, and a corporate cap logo). For each, decide the best decoration method and justify it in two sentences.

- How many distinct spot colors does the design contain, and does that favor screen print or DTG/DTF?

- What is the expected order quantity, and how do setup fees change the cheapest method at that volume?

- Does the garment fabric (cotton, polyester, blend) rule out any method, and where does embroidery fit?

Worksheet: Unit Economics Calculator

Fill in the numbers for one project to find your true cost per piece and a retail price. Use a distributor catalog for the blank cost.

Order quantity (units)

Blank garment brand, style number, and unit cost

Decoration method

Number of spot colors (screen print only)

Screen setup fee per color

Per-print cost

Total setup cost (colors x setup fee)

Total print cost (per-print x quantity)

All-in cost per unit

Target markup multiple (2.5x to 4x)

Suggested retail price

Checklist: Method Decision Checklist

- Counted every distinct spot color in the design
- Confirmed the order quantity and crossover point between screen print and DTG/DTF
- Checked garment fabric compatibility with the chosen method
- Verified the design's finest detail survives the method (no sub-1.5 mm detail for embroidery)
- Ran the cost-per-unit math before quoting a price

Print-Ready File Preparation

Lock in file settings, build clean separations, and run a preflight that stops reprints.

Exercise: Separate and Spec a Palette

Take one flat-color design and reduce it to a fixed palette, then assign every color a number. Note the underbase requirement for a dark garment.

- Can you reduce the palette to 4 or fewer flat colors without losing the idea?

- What is the Pantone Solid Coated number for each color?

- If printed on a dark garment, where does the white underbase layer go, and which colors need it?

Worksheet: File Setup Sheet

Record the technical settings for one production file so it is correct before you build it.
Vector or raster (and why)

Canvas size at real print dimensions (inches)

Resolution at print size (DPI)

Color mode (CMYK / spot / Pantone)

Fonts outlined (yes/no)

Bleed required (yes/no) and amount

Master file format and location

Production file format for handoff

Checklist: Preflight Before Handoff

- Color mode correct for the method (no RGB sent for spot printing)
- Raster art is 300 DPI at final print size and never upscaled
- All fonts outlined or expanded
- Bleed and safe zone present on any cut product
- Spot colors labeled with Pantone numbers
- Production file named clearly with brand, placement, colors, and size

Garments, Blanks, and Material Choices

Build a reliable blank shortlist and spec garments precisely by brand and style number.

Worksheet: Garment Spec Worksheet

Spec the exact blank for one project using a distributor catalog so it is orderable, not vague.
Brand and style number

Fabric content

Weight (oz or GSM)

Fit (classic / fashion / boxy)

Color name and code

Size range needed

Print method compatibility note (e.g., dye-migration risk)

Distributor source (SanMar / S&S / AlphaBroder)

Exercise: Build Your Blank Shortlist

Choose your go-to blanks across three tiers so future quotes are fast and consistent.

- Which budget workhorse blank will you default to (e.g., Gildan 5000)?

- Which fashion-fit retail blank fits soft, modern brands (e.g., Bella+Canvas 3001)?

- Which premium heavyweight blank suits streetwear and college merch (e.g., Comfort Colors 1717)?

- What is your default for caps and for performance fabric?

Checklist: Garment Selection Checklist

- Matched the blank tier to the brand and budget
- Confirmed fabric content suits the chosen print method
- Flagged any dark polyester garment for dye-migration handling
- Looked up the exact style number and color code in a distributor catalog
- Confirmed size range and stock availability before quoting

Mockups, Tech Packs, and Presentation

Present designs that win approval and hand off a spec sheet a printer can run without questions.

Exercise: Present a Three-Mockup Set

Build a small, convincing presentation for one design using smart-object or online mockups on the exact specified garment color.

- Does the mockup garment color match the specified blank color exactly?

- Did you include a front on-model, a back, and a flat-lay view?

- Did you use a multiply blend so the print follows the fabric wrinkles?

Worksheet: Tech Pack / Spec Sheet Builder

Complete every field so the printer needs to ask nothing. This becomes your handoff document.

Garment: brand, style number, color, size range

Decoration method and underbase note

Placement and distance from collar

Imprint size (width x height) per size group

Colors: Pantone / thread brand and number / CMYK

Artwork file names, formats, and resolution

Quantity and size breakdown

Mockup image attached (yes/no)

Checklist: Approval and Production Handoff

- Written client approval on final mockup and spec sheet
- Final files delivered in agreed formats with fonts outlined
- Strike-off or pre-production sample approved for color and placement
- Color confirmed against a physical Pantone chip on the actual garment
- Quantity, size breakdown, and deadline confirmed with the printer
- Final files, spec sheet, and approved sample photo archived for reorders

Your Action Plan

1. Pick one real merch idea and lock the decoration method using the Method Decision Checklist before designing.
2. Run the Unit Economics Calculator to set a cost-per-unit and a retail price for that idea.
3. Reduce the artwork to a fixed palette and assign every color a Pantone Solid Coated number.
4. Build the production file at real print size, in the correct color mode, with fonts outlined and bleed where needed.
5. Spec the exact blank by brand, style number, and color code from a distributor catalog.

6. Adapt the design into a small logo system that fits a full back, a left chest, and a cap front.
7. Create a three-mockup presentation on the exact specified garment color and get written approval.
8. Complete the Tech Pack / Spec Sheet Builder so nothing is left to interpretation.
9. Order a strike-off or sample and confirm color against a physical Pantone chip before the full run.
10. Archive final files, the spec sheet, and an approved sample photo so reorders are fast and identical.

