

Armored Sweatshirt
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Materials

1. Hooded sweatshirt. I've used a pullover, but you can adapt the same ideas for a zippered shirt.
2. Fabric for the armor plates. Your first impulse may be to look for matching fabric and color, but the only ways to do that with complete success are to make the hoodie yourself from yardage or to buy a second hoodie and mine it for fabric.
It isn't really essential to match the colors. Historical armor is often made from a combination of metals. In fact, you could use gold or bronze fabric on a gray hoodie if you like.
3. 2 metal buttons with shanks.
4. Ultra-firm stabilizer, fusible on one side (For example, Floriani Stitch N Shape).

Measuring and Patternmaking

Half-size patterns for the hoodie shown on camera (size large) are provided in the PDF, but you'll need to create your own pattern pieces the measurements of your hoodie and wearer. Have the wearer try on the hoodie as you take the measurements. Mark the hoodie to fix the endpoints of each measurement.

Visor: Measure across the widest part of the nose for the lower visor. Measure across the forehead for the upper visor. The endpoints are the same for both measurements, about 3" above the ears.

Elbow: Measure around the sleeve (not the wearer's arm) at the elbow to determine the length of the strip that holds the shield in place. The shield itself is an oval; its dimensions are flexible.

Shoulder shields: Measure the armhole seam from front to back over the shoulder, starting and stopping about where the armhole bends to go under the arm. Most sweatshirts have either straight armholes or raglan sleeves, so you'll need a bit of imagination. Also measure along the top of the shoulder from about the midpoint of the shoulder to the shoulder point and beyond, to the desired length of the shield (about 2" – 3" below the shoulder point).

Neck shield: The length of the straight edge should be about half of the length of the shoulder shield's big curve.

Decide on the shapes for your pieces and sketch them on paper. Use the measurements you took to draw straight lines on paper as a starting point, and sketch in the curves. Work on just one half of the pattern; you'll flip it over to create a symmetric second half as you cut out the pieces. Add 1" to each end of the visors to extend beyond the button joints. True up the curves. Don't add seam allowances.

Cut one of each armor piece from ultra-firm stabilizer, with no seam allowances. Tape the dart edges together. Try on the shapes, adjust fit if necessary, and re-cut any pieces you adjusted. When the fit is right, cut the second shoulder shield, elbow oval, and neck guard.

Constructing the Armor Plates

Instructions for flat construction (elbow and neck shields; visors):

1. Roughly cut out two layers of fabric for each accessory piece except the shoulder shield. Each should be at least 1/2" larger on all sides than the stabilizer.
2. Put the fabric layers right sides together and fuse the stabilizer to the wrong side of the top fabric layer.
3. Stitch 1/16" outside the edges of the stabilizer, leaving a gap for turning. Use a zipper foot and adjust the needle placement to sew close to the stabilizer edge.
4. Trim and clip the seam allowances along curves and corners.
5. Turn each piece right side out and press. Press the seam allowances to the wrong side along the gap.
6. Close the gap with hand stitches or fusible web.
7. Topstitch 1/4" from the edges.

Instructions for the shoulder shields:

1. Roughly cut two fabric layers per shoulder as before, but cut exactly 1/4" from the dart edges.
2. Sew the darts in the fabric pieces.
3. Abut the dart edges of the stabilizer and zigzag to stitch the dart.
4. Stack the layers, fuse the stabilizer, stitch and finish as above.

Attaching the Armor Plates

For button joints:

1. For moveable joints, make an eyelet through each armor plate at the button location. Sew the button in place by stitching through the eyelet holes, not catching the fabric and stabilizer. Sew only through the button shank and the hoodie.
2. If the joint doesn't need to move, just sew the button through all of the layers: a sew-through button can be used and may even be preferable to a shank button.

Elbow shields:

1. Cut two 2"-wide bias strips long enough to fit around the sleeve at the elbow.
2. Press 1/2" to the wrong side on both long edges of each strip.
3. Open the hoodie's underarm seams.
4. Position each shield on a sleeve. Pin the prepared strip to the sleeve from one underarm seam to the other, passing across the middle of the shield.
5. Edgestitch the strips to the sleeves. Leave the upper and lower portions of the shields free. Use a stretch stitch to preserve freedom of movement, especially if the sleeve fits close to the wearer's arm.
6. Sew the underarm seams, catching the ends of the applied strips.