An Introduction to Building Gothic Arches in Vectorworks

There are different types of pointed arches used in Gothic architecture. The Tri Arch is based on an equilateral triangle and its height is the same as its width. A 3/5th Arch is an arch in which the height is 3/5 of the arch width. A Quinto Arch has a span of 4/5 of its width. The Recto arch has a span of 6/5ths. Each type is illustrated below.

Step 1. We will create a 3/5 arch in this tutorial. Create a document using the course template.

1. Select the Line tool from the “Basic Tools” palette. Click once to set the Line tool in the document. Hold the shift key and move the cursor to the right. Create a line that is 10m long.
2. Divide the line into 5 equal segments (2m each).

3. Your line should look like the example below.

4. Select the “Circle” tool from the “Basic Tools” palette and make sure that it is set on the first setting, “Radius Mode.”
5. Place the center of your circle 2/5 from the end of the line. Drag the edge of the circle out to the opposite end of the line. Click once to finish drawing the circle.

6. Select the circle and go to “Modify > Send > Send to Back.”
7. Your divided 10m line will be visible again.

8. Select the “Circle” tool and repeat steps 4-6.
9. Select the “Trim Tool” from the “Basic Tools” palette and trim the areas outside of where the circles overlap. You will be left with a mandorla shape. If the “Trim Tool” deletes too much, undo (command + z).

10. Now trim the lower segments of the shape.
11. With the top two arcs selected, go to “Modify > Compose.”
12. You have created a 3/5 arch.

13. With the arch selected, go to “Modify > Convert > Convert to NURBS.”
14. You have now created a 3/5 arch along which you can extrude a molding profile.