

Amped up: the anatomy of a design project

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As part of their undergraduate training, industrial design majors at the Shintaro Akatsu School of Design are invited to complete a comprehensive project entirely of their own making.

“Our students are always working on interesting assignments, but we’ve found that independent projects can be a unique opportunity for them to apply skills to things they deeply and personally care about,” says Industrial Design Chairman Richard Yelle.

“Industrial design is applicable to so many things—medical devices, cars, espresso machines,” Yelle continues, “so independent work is a great opportunity for our students to think fully about where they want to take their degree.”

Senior Marc St. George agrees. His interests—industrial design and music—certainly fused in perfect harmony when he proposed building a guitar of his own.

Why a guitar?

I always wanted to build a guitar so this seemed like a perfect opportunity.

How long did it take you to finish it?

Six months. I designed everything. I was inspired by the Standard Telecaster; it’s one of the most iconic guitars. It came out in the 1950s and 1960s. I play aggressive, heavy music so I put my own metal edge to it. Normally, it would have 22 frets, but I put 24 on mine so I would have two octaves instead of one.

Tell us about the wood you chose.

It’s made out of swamp ash. It’s lightweight and you get a really good midrange. It’s really good for heavy metal. I used bird’s eye maple for the fret board. It literally looks like there are eyes in it the

way the wood has natural knotting to it. Maple has a much brighter sound to it than rosewood or ebony. It just looks amazing.

When and where going to play it?

Once I get it tuned, anywhere really. I have friends I jam with, and I do a lot of bedroom guitar, for sure.

As a designer, what have you learned?

I set out wet behind the ears. I thought I could just go for it. I thought making a guitar would take a month. My timeline was shattered when I started getting into the meat of it. But I'd definitely love to pursue guitar building as a career.

About the Industrial Design Program:

The four-year [Bachelor of Science in Industrial Design](#) emphasizes conceptualization, design, and production of products for personal, home, industrial, and commercial use, ranging from domestic and consumer products to medical, entertainment, and more. Students learn to design and develop product concepts, visualize them using the latest computer technology, and build models in a well-equipped model shop or computer lab. Students learn presentation skills to demonstrate their creative and unique solutions. Advanced industrial design topics include ergonomics, materials and manufacturing, and marketing.

Cellphones, HDTV and computer monitors, lighting, furniture, home appliances, exhibition spaces, computer-aided design, hand-modeling are all part of the SASD Industrial Design Program. SASD is an accredited member of the National Association of Schools of Art and Design (NASAD), the governing body of undergraduate and graduate art and design schools.