Building a bridge to a new career

In Instructor Charlie Warren’s Statics class, Computer Aided Design Drafting students study bridge design and then go one step further by building one! Each student selected a bridge design and sketched it on graph paper. Then they built a two-dimensional bridge prototype out of balsa wood and glue. Balsa wood is extremely light and flexible, so will the designs hold weight? And which design will support the most weight without breaking? When the prototype was constructed, students answered those questions by testing their structures.

Mr. Warren had each student hold his or her design so that it formed a bridge across a sink in his classroom, simulating the bridge spanning an actual river or gorge. Weight was added to the model until it became unstable, bent, or broke. Students recorded the highest amount of weight the bridge truss supported.

**Hands-on activity was great learning experience**

Students learned from the construction process, and from the experiments with weights. Blair Blanford’s K-truss, for example, supported 6 ½ pounds of weight while the model itself weighed in at slightly less than 0.2 ounces! His model supported more than 500 times its weight. Students can use this information to make real-world design decisions in the future.

Blandford said, “It was surprising that something this light can actually hold so much weight! What a lesson for us.”

Student John Racippio, who works in theater, applied what he learned in class to the way trusses are used on stage to support lighting, background settings and props. He was “delighted with the ratios and learned glued joints are stronger than the wood alone.”

Mr. Warren concluded the class exercise with a discussion about bowing and how it distributes weight across a truss. Students will use what they have learned with this project as they continue to complete their CADD programs, whether they design buildings or machine parts!

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**GREETINGS FROM JEFF AT WALT DISNEY WORLD**

“Many of you may be studying at SCTD or planning to do so with the hope of one day making a great career out of the knowledge and experience you will get from the college experience. I study at the college in the area of Graphic Design and from the start of my studies I’ve made it my ultimate goal to someday work for Disney. I am happy to say that SCTD has afforded me this option, though it required a lot of my hard work and dedication to get me here. With just a few classes to go in order to complete my program and earn my degree, I was able to embark on a lifetime opportunity to work for this amazing company in a program called Disney College Program. My experiences here are fulfilling my externship requirements for my program, as well.

Through this amazing journey I have been able to make future contacts and network with some amazing leaders throughout a company known around the world. While a lot of trade skills are not required to do my daily job, the environment and learning experiences are well worth a few months of labor. I have been given the opportunity to get my foot in the door at what I hope will be my future and lifelong career path. Here at Disney we like to say ‘it all started with a mouse...’, but for me it all started at SCTD!”

Jeff Flaherty, Graphic Design student

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**Student joins Disney team in Orlando, Florida**

SCTD Computer Graphic Design student Jeff Flaherty knows what he wants out of life and is not afraid to go after it. His drive has earned him an internship as part of the Disney College Program. Jeff is now at Disney World in Orlando, Florida to spend six months as a Merchandise Cast Member. Flaherty is excited about his opportunity to live and work at the Disney theme park. He said that the internship will be “a great experience that will expand my resume and my network. It will also give me a unique opportunity to see how a world-class operation such as Disney employs graphic design professionals in all aspects of the design industry.”

As part of his duties, he will demonstrate and sell merchandise, unload, store and inventory products, provide guest services, and more. SCTD will maintain his enrollment and his guaranteed tuition as he participates in this exciting Disney opportunity. When he returns to SCTD in January, he will be able to move seamlessly back into his Graphic Design program. Plus, when he earns his degree, he’ll have opportunities for full-time employment with a great Disney career. Good luck, Jeff Flaherty.