Florida Institute of Technology started in 1958, the same year NASA was established, as Brevard Engineering College to educate professionals working in NASA’s space program at the Kennedy Space Center.

University lore tells a story of Jerome P. Keuper, a NASA physicist sharing his dream to create a scientific and technological university with a colleague over drinks at a Florida pub. Overhearing the conversation, a fellow patron pushed 37 cents in change across the bar and said: “There’s your first donation, Jerry. Now, go and build that college.”

Known as Florida Tech since 1966, the school has expanded since its early days to other STEM areas, including marine biology and biosciences, and enrolled a total of 6,775 students last fall, according to the Department of Education. T. Dwayne McCay, a rocket scientist who served as division chief at NASA Marshall Space Flight Center, has led Florida Tech as president since 2016 and said at his inauguration that he wanted to transform a “very good university” into a great one.

McCay recently spoke with The Business Journals’ Hilary Burns about the school’s “symbiotic” relationship with NASA and fundraising efforts. The following is an edited transcript of the conversation.

Could you talk about how Florida Tech has evolved from its space roots?

I call our strategic plan that we have underway right now back to the future. We’ve tried to narrow our scope and refocus ourselves on the engineering and science aspects, and the employability of our graduates. One of the things we pride ourselves on is that our graduates come out of here work-ready. We have a lot of hands-on opportunities for our engineers and our scientists. The employment rate is in the high 90s within a few months.

I know we shouldn’t be mercenaries and focus just on employment, but I’ve had parents tell me, “I’m sending my son or my daughter to Florida Tech because I know if they can graduate, they’ll have better lives than we had.”

How do you compete with better-known engineering schools?

Our real strengths for years have been in aerospace engineering, mechanical engineering and space physics. Our founder was a guy named Jerome P. Keuper and he founded the school on nothing more than 37 cents and a dare from some of his drinking buddies. But he was a true entrepreneur in every way. The whole school was founded on entrepreneurship and that still appeals to so many of these young people. We still have probably the most entrepreneurial set of graduates of any school around. And that is very appealing. Other schools, particularly the bigger ones, have trouble instilling that. And, you know, if I had a $20 billion endowment like some of them do, then I wouldn’t even worry about them. But we don’t. So, we have to compete a little harder. We have to listen a little better. We have to construct our programs so they get job offers.

I know growing the endowment has been a priority for you. It’s grown from $66 million to $92 million in your tenure. How is fundraising going?

We’re young. We’re only a little over 60 years old so our graduates are just now beginning to be in a position where they not only lead some major companies, but they own some major companies. What we’ve done in our new development office is we’re finding those people and we’re beginning to develop the relationships. For years there wasn’t a great interest by
the Florida Tech administration in involving those graduates. They gave them a good education, patted them on the head and said, go get ‘em. Since our previous president came, we’ve done a lot of reopening those communication lines and involve those and alumni in the university again.

When you started in 2016, you said your goal was to turn a “very good university into a great one.” What does that look like?

What we had done over time is we added so many programs and spread ourselves thin. To go from good to great requires you to focus. I thought as the president, I could refocus the school. The plan that we’ve implemented is to refocus on the things that we’re really good at – we’re the best aerospace-engineering school in the country, the best mechanical-engineering department in the south, the best electrical-engineering department. Something that we had been excellent in for so many years but we let diminish was ocean and marine engineering and also marine biology. Our biological sciences were focused on the marine world and as we started recruiting high-quality faculty, the bioengineering and biomedical began to show themselves as something we could be as good at as anybody.

Not all aspects, but a focused program. In biomedical engineering, for example, the jobs are there. We built a brand new biomedical engineering building that’ll come online in December. The next thing in line is an ocean-engineering research facility.

When you say you were spread too thin, did that mean getting rid of some programs? What was that process like?

Yes. We’ve been underway with that for two or three years. It’s an incredibly painful process to go through because there are faculty that are dedicated to those areas. And they’re good faculty, there’s no doubt about that, but you just can’t do everything. You only have so many resources. We’re actually evaluating basically the return on investment, not just for us at the school, but for the students. If you wanted to major in English literature, even though you might be able to do it here, I would say there are a lot better places to go and a lot more bang for your buck then trying to come to an engineering school and major in journalism. I’m not saying we’re getting rid of journalism completely, but we’re focused on advanced-media type journalism – things that fit with us as an engineering school.

Could you talk about the school’s relationship with NASA and how that’s evolved?

Both of us were founded in 1958, a few months apart. So, we’ve grown up together and Florida Tech and NASA have been arm-in-arm since the very beginning. There’s a huge number of people with Florida Tech degrees who work at Kennedy Space Center, which is about 40 miles away. We actually teach classes out there on space physics and space systems. It’s been a synergistic and symbiotic relationship from day one. I worked for NASA for a while as a propulsion chief, and we have dozens of people that have done research for NASA here.

Where do you see the school five or 10 years from now?

We’re in the second year of a six-year plan. I think we’re going to be one of the most respected technological schools, certainly in the southern U.S., and for that matter, in the whole country.