By Adrienne King

LONG KNOWN FOR ITS ACADEMIC PRESTIGE IN ENGINEERING, WEST VIRGINIA UNIVERSITY INSTITUTE OF TECHNOLOGY FIRST RECEIVED AUTHORIZATION FROM THE STATE BOARD OF EDUCATION TO OFFER A BACHELOR’S DEGREE IN ENGINEERING IN 1952. SINCE THEN TECH HAS BEEN AN INNOVATOR IN THE VARIOUS FIELDS OF ENGINEERING, ESTABLISHING ITS REPUTATION AS ONE OF THE STATE’S LEADING UNDERGRADUATE STEM INSTITUTIONS.

The first engineering degrees awarded by Tech were in electrical engineering in 1955. The class of five were the first-ever Tech engineering graduates. “Enrolling at Tech and in the electrical engineering program changed my life forever,” explained Tom Dressler, ’55.

“I would have never had the opportunities I was given during my 40 year career without the engineering program and my degree from Tech,” Dressler said.

In 1956 then-president Dr. William Axtell hired Dr. Leonard C. Nelson as Tech’s first director of engineering. “At the time I was working as an associate professor in the mechanical engineering department at North Carolina State,” Nelson explained. Nelson first heard about the job at Tech from a Tech faculty member who passed his name along to the president. President Axtell had written to Nelson: “A further reason which makes this position a challenge, and which might very well interest you, is that it is a young program and the potential for developing a top-notch engineering program is great.”

After accepting the position, Nelson realized indeed just how much potential lie in the program, despite its embryonic state. He described the first few years, “Our challenge was to establish the various engineering departments and strengthen them so that they could pass accreditation.” At the time, Tech had three engineering departments: electrical, mechanical and chemical. “I attribute our success to the people I hired. We had good department heads. I simply orchestrated their efforts.”

In 1961 Nelson became the institution’s fifth president and served until 1987. Lloyd Ritchey replaced Nelson as director in 1962 and served as the engineering director for the next three years, during which Tech added civil engineering to its curriculum offerings.

The current engineering building was completed in 1967, which allowed all of the engineering programs to be housed under one roof. Nelson’s accreditation objective was successful when, in 1968, civil, electrical and mechanical engineering became accredited by the American Engineering Council for Professional Development (ECPD), today’s Accreditation Board for Engineering and Technology (ABET).

Dr. Lyle Blackwell served as the director from 1966–72 and dean from 1972–85. Under Blackwell’s leadership, the 1970s were full of continued growth for the College, with the addition of computer science in 1970 and a master’s degree program in engineering in 1979, which was later discontinued. Chemical engineering was accredited by ECPD in 1972.

Tech awarded the first Master of Engineering degree in 1981 to civil engineering graduate Raymond Kettlowell, ’71. The electronic engineering technology program received ABET accreditation in 1982, and a 23,000 sq. ft. addition to ELab was completed in 1983. Dr. Robert Gillespie served as dean in 1985, prior to his role as the University president from 1986–1992. Dr. Ernest Nester assumed the role of dean in 1986 and served in that capacity until 1994. During Nester’s tenure Tech added a master’s degree in control systems engineering, which was discontinued in 2007.

In honor of President Nelson's service to Tech, the College was officially renamed the Leonard C. Nelson College of Engineering in 1986. “I believe the naming gave us an identity,” explained Nelson.

The University saw tremendous changes during the next two decades. In 1996, Tech became a regional campus of West Virginia University, and became a full
division in 2007. After a legislative mandate in 2009, all West Virginia community & technical colleges were separated from their four-year counterparts. WVU Tech continues to share its campus with Bridgepoint Community & Technical College, and the two institutions collaborate on issues such as facilities maintenance and general education courses.

As industrial needs have evolved, so too have Tech’s academic offerings, including the introduction of a 2+2 aerospace engineering program in 1999 in collaboration with WVU. Both the civil and mechanical engineering technology emphases received ABET accreditation in 2003. A separate computer engineering program was started in 2005 and accredited in 2007.

Dr. Zeljko “Z” Torbica was named dean in 2012. With more than 13 years of higher education experience in both public and private universities, in addition to his international private-sector business record, Torbica will lead the College through its next phase of challenges and opportunities for growth. “A ‘technicist’ shift is taking place in the funding of public higher education in the United States, and West Virginia is no exception. We need to adapt to these changes by becoming less dependent on state funding by finding alternative sources of revenue, such as increased enrollment, funded research, fundraising and offering more revenue-generating services to the market,” stand Torbica.

“One of our proudest legacies has been our strong traditional engineering curriculum with a practical orientation. This approach has served our programs and reputation well,” he explained. Torbica sees the future of engineering in integration, with many engineering and science sub-disciplines converging. “I also believe that in order to produce top-notch engineers of tomorrow, our curriculum needs to be carefully balanced to emphasize the development of both ‘how to produce’ and ‘what to produce’ capabilities.”

Shae Shamblen, senior chemical engineering major, explained, “WVU Tech was my college choice for several reasons: the accredited engineering program, smaller classroom setting which enhances my learning and friendly atmosphere given from students and staff. I hope to gain a lifetime of opportunities, including a successful career, with the education and experiences that I obtain.”

When asked about Tech’s role in the future of engineering, Nelson commented, “there is no question that there is, and will continue to be, a need for quality engineering graduates to provide innovation and product development now and in the future.” Torbica added, “Educating top-notch engineers, technologists, scientists and mathematicians who can go out into the world and have a positive impact on peoples’ lives takes a lot of hard work and resources. I’m confident that with the support of our alumni and friends, Tech is up to the challenge.”

Research contributions by Dr. Ronald Alexander, ’64; Tara Hines, ’03; Dr. Ernest Neter and Dr. Z. Torbica.

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