It was as if Gifford Albright could see the future when he was appointed as the first head of the Penn State Department of Architectural Engineering in 1963. He knew that technology was going to reshape the discipline and Penn State was positioned to lead the way.

Albright had a vision for “a computer operation with both verbal and graphic printout that will allow an architect, engineer, and others to sit down together and quickly conceive, design, and specify a building on the basis of total performance criteria.”

Through his vision, Project MODCON (Man-Machine System for the Optimum Design and Construction of Buildings) was born, along with the country’s first course in integrated building systems based on computer applications.

In the more than 55 years since, the emphasis on innovative uses for technology in the building industry has expanded greatly. Electronic Data Interchange (EDI), Building Information Modeling (BIM), Computer Integrated Construction, and Immersive Construction all trace their lineage to Project MODCON and its introduction at Penn State.

“Gifford Albright pioneered a unique curricular structure that emphasizes systems-of-systems thinking and equips students with the ability to integrate complex, interdependent engineering systems for achieving ultra-high-performance buildings. His ideas for convergent architectural engineering education were several decades ahead of their time, and are still meaningful and applicable today.”

Key Milestones

1936 | The first year of accreditation for the Architectural Engineering (AE) Program at Penn State, which has the longest continually accredited program in the United States.

1948 | AE at Penn State is changed to a five-year program and begins granting bachelor of architectural engineering degrees. As part of the five-year curriculum, a thesis project is established for fifth-year students.

1963 | The Department of Architectural Engineering is reestablished in the Penn State College of Engineering, with Gifford Albright as the first department head.

1991 | The Ph.D. program in AE is formally established at Penn State.

1994 | The AE Career Fair, with 20 companies attending, launches. The event is now the single largest AE career fair in the nation, with more than 165 companies and an average of 600 students attending annually.

1998 | To better meet the needs of the building industry, the AE Environmental Option is divided into two: Mechanical and Lighting/Electrical. The options stand today as Construction, Lighting/Electrical, Mechanical, and Structural.

2018 | Sez Atamturktur is named department head.

Architectural Engineering Today

100% JOB PLACEMENT by spring graduation*

>95% internship placement for all students in major

Full Professor 8 7
Associate Professor Assistant Professor

50% of undergraduate AE students study abroad