Mechanical and aerospace engineering is deeply rooted in the history of NC State, stretching back to the Mechanic Arts program of NC State’s inaugural year in 1889.

Drawing on the holdings of the College of Engineering, University Archives and the NCSU Libraries Special Collections Research Center, this exhibit features the historical highlights of the Department of Mechanical & Aerospace Engineering.
Holladay Hall

After a long, hard battle to obtain a federal grant for the revolutionary idea of higher education for the working class, the North Carolina College of Agriculture and Mechanic Arts (A. and M. College, now NC State University) opened its doors on October 3rd, 1889. Alexander Q. Holladay was named as the first President. The first student enrolled was Walter J. Matthews in mechanic arts (engineering). Dr. Wallace Carl Riddick Jr. joined the faculty of the North Carolina College of Agriculture and Mechanic Arts as professor of mechanics and applied mathematics. The first graduating class at NC State was 1893 with 19 graduates: 14 completed course work in mechanics (mechanic arts or engineering) to receive a BE degree (Bachelor of Engineering).
Built in 1890 to house mechanical engineering shops, the Mechanical Building was demolished in 1927 and replaced by Peele Hall. It was the second building on campus.

This building contained drawing rooms, laboratories and shops: a machine shop, forge shop, wood-turning shop and carpenter shop. Each shop had a capacity of 34 students. At this time students completed their degrees in two years. Post graduate courses in mechanics were first offered in 1893 and required only one additional year. The students who completed the additional year received the designation of mechanical engineers. In 1895 oil lamps on campus were replaced with electric lights and the electric plant was operated by engineering students. The Mechanical Building was demolished in 1927 and replaced by Peele Hall. The Park Shops were built in 1914 and named in honor of Charles B. Park (1867-1944). From 1914 until 1949 the Mechanical Engineering Department taught the majority of all shop courses (woodworking, machinery, welding foundry, etc.) in this building.

Park Shops are named after Charles Benjamin Park (1867-1944), an expert machinist, who was superintendent of shops at NC State for almost fifty years, beginning in 1891. The Shops were built in 1914 and originally used by the mechanical engineering department for shop classes.
Page Hall & Diesel Building

Mechanical Engineering moved to a new building, Page Hall, in 1922 and on May 28th, 1923, the School of Engineering was formed. Dr. Wallace C. Riddick, Jr. was named the first dean. The School consisted of the Mechanical Engineering Department, Civil Engineering Department, Physics Department, Textile Engineering, and Electrical Engineering.

In 1929 the Aeronautical Engineering Option was offered for the first time, and by 1940 the Department of Aeronautical Engineering was established. In 1941 one of NC State’s most significant contributions to the war effort was the Diesel Program, developed by the Mechanical Engineering Department to train naval officers.

Katharine Stinson was the first woman to graduate from NC State's School of Engineering. She received a bachelor of mechanical engineering degree, aeronautical option. Katharine Stinson (class of 1941) was taking flying lessons at the old Raleigh Airport on US-401 when Amelia Earhart flew in for a visit in the early 1930s. When Stinson told Earhart that she wanted to become a pilot, Earhart advised her to become an engineer, a career Stinson pursued in spite of obstacles that prevented most young women from striving for nontraditional degrees. Stinson also was the first woman engineer hired by the Civil Aeronautics Administration, now the Federal Aviation Administration.

Mechanical Engineering moved to a new building, Page Hall, in 1922. Page Hall was named for Walter Hines Page (1855-1918), who was a member of the Watauga Club and supported the establishment of North Carolina State University. Page served as editor of the State Chronicle and was ambassador to Great Britain from 1913-1918.
In 1951 the Department of Mechanical Engineering and the Department of Aeronautical Engineering moved into two new buildings, Broughton Hall and Riddick Engineering Laboratories. These buildings housed offices, classrooms, labs, several wind tunnels and a collection of diesel engines furnished by the U.S. Navy. In 1962 the departments were amalgamated and the name of the Department of Mechanical Engineering was broadened to include Aerospace Engineering which coincided with the increasing number of NC State engineering graduates and faculty who joined the U.S. Space Program.

In 1953 the first African-American graduate students enrolled at NC State, Hardy Liston (mechanical engineering) and Robert L. Clemons (electrical engineering). Clemons became the first African-American to receive a degree from the university when he received a professional degree in electrical engineering in May 1957. In 1956 the first African-American undergraduate students entered NC State; all were engineering students. Walter Holmes enrolled in mechanical engineering with an aerospace option.

Broughton Hall was built in 1951 and named for Joseph Melville Broughton (1888-1949). Broughton was elected governor of North Carolina in 1941 and to the U.S. Senate in 1948.
Built in 2010, Engineering Building 3 is a four story, 250,000 square foot facility that houses Mechanical & Aerospace Engineering and Biomedical Engineering. A separate building in the back houses wind tunnels, an anechoic chamber and research labs.

MAE Department Building Locations 1889-2010

**NC State Main Campus**
- 1889 Holladay Hall
- 1890 Mechanical Building (now Peele Hall)
- 1914 Park Shops
- 1922 Page Hall
- 1944 Diesel Building
- 1951 Riddick Engineering Laboratories
- 1951 Broughton Hall

**NC State Centennial Campus**
- 2010 Engineering Building 3
MAE Department Milestones
1889-2010

1889 North Carolina College of Agriculture and Mechanic Arts (NC State) opens.

1893 First graduating class with 19 graduates: 14 completed the course work in "mechanics" ("mechanic arts" or "engineering") to receive the BE degree (Bachelor of Engineering).

1923 The School of Engineering was formed and the Mechanical Engineering Department established.

1930 School of Engineering enrollment (undergraduate and graduate combined) was 685.

1940 The Department of Aeronautical Engineering is established. School of Engineering enrollment (undergraduate and graduate combined) was 1,180.

1941 One of the most significant contributions to the war effort, the Diesel Program was developed by the Mechanical Engineering Department to train naval officers. Katharine Stinson was the first woman to receive an engineering degree from NC State.

1950 School of Engineering enrollment (undergraduate and graduate combined) was 1,690.

1953 The first African-American graduate students enrolled at NC State.

1962 The Department of Mechanical Engineering becomes the Department Mechanical and Aerospace Engineering.

1965 The first PhDs in mechanical engineering at NC State are awarded. School of Engineering enrollment (undergraduate and graduate combined) was 3,365.

1969 The Center for Sound and Vibration was established.

1975 School of Engineering enrollment (undergraduate and graduate combined) was 3,702.

1982 The Precision Engineering Center was established.

1987 The School of Engineering changed its name to the College of Engineering.

1988 The Mars Mission Research Center was established.

2005 College of Engineering enrollment (undergraduate and graduate combined) was 7,300.

2010 Engineering Building 3 opens. Mechanical and Aerospace Engineering enrollment reaches 1700 (approximately 20% of the College of Engineering and 5% of NC State).