Elinor Batie (BSChE’28), Wayne State’s first female engineering graduate. This photo is from the WSU 1928 Yearbook.

In 1928, a mere eight years after women gained the right to vote, Wayne State was known as Detroit City College and tuition was free to city residents. Members of the Engineering Society gathered in the “Eng-Out”, a dim corner deep in the bowels of Old Main. The fellows played bridge, drank soda, and wagered on how many kittens their pregnant cat, Madame Curie would produce. Nobody invited Elinor Batie, one of four people to receive a degree in chemical engineering that year — and the first female engineering graduate in the school’s history.

Women were oddities in the engineering field. Ms. Batie blazed a trail for other women to follow, but it took six more years before another

Lucille Pieti (above: middle row, third from left, and opposite page) blended in with her “fellow” Society of Automotive Engineer members in this 1950 photo. But this only female graduate of the 1950 engineering class, stood out in her accomplishment. She and other female engineering students in the early years paved the way for other women to study engineering.
woman followed in her footsteps. Women were scarce in the engineering college until the mid-to-late 70s. Until then, female engineers had limited job opportunities. It wasn’t until the 70s, when a national effort to attract minorities to engineering resulted in opportunities for women as well. Female enrollment in engineering colleges swelled as more career opportunities became available.

Mary von Rosen earned her degree in 1934. In a story in the October 23 edition of the WSU student paper, The Detroit Collegian, she was listed as senior vice president of the College of Engineering and secretary of the Engineering Student Council. The anonymous author of the article described her as “small and slender, with softly curled blonde hair, and shy gray-blue eyes, not at all like a person who would be designing cam engines.” The boys down in Eng-Out wrote about her in the April edition of the Buzz Saw, the college’s engineering magazine. “The boys are all in favor of that new Easter outfit Mary von Rosen has been sporting for the last week,” the author stated.

Based on the statements made in articles from this early period, many men found the idea of a career woman unfathomable. “A woman is really only kidding when she says she wants a career,” wrote another anonymous writer in the Collegian on December 12, 1936. The writer went on to demand that all college women be required to take home economics courses. “Colleges are responsible for the deplorable lack of culinary ability displayed by our modern women.”

Professors displayed the same attitude. In a November 4, 1936 article in the Wayne Engineer, the successor to the Buzz Saw, Professor W. F. Gerhardt was said to have smiled when asked about lady engineers. “Girls who have graduated from Wayne’s Engineering College have obtained good positions. Miss Rosen is secretary to an engineer,” he said.

Professor Gerhardt claimed there was no psychological reason why women shouldn’t become engineers. He advised women interested in engineering to combine their program with secretarial training and start from there. “They will thus get inside experience and prepare for personal work...Unless they get married in the meantime.”

Apparently, some women were not surprised by this attitude. Nor did they expect different. The Women’s Literary Club discussed the topic of whether women should work after marriage in 1928. According to a story in the January 12 edition of the Collegian, the answer was an overwhelming ‘no’. Nearly ten years later, an article in the January 1937 issue of the Wayne Engineer featured Catherine Cousins, the lone survivor of three women who entered engineering school together. “The fellows are swell,” said Ms. Cousins, or Casey, as she was affectionately known. “It’s grand they tolerate a girl in their classes.”

The headline in the October 11, 1939 issue of the Collegian read: “Two Brave Freshwomen Enter Engineering College.” And as the unnamed author of the story wrote, “All the engineering men are wondering, What they’re doing here?” The women, Florence Costello and Lillian Lee, were the fourth and fifth women to complete the program.

Fast forward a decade. Lucille Joyce Pieti, Miss Wayne University of 1950, graduated from the School of Engineering in 1950, the only woman out of a class of 300. Ms. Pieti, “a perfect size 10,” wrote Collegian reporter Sheldon Decker, joined the Chrysler Corporation where she was assigned to do television commercials for the Plymouth Division. Four years later, Ms. Pieti returned to Wayne University to give a speech to the American Society of Automotive Engineers. In Mr. Decker’s story headlined “Beautiful Blonde Delights Engineers,” he described Ms. Pieti’s talk as explaining a woman’s viewpoint on the interior and exterior color combination of the contemporary automobile. Ms. Pieti apparently went on to become a successful television actress, according to James McMicking, a long-time professor of Chemical Engineering.

About one woman a year graduated in chemical engineering during the 1950s, recalls retired chemical engineering professor Stan Stynes, who began teaching at WSU in 1955 and was dean from 1970 to 1985. In the 11 years between 1958 to 1969, the College of Engineering graduated only 15 women — 12 with bachelor’s degrees and 3 with master’s degrees. Theresa Krolakowski became the first woman to earn a Ph.D. in engineering at Wayne State in 1968.

“They had to be very dedicated to engineering,” said Dr. Stynes. “They were the only female in the class, every class, until they graduated. The majority of male students treated them fairly, although there were a group of students who resented them. "Unfortunately, there were some..."
professors who thought that engineering was a male profession and women didn’t belong there,” he said. Female students might not have received the grades they earned, added Dr. Stynes.

Diana Koenig graduated from WSU with a degree in Mechanical Engineering in 1956. Three other women attended the College of Engineering at the time, but one dropped out. Ms. Koenig said she enjoyed her time at Wayne State. Her professors and classmates treated her fairly, she recalled. But, “I did get strange looks sometimes when I wore pants to machine shop and welding classes.”

The most daunting problem that faced women in engineering, said Dr. Stynes, came after graduation. “Job opportunities for women were limited because at the time it was thought that women couldn’t manage men,” he said. Women were often limited to government jobs, research positions and consultant work.

Ms. Koenig recalls her first summer job. The telephone company hired her and 99 men. “Ninety-nine salaries were the same. Mine was less.” After graduation, she went to the Ford Motor Company. As far as she knows, she was the first female at Ford with an engineering degree. At the time, she couldn’t work in the department she wanted because there wasn’t a women’s room. But she did perform meaningful engineering work, helping design six and eight cylinder engines.

When Ford began laying off engineers in 1958, Ms. Koenig was one of the first to go because, as her supervisor told her, “She had a husband who was working.” She came back one and a half years later to the Sci-Lab in the Human Factors Engineering Department. She then took time off to raise a family. She returned to Ford in 1977, joining the Body Safety Group in Body Engineering. In 1986, she transferred to the Brake Department.

The climate for women improved in the middle to late ‘70s, according to Dr. Stynes. There was a national effort to recruit minorities into engineering. Female enrollment increased at the same time, through no particular effort, he said. “No money was set aside for scholarships for women, but the opportunities were there, and female enrollment surged, more so than minorities.”

Ms. Koenig said the climate was very different in the late ‘70s. At a meeting at Ford, she overheard her supervisor make the comment, “If you know any blacks or women — we want to hire them.” She was offended. “I felt sorry for the girls who came after me because they were treated as commodities, not individuals. Women shouldn’t get the jobs simply because they’re women. Everyone should be given an equal opportunity.”

Lydia Lazurenko, a 1955 WSU graduate in aeronautical engineering, built a successful career at General Motors working with gas turbines. She said the current attitude in industry is completely different than it was in the 1950s. “I never worked with another woman engineer until the 1960s,” she said. “Now that more women are entering the field, at least women will have other women to talk to at work.”

Today, opportunities for women in engineering continue to increase. At WSU, more than 21 percent of the students enrolled in the College of Engineering are female, slightly above the national average. Females make up more than 38 percent of the students in Industrial and Manufacturing Engineering, 35 percent of the students in Civil and Environmental Engineering, and 36 percent of the students in Chemical Engineering and Materials Science. Organizations such as the Society of Women Engineers and Women in Engineering Program Advocates Network (WEPAN) work to recruit women to the profession, provide scholarships and mentors, and help women establish themselves in the workplace.

But while the number of female engineers in industry continues to grow, they still make up only about 10 percent of the work force. Today’s female engineer enjoys more opportunity than her counterpart from the ‘20s and ‘30s, but engineering is still a male-dominated profession.