Albers was born in Bottrop, Westphalia, Germany. He studied art in Berlin, Essen, and Munich, before enrolling as a student in the basic course of Johannes Itten at the prestigious Weimar Bauhaus in 1920. The director and founder of the Bauhaus, Walter Gropius, asked him in 1923 to teach in the preliminary course 'Werklehre' of the Department of Design to introduce newcomers to the principles of handicrafts, because Albers came from that background and had appropriate practice and knowledge. In 1925, Albers was promoted to Professor, the year the Bauhaus moved to Dessau. At this time, he married Anni Albers (née Fleischmann) who was also a student there. His work in Dessau included designing furniture and working with glass. As a younger art teacher, he was teaching at the Bauhaus with artists including Oskar Schlemmer, Wassily Kandinsky and Paul Klee. Klee was the so-called form master who taught the formal aspects in the glass workshops where Albers was the crafts master; they cooperated for several years.

With the closure of the Bauhaus under Nazi pressure in 1933, Albers emigrated to the United States; in November 1933, he joined the faculty of Black Mountain College, North Carolina, where he ran the painting program until 1949. At Black Mountain, his students included Robert Rauschenberg, Cy Twombly, Ray Johnson and Susan Weil. He also invited important American artists as Willem de Kooning, to teach in the summer seminar. Weil remarked that, as a teacher, Albers was "his own academy" and said that Albers claimed that "when you're in school, you're not an artist, you're a student", though he was very supportive of self-expression when one became an artist and began his or her journey.[2] Albers produced many woodcuts and leaf studies at this time.