The aim of the study is to examine the relationship between personality traits of students who take entrepreneurship course in Suleyman Demirel University (SDU) and their entrepreneurial tendency. Students who take entrepreneurship courses from SDU constitute the universe of the research. Students were selected among the students who took entrepreneurship course at SDU where 84,854 students were educated. Five Factor Personality Scale and Entrepreneurship tendency scale are used. The obtained data were analyzed by using the SPSS program. The research is very important in determining the entrepreneurship tendencies of students who take entrepreneurship courses and in determining the effects of personality traits on entrepreneurial tendencies. The relationship between personality traits of students and entrepreneurship tendencies was detected. It is observed that Extraversion, Agreeableness, Openness to Experience, Self-discipline personality traits have a positive effect on the entrepreneurial tendency while neuroticism personality trait has negatively influenced on the entrepreneurial tendency. Also, vieved whether entrepreneurial tendencies have differentiated according to the students' faculties, sexes, marital status and where they have spent their childhood years but no differentiation has been detected.