Traditionally known for their open-door admission policies, low tuition, and convenience, community college enrollment has grown drastically in the last decade. This increased enrollment; however, has not brought about an increase in degree attainment. In fact, only 29.9% of full-time degree- or certificate-seeking students at community colleges graduate in three years or less. Based on Astin's (2001) modified input-environment-outcome (I-E-O) model, this study investigated the relationship between college readiness measures taken in high school and the successful completion of a community college associate degree. The high school transcripts of 443 first-time, full-time students who graduated high school in May 2011 and enrolled at the community college in fall 2011 with a declared associate degree major were examined. The final and complete binary logistic regression model included all independent variables simultaneously, including demographics. Regression results indicated that the overall model was statistically reliable in distinguishing between successful and unsuccessful community college students. Taken together, among first-time, full-time, traditional age, degree-seeking community college students, the likelihood of attaining an associate degree within three years with a 2.0 or higher GPA was significantly associated with high school GPA, total high school credits earned, senior year math, and college credits earned in high school.