The teaching of English sometimes brings values and culture which not suitable for Muslim students. The teaching of science (non-Islamic subject) and Islamic values taught side by side. Value has become a reference and measurement of human to think and act every time. It can be said that value is a prominent aspect which civilized human life. Therefore, this study focuses on the implementation of integrating Islamic values in teaching English. This study uses descriptive qualitative design. Then, observation, documentation and interview are the instrument to analyze the data. It is aimed to analyze the implementation of integrating Islamic values, type of integrating Islamic values, and the strengths and weaknesses of integrating Islamic values in teaching English. This study involved English teachers at seventh grade of SMP Al-Hikmah Surabaya. The numbers of English teachers at seventh grade are three teachers in academic year 2015-2016. The result of the study showed that the implementation of integrating Islamic values in teaching and learning activities are starts and closes the lesson by say salaam, pray before the class begin, connects or makes link of lesson and students daily life as Muslim, tells Islamic stories, explains the differences between western culture and Muslim culture, using Islamic expression, inserts verses of Qur’an and hadiths, gives good example to the students and motivates students to integrates Islamic values they learnt in daily life. The type of integration used is Integration or Interconnected entities. The last, the strengths of integrating Islamic values in teaching English are: Students get better knowledge about Islam, be good students who really appreciate Islamic culture was like, can apply Islamic values they have got in their neighborhood. While, the weaknesses are the teacher lack of literature about Islamic values and lack of teaching media especially for a textbooks loaded Islamic values inside.