Adhessivity and interface interaction are important factors in polymer/bamboo composite design. In this final project research, the interface interaction between polymer (polyester and epoxy) and bamboo (“apus” and “jawa”) has been studied. Three variations of water concentration in bamboo are used in this research, i.e. 0%, 2.2% and 3.9%. The interface interaction was studied in this research represented by wettability and adhessive strength. The result showed that the kind of bamboo gave strong affect to the interface adhessivity. “Apus” bamboo has stronger interface adhessivity than “jawa” bamboo. The best interaction between polyester and bamboo found in “apus” bamboo with 2.2% water concentration. Whereas, the best interaction between epoxy and bamboo found in “apus” bamboo with 3.9% water concentration. Overall, interface interaction between epoxy and apus bamboo with 3.9 water concentration gave the best result, that is 12 degree of wettability and 1.121 MPa in adhessive strength.

Key words: polymer, bamboo, wettability, adhessive strength