Chorus waves have been suggested to play crucial roles in the dynamics of energetic electrons in the inner magnetosphere. Traditionally, effects of chorus waves on electrons were modeled by quasilinear theory, which assumes that waves are broadband and incoherent. The discrete and narrowband features of chorus waves, however, raise questions about the applicability of quasilinear theory. Previous research used a single wave to model the effects of a single chorus wave element on electrons, showing that nonlinear processes such as phase trapping and bunching can strongly modify electron's trajectory when the amplitude was large enough. However, high resolution observations of chorus wave packets show a modulation of the wave amplitude, forming the so-called chorus subpackets or subelements. Here we first extend a previous method to model a realistic chorus packet including frequency sweeping and amplitude modulation using wave data observed by THEMIS. We demonstrate directly that including realistic amplitude modulation of chorus could significantly affect the nonlinear behavior of resonant electrons and possibly the efficiency of phase trapping as an acceleration mechanism. We then construct a chorus wave field with a series of elements to explore the effects of chorus on energetic electron dynamics when realistic features of the wave are included in the test particle simulations. By comparing the electron distribution functions from test particle simulations and quasilinear prediction, we demonstrate that both the amplitude and the discreteness of chorus waves affect the applicability of quasilinear theory to the electron-chorus interactions. These results are important to our understanding and modeling of electrons dynamics due to interactions with chorus.