Abstract. In this paper, we study the existence of an asymptotically periodic solution of a Volterra integral equation on the time scale $q^{N_0}$, which we call a quantum Volterra integral equation. In the process, we study the existence of periodic solutions of an associated equation on the time scale $q^{Z}$, which is an extension of $q^{N_0}$. We employ Schauder’s fixed point theorem in the analysis. (Received February 18, 2017)