Neutral Kaon mixing plays an important role in the phenomenology of the standard model and its extensions because of its sensitivity to high-energy scales. In this talk I will give a summary of the theory prediction of $\epsilon_K$ and $\Delta M_K$ and present our new NNLO QCD calculation of the charm-quark contribution $\eta_{cc}$ to the $\Delta S = 2$ effective Hamiltonian.