Given $\varphi : \mathbb{D} \to \mathbb{D}$, an analytic map of the unit disc in $\mathbb{C}$, the composition operator $C_\varphi$ is defined by $C_\varphi(f) = f \circ \varphi$ for $f$ belonging to some Hilbert space of analytic functions on $\mathbb{D}$. In this talk, we will discuss properties of linear-fractionally induced composition operators and their adjoints on the Hilbert space of functions whose derivative is in the Hardy space, $H^2(\mathbb{D})$. (Received September 15, 2009)