Solution (#1058) By Theorem 4.14(b) we have

$$c_T(x) = c_A(x)$$

for any matrix representative A of T. So with $A = {}_{\mathcal{V}}T_{\mathcal{V}}$, which is upper triangular, we have

$$c_T(x) = c_A(x) = (x - \lambda_1) \cdots (x - \lambda_n)$$

where $\lambda_1, \lambda_2, \ldots, \lambda_n$ are the diagonal entries of A (Proposition 3.153). Hence all the roots of $c_T(x)$ are real.

Remark: The converse is also true – see #998 and #1007.