A zero-nonzero pattern $A$ is a matrix with entries from the set $\{0, \ast\}$. A square zero-nonzero pattern $A$ is spectrally arbitrary over $R$, a commutative ring with unity, if all the monic polynomials from $R[x]$ are a characteristic polynomial for some realization of $A$, i.e. if all possible spectrums can be realized. In this talk, I will discuss how the algebraic structure of rings affects how we determine if a pattern is spectrally arbitrary. I will also detail some of the results we found when considering whether a pattern that is spectrally arbitrary over a ring $R$ will be spectrally arbitrary over a different ring $S$. These results establish that a pattern that is spectrally arbitrary over $\mathbb{Z}$ will be spectrally arbitrary over $\mathbb{Q}$ and relaxed spectrally arbitrary over $\mathbb{Z}/(m)$ for all positive integers $m$. Similarly, these results will establish the relationship of spectrally arbitrary patterns over the $p$-adic integers with the $p$-adic numbers and finite fields of order $p$. (Received January 27, 2019)