In 1954-1956 John Nash proved that every Riemannian manifold admits an isometric embedding into Euclidean space. His results were extended to manifolds endowed with an indefinite metric tensor by Greene and Gromov/Rokhlin independently in 1970. More specifically, they proved that such manifolds admit isometric embeddings into Minkowski space of an appropriate signature. In this talk we will discuss combinatorial analogues of both of these results to polyhedra whose simplices are endowed with a metric tensor of arbitrary signature. (Received August 23, 2013)