ABSTRACT: Education in science and technology at universities is currently facing several problems. One of the first nanotechnology undergraduate degrees in the world was established at Flinders University, Adelaide, Australia, in 2000. This article focuses on some of the problems encountered and solutions developed at Flinders University as part of the Bachelor of Science in Nanotechnology (Honours). In this article, the authors present their experiences in developing and delivering this degree in a climate where traditional physical sciences are under considerable strain. Also discussed will be the motivation for this initiative, the structure of the established course, as well as the relevant educational issues that relate to its development. The article also outlines some of the concepts and tasks related to the core subjects in the nanotechnology degree offered at Flinders University.