**Academic Fields Potentially Impacted by STC**

**There are growing efforts on the part of countries of proliferation concern to acquire controlled technology (often through intangible means) by sending engineers, scientists, or scholars to study in university programs abroad**.[[1]](#endnote-1)

**The following academic fields are particularly vulnerable**, as they are the disciplines most likely to utilize strategic goods and technology and conduct research related to goods and technology with potential WMD or military applications.

* Nuclear physics and engineering
* Computer science and engineering
* Cyber security and computer networking
* Robotics and automatic control technologies
* Advanced material science (high-performance and high-function material technologies)
* Mechanical engineering
* Optical engineering
* Mathematics
* Chemistry 
* Agricultural science and biochemistry (veterinary medicine)
* Natural sciences (e.g. geology, physics)
* Biology and medical science (in particular the study of infectious diseases and vaccines)
* Biotechnology and biomedical engineering
* Energy Sciences
* Aerospace engineering and design
* Avionics
* Information and Communications Technology (ICT)

1. Spector, Leonard S. and Egle Murauskaite, “Countering Nuclear Commodity Smuggling: A System of Systems,” James Martin Center for Nonproliferation Studies (CNS), March 2014, <http://www.nonproliferation.org/wp-content/uploads/2014/10/cns\_occasional\_paper\_no\_20\_web.pdf>. [↑](#endnote-ref-1)