The Department of Defense (DoD) has a broad spectrum of requirements in many areas of physics with applications not normally addressed in traditional civilian physics programs. These include nuclear weapons and their effects, directed energy weapons, electro-optical systems particular to the military, remote sensing, measurement and signature intelligence, high technology materials for weapons, etc. To serve the DoD’s advanced degree needs in such specialized areas for both military officers and civilian employees, the Air Force has offered a doctoral and master’s program in applied physics in the Department of Engineering Physics of the Graduate School of Engineering and Management at the Air Force Institute of Technology on Wright-Patterson AFB near Dayton, Ohio for nearly 50 years. Our doctoral program in particular has many features in common with most doctoral programs in physics but includes many unique features required to serve the specific needs of the military. The program is interdisciplinary in nature drawing on many of the engineering courses available through the other departments of the school. It is also strongly coupled with DoD research and development laboratories, many of which are co-located with AFIT on Wright-Patterson AFB. These labs provide the seed for many of the doctoral research problems as well as fertile opportunities for meaningful intern experiences.