

# What the Pentagon puts into information operations

ELEMENTS OF U.S. MILITARY'S INFORMATION OPERATIONS*	ACTIVITIES	OBJECTIVES	WHO DOES IT?
Electronic warfare	Electronic attack	Destroy, disrupt, delay	Individuals, governments, militaries
	Electronic protection	Protect the use of electromagnetic spectrum	Individuals, businesses, governments, militaries
	Electronic warfare support	Identify and locate threats	Militaries
Computer network operations	Computer network attack	Destroy, disrupt, delay	Individuals, governments, militaries
	Computer network defense	Protect computer networks	Individuals, businesses, governments, militaries
	Computer network exploitation	Gain information from and about computer networks	Individuals, governments, militaries
Psychological operations	Psychological operations	Influence	Businesses, governments, militaries
Military deception	Military deception	Mislead	Militaries
Operations security	Operations security	Deny	Businesses, governments, militaries
Supporting capabilities	Information assurance	Protect information and information systems	Businesses, governments, militaries
	Physical security	Secure information and information infrastructure	Businesses, governments, militaries
	Physical attack	Destroy, disrupt	Governments, militaries
	Counterintelligence	Mislead	Governments, militaries
	Combat camera	Inform, document	Governments, militaries

\* Six elements of China's information warfare: operational security, military deception, psychological warfare, electronic warfare, computer network warfare and physical destruction

Sources: Joint Publication 3-13 Information Operations (Feb. 13, 2006)

China information from Defense Intelligence Agency official quoting a Chinese major general

## Information technology degrees granted in 2004

Degree field	United States <sup>1</sup>	India <sup>2</sup>	China <sup>3</sup>
Total bachelor's and subbaccalaureate engineering, computer science and IT degrees	222,335	215,000	644,106
Number of bachelor's degrees	137,437	112,000	351,537
Engineering (excluding CS and electrical engineering)	52,520	17,000	---
CS, electrical engineering and IT	84,917	95,000	---
Number of subbaccalaureate degrees	84,898	103,000	292,569
Engineering	39,652	57,000	---
CS and IT	45,246	46,000	---

SOURCES:

(1) National Center for Educational Statistics; (2) National Association of Software and Service Companies, 2005; (3) Chinese Ministry of Education