

DEPARTMENT SUMMARY

OVERVIEW:

The Department of Electrical and Computer Engineering (ECE) has a broad research program, reflecting the variety of skills and interests of the faculty. ECE faculty research projects are supported by systems commands, warfare centers, the services, basic research agencies, other universities, and industry. These research projects can be grouped into ten major research thrust areas that support the curricula serviced by the Department as well as the several DoD Plans. Unique to the Department and the Naval Postgraduate School is the ability of faculty and students to perform military relevant classified research at all levels. The Department's research program ensures that our graduate students will have a creative meaningful thesis experience, that our curricula and courses will remain at the cutting edge, that we can recruit and retain quality faculty, and that we can provide our sponsors with cutting edge solutions to their problems.

CURRICULA SERVED:

- Electronic Systems Engineering
- Information Warfare
- Electronic Warfare
- Space Systems Operations
- Space Systems Engineering
- Undersea Warfare
- Joint C4I Systems
- Information Technology Management
- Aeronautical Engineering

DEGREES GRANTED:

- Master of Science in Electrical Engineering
- Master of Science in Engineering Science
- Master of Science in Computer Engineering
- Electrical Engineer
- Doctor of Philosophy

RESEARCH THRUSTS:

- Communication Systems:
Professor Tri Ha, Professor R. Clark Robertson
- Communication Networks:
Assistant Professor John McEachen, Professor Murali Tummala, Military Assistant Professor Robert Ives, Associate Professor Xiaoping Yun
- Computer/Information Systems:
Professor Jon Butler, Associate Professor Douglas Fouts, Professor Herschel Loomis, Visiting Instructor Randy Wight
- Electromagnetic Systems:
Professor Jeffrey Knorr, Research Associate Professor Richard Adler, Professor Ramakrishma Janaswamy, Associate Professor David Jenn, Professor Michael Morgan, Research Associate Andrew Parker, Research Associate Professor Ray Vincent, Military Assistant Professor J. Scott Tyo, Visiting Associate Professor Jovan Lebaric
- Infra-Red and Electro-Optics:
Distinguished Professor John Powers, Professor Phillip Pace, Visiting Associate Professor Ron Pieper
- Guidance, Control and Navigation Systems:
Associate Professor Roberto Cristi, Associate Professor Gary Hutchins, Associate Professor Xiaoping Yun

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- Power Electronics, Electric Machines and Distribution:
Associate Professor Robert Ashton, Associate Professor John Ciezki
- Radar, Surveillance and Information Warfare Systems:
Professor Jeffrey Knorr, Professor Phillip Pace, Research Associate Professor Lonnie Wilson, Professor R. Clark Robertson
- Signal Processing/Acoustic Systems:
Military Assistant Professor Bob Barasanti, Associate Professor Roberto Cristi, Associate Professor Monique Fargues, Associate Professor Ralph Hippenstiel, Professor Charles Therrien, Professor Murali Tummala, Professor Lawrence Ziomek
- Signals Intelligence/Space Systems:
Associate Professor Douglas Fouts, Professor Tri Ha, Associate Professor Ralph Hippenstiel, Professor Herschel Loomis, Assistant Professor John McEachen, Associate Professor Sherif Michael, Assistant Professor Todd Weatherford
- Solid State Microelectronics:
Associate Professor Douglas Fouts, Associate Professor Sherif Michael, Assistant Professor Todd Weatherford

RESEARCH FACILITIES:

- Signal Enhancement Lab
- Power Electronics Lab
- Digital Signal Processing Lab
- Electronics (Analog VLSI/Radiation Hardening) Lab
- Electronic Warfare Lab
- Electromagnetic Scattering Lab
- Digital Systems Lab
- Radar Lab
- Microwave and Antennas Lab
- Optical Electronics Lab
- Robotics Lab
- Advanced Networking Lab
- VLSI Lab
- Computer and Network Research Lab
- Secure Computing Lab

RESEARCH CENTERS:

- Center for Electronic Warfare Simulation and Modeling
- Center for Reconnaissance Research
- Center for Signal Processing
- Cryptologic Research Center

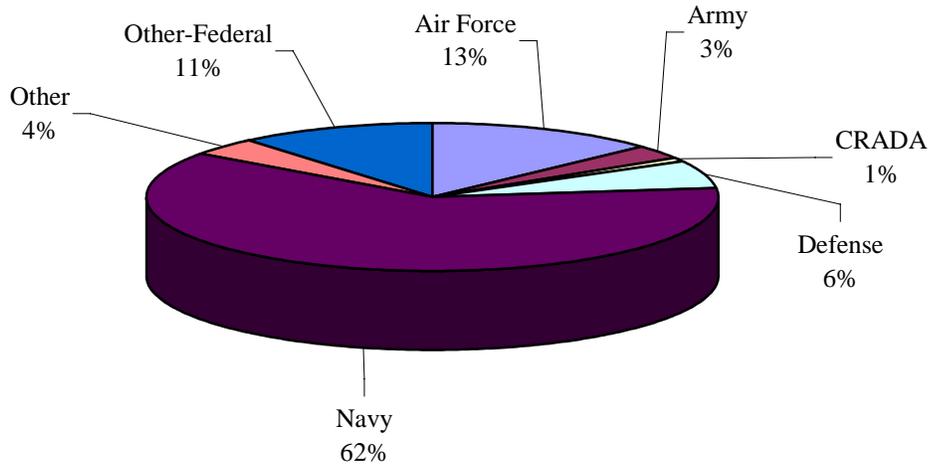
RESEARCH CHAIR:

- National Security Agency Cryptologic Chair

DEPARTMENT SUMMARY

RESEARCH PROGRAM-FY2000:

The Naval Postgraduate School's research program exceeded \$43 million in FY2000. Over 93% of the Naval Postgraduate School Research Program is externally funded. A profile of the external research sponsors for the Department of Electrical and Computer Engineering is provided below along with the size of the FY2000 externally funded program.



Size of Program: **\$2884K**