

NORTHWESTERN UNIVERSITY
**ELECTRICAL
ENGINEERING
& COMPUTER
SCIENCE**
TECH, ROOM L359

ACADEMIC OPTIONS

THE NORMAL PATH IS TO OBTAIN THE BACHELOR OF SCIENCE DEGREE IN EITHER EE OR COMPE. STUDENTS WITH SUFFICIENT AP CREDITS OR EQUIVALENT PLACEMENT MAY DOUBLE-MAJOR IN BOTH DISCIPLINES, RECEIVING TWO B.S. DEGREES. THE EE DEGREE ALSO PERMITS A BIOMEDICAL ENGINEERING OPTION.

WHAT HAPPENS AFTER GRADUATION?

OUR B.S. GRADUATES ARE ROUTINELY PLACED WITH LEADING COMPANIES SUCH AS AT&T, FORD, GENERAL MOTORS, HEWLETT-PACKARD, IBM, INTEL, MOTOROLA, AND NORTHROP-GRUMMAN. IN ADDITION, OUR GRADUATES HAVE GONE ON TO TOP PH.D. AND PROFESSIONAL DEGREE PROGRAMS AT UNIVERSITIES INCLUDING STANFORD, BERKELEY, MIT, CALTECH, AND CARNEGIE-MELLON.

WHOM SHOULD I CONTACT TO LEARN MORE?

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EE IS CENTRAL TO OUR SOCIETY AND HOLDS THE KEY TO MUCH OF ITS FUTURE TECHNOLOGICAL PROGRESS. IT INVOLVES THE DEVELOPMENT AND APPLICATION OF ELECTRONIC, PHOTONIC, AND QUANTUM TECHNOLOGIES FOR GENERATING, COMMUNICATING, AND PROCESSING INFORMATION AND DATA OF ALL TYPES, INCLUDING TEXT, SPEECH, MUSIC, GRAPHICS, VIDEO, RADAR, CONTROL SIGNALS, AND POWER.

WHAT JOBS DO EE'S PERFORM?

EE'S HAVE THE BROADEST PROFESSIONAL EMPLOYMENT OPPORTUNITIES OF ALL ENGINEERS, INCLUDING DESIGN AND MANAGEMENT RESPONSIBILITIES WORKING IN:

- * MICROCHIPS AND COMPUTERS
- * ROBOTS AND ROBOTIC SYSTEMS

- * CELLULAR COMMUNICATIONS
- * EARTH-ORBITING SATELLITES
- * LASERS AND FIBER OPTICS
- * AEROSPACE AND DEFENSE ELECTRONICS
- * TELEVISION AND AUTOMOTIVE ELECTRONICS

IN ADDITION, PEOPLE HAVING UNDERGRADUATE TRAINING AS EE'S HAVE EXCELLENT BACKGROUND FOR GRADUATE PROGRAMS IN PATENT LAW, MEDICINE, BUSINESS AND FINANCE, MULTIMEDIA ADVERTISING, ECONOMICS, TECHNICAL JOURNALISM, AND RADIO/TV/FILM TECHNOLOGY.

WHAT DISCIPLINES MIGHT EE'S USE IN THEIR WORK?

- * CALCULUS, LINEAR ALGEBRA, DIFFERENTIAL EQUATIONS, AND STATISTICS
- * SOLID-STATE PHYSICS
- * ELECTROMAGNETICS AND OPTICS
- * QUANTUM PHYSICS
- * CIRCUIT AND GRAPH THEORY
- * ANALOG AND DIGITAL CONTROLS
- * INFORMATION, MODULATION, AND CODING
- * DIGITAL SIGNAL PROCESSING

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