

Phillips, Kerk L. (1992) BS, Brigham Young U., 1986; MA, PhD, U. of Rochester, 1990, 1991.  
Showalter, Mark H. (1991) BA, Brigham Young U., 1986; PhD, Massachusetts Inst. of Technology, 1991.

**Assistant Professors**

Garner, Phillip D. (2002) BA, Brigham Young U., 1997; PhD, Brown U., 2002.  
Lefgren, Lars J. (2001) BA, Brigham Young U., 1996; PhD, U. of Chicago, 2001.  
McIntyre, Frank L. (2003) BA, Brigham Young U., 1998; PhD, Stanford U., 2003.  
Platt, Brennan C. (2006) BS, Arizona State U., 2001; MA, PhD, U. of Minnesota, 2005, 2006.  
Sims, David P. (2004) BS, Brigham Young U., 1999; PhD, Massachusetts Inst. of Technology, 2004.

**Adjunct Assistant Professor**

Wilson, Sven E. (1997) BA, Brigham Young U., 1989; MA, PhD, U. of Chicago, 1992, 1997.

**Emeriti**

Clark, Wayne Walter (1962) BA, Brigham Young U., 1952; PhD, Texas A&M U., 1960.  
Dutton, Dean S. (1968) BA, U. of Utah, 1964; MA, PhD, Michigan State U., 1966, 1968.  
Gardner, B. Delworth (1986) BS, MS, U. of Wyoming, 1952, 1954; PhD, U. of Chicago, 1960.  
Infanger, Carlton A. (1964) PhD, Montana State U., 1964.  
James, Sydney C. (1983) BS, MS, Utah State U., 1953, 1957; PhD, Oregon State U., 1960.  
Nelson, Glen T. (1955) BS, MS, Utah State U., 1942, 1948; PhD, U. of Illinois, 1950.  
Park, William Laird (1977) BS, MS, Utah State U., 1957, 1958; PhD, Cornell U., 1963.  
Wimmer, Larry T. (1963) BS, Brigham Young U., 1960; MA, PhD, U. of Chicago, 1962, 1968.

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## Educational Leadership and Foundations

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### Graduate Programs and Degrees

MEd Educational Leadership  
PhD Educational Leadership

For more information see the BYU 2007–2008 Graduate Catalog.

### Educational Leadership and Foundations (EdLF)

#### Undergraduate Courses

**362. Introduction to Comparative and International Development Education.** (3:3:0) F

Methods, major concepts, and current trends in comparative and international development education; role of education in promoting national development.

**363. Educational and Community Development.** (3:3:0) W

Analyzing basic policy in education; community and national development through the perspective of political science, economics, and sociology.

**390R. Special Topics in Education.** (1–3:Arr:Arr. ea.) On dem.

Various topics dealing with educational issues.

**399R. Academic Internship.** (1–9:0:0 ea.) F, W, Sp, Su Prerequisite: departmental consent.

On-the-job experience and training under the guidance of a mentor.

**452. Foundations of Education.** (2:2:0) F, W, Sp, Su

Introduction to the philosophical, sociological, and historical foundations of American education, with special reference to current issues in U.S. public schooling.

**494R. Independent Readings.** (1–3:0:0 ea.) F, W, Sp, Su

Prerequisite: departmental consent.

Readings in education.

**495R. Independent Research.** (1–3:0:0 ea.) F, W, Sp, Su

Prerequisite: departmental consent.

Student research mentored by faculty member.

#### 500-Level Graduate Courses (available to advanced undergraduates)

**515R. Special Topics in Education.** (1–3:3:1 ea.) F, W, Su Credit earned in 515R is not counted toward graduate degrees.

**530. School and Community Programs in Education.** (2:2:0)

Examination of programs in school and community for enhancement of teaching and learning.

#### Graduate Courses

For 600- and 700-level courses, see the BYU 2007–2008 Graduate Catalog.

### Educational Leadership and Foundations Faculty

**Professors**

Geo-Jaja, MacLeans (2000) BS, Morehead State U., 1976; MS, Indiana State U., 1980; PhD, U. of Utah, 1986.  
Hite, Steven (1991) BS, MS, Brigham Young U., 1980, 1982; EdD, Harvard U., 1985.

Holsinger, Donald (1997) BA, Brigham Young U., 1966; MA, MS, U. of Wisconsin, 1967, 1969; PhD, Stanford U., 1972.  
 Randall, E. Vance (1992) BS, MEd, Brigham Young U., 1975, 1978; PhD, Cornell U., 1989.

#### Associate Professors

Baugh, Steven C. (2000) BS, MEd, EdD, Brigham Young U., 1969, 1970, 1978.  
 Ferrin, Scott Ellis (1997) BA, JD, Brigham Young U., 1980, 1984; MEd, EdD, Harvard U., 1989, 1996.  
 Hallam, Pamela (2006) BS, MA, Brigham Young U., 1979, 1990; EdD, U. of Utah, 2006.  
 Hilton, Sterling C. (1996) BA, MA, MS, Brigham Young U., 1987, 1990; PhD, John Hopkins U., 1996.  
 Hite, Julie M. (2000) BS, MOB, Brigham Young U., 1980, 1995; PhD, U. of Utah, 1999.  
 Matthews, L. Joseph (1998) BA, U. of Wyoming, 1972; MEd, EdD, Brigham Young U., 1978, 1987.  
 Mayes, Clifford T. (1998) BA, MA, U. of Arizona, 1974, 1981; MA, U. of Oregon, 1979; PhD, U. of Utah, 1997.  
 Richards, A. LeGrand (1985) BS, PhD, Brigham Young U., 1975, 1982; MEd, Harvard U., 1976.  
 Williams, Ellen J. (2000) BA, MEd, Utah State U., 1966, 1973; EdD, Brigham Young U., 1990.

#### Assistant Professor

Peterson, Erlend D. (1966) BS, MS, EdD, Brigham Young U., 1967, 1971, 1985.

#### Adjunct Faculty

Poulsen, Denis (1998) BS, MEd, Brigham Young U., 1967, 1979.  
 Van Orman, Jan (1999) BA, MA, U. of Utah, 1964, 1970.

#### Emeriti

Andersen, Dan W. (1980) BS, U. of Utah, 1952; MS, U. of Southern California, 1955; PhD, U. of Wisconsin, Madison, 1961.  
 Butterfield, Dennie D. (1974) BA, Brigham Young U., 1955; MA, Fresno State Coll., 1962; EdD, U. of California, Los Angeles, 1972.  
 Christensen, Dean C. (1957) BS, MS, Utah State U., 1938, 1948; EdD, U. of Oregon, 1957.  
 Flinders, Neil J. (1978) BS, MRE, EdD, Brigham Young U., 1960, 1963, 1968.  
 Garfield, Rulon Roy (1978) BS, MA, PhD, U. of Utah, 1954, 1956, 1964.  
 Harms, Callis R. (1960) BS, MEd, Brigham Young U., 1952, 1956; EdD, Arizona State U., 1961.  
 Heaton, Israel C. (1956) BS, MS, Utah State U., 1940, 1941; EdD, DRE, Indiana U., Bloomington, 1955.  
 Hungerford, Curtiss R. (1977) BA, Stanford U.; MA, PhD, U. of Southern California, 1956, 1967.  
 Hyatt, Norman F. (1970) BS, MS, Brigham Young U., 1948, 1949; EdD, U. of Oregon, 1964.  
 Patterson, Robert S. (1992) BEd, MEd, U. of Alberta, Canada; PhD, Michigan State U., 1968.  
 Shute, R. Wayne (1974) BS, MEd, Brigham Young U., 1955, 1959; EdD, U. of Southern California, 1964.  
 Van Alfen, Curtis N. (1967) BS, MS, Utah State U., 1957, 1959; EdD, U. of Utah, 1967.  
 Webb, Clark D. (1966) BA, MA, Brigham Young U., 1964, 1966; PhD, U. of Texas, Austin, 1970.  
 Willardson, J. D. (1996) BS, Brigham Young U., 1966; MBA, U. of Utah, 1979; EdD, U. of Southern California, 1987.

## Electrical and Computer Engineering

Michael Jensen, Chair  
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### Admission to Degree Program

The degree programs in the Department of Electrical and Computer Engineering carry special enrollment limitations. Please see the department or college advisement center for specific details.

### The Discipline

Electrical and computer engineers study phenomena, devices, and systems for information processing, communication, and systems control. These studies, grounded primarily in physics and mathematics, have enabled engineers to develop the innovative new technologies for information acquisition, processing, storage, and communication that have made possible our contemporary Age of Information.

Examples of systems developed by electrical and computer engineers include radio, television, radar, satellite communication systems, cellular telephones, laptop computers, fiber-optic communications devices, global and local computer networks, robotic systems, control systems, fax machines, medical image processing, computer modems, lasers, pagers, computer vision, programmable calculators, VLSI chips, computer-aided design tools, and medical instruments.

Although it is the goal of engineering to produce useful objects, electrical and computer engineers typically play a limited role in construction, assembly, or mass production. Instead, they focus on design, analysis, and the development of the underlying theory and knowledge applied in the design process.

Many engineers are involved in designing and developing products, but other electrical and computer engineers may choose to work in product marketing, project management, system calibration and maintenance, product testing, or other areas related to electronic systems.

Computer programming skills and the ability to use advanced design and simulation software packages are vital in electrical as well as computer engineering. As part of their training, electrical engineers become familiar with a variety of programming languages and software environments. This experience is closely coupled to real-world applications.

### Career Opportunities

Electrical and computer engineers are among the most actively recruited students graduating from a four-year program. Baccalaureate engineers typically start their careers as members of project teams with one or more of the following responsibilities: designing digital, analog, or opto-electronic circuits; creating or testing application-specific software; testing components or systems; or providing technical support for sales. Later on, many engineers find themselves pursuing managerial careers, starting their own companies, or even managing entrepreneurial funds. Top graduates are also well received by medical schools, law schools, and professional and management programs.

The BS curriculum for both the electrical engineering and computer engineering degrees is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (ABET).