



Dean’s Office: College of Engineering and Computer Science

ACTIVE TEACHING DISCIPLINES		
For Administrative Use Only – Please do not edit federal NCES information below		
CIP Code	Description	NCES Definition For more information on the NCES CIP taxonomy, see http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55
14.0101	Engineering, General	A program that generally prepares individuals to apply mathematical and scientific principles to solve a wide variety of practical problems in industry, social organization, public works, and commerce. Includes instruction in undifferentiated and individualized programs in engineering.
15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	A program that prepares individuals to apply basic engineering principles and technical skills in support of electrical, electronics and communication engineers. Includes instruction in electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration, and report preparation.
15.0899	Mechanical Engineering Related Technologies/Technicians, Other	Any instructional program in mechanical engineering-related technologies
15.1202	Computer Technology/Computer Systems Technology	A program that prepares individuals to apply basic engineering principles and technical skills in support of professionals who use computer systems. Includes instruction in basic computer design and architecture, programming, problems of specific computer applications, component and system maintenance and inspection procedures, hardware and software problem diagnosis and repair, and report preparation.
30.0000	Multi-/Interdisciplinary Studies, General	A program that derives from two or more distinct programs and that is integrated around a unifying theme or topic that cannot be subsumed under a single discipline or occupational field.

The qualifications described below represent commonly accepted good practices for teaching in the discipline(s) included in this unit. [1]

Please provide a general description of unit, including programs and course offerings [2]

Courses offered under the purview of the CECS Dean's Office include general engineering courses that are taken by students in all the undergraduate majors in the college, as well as courses that were once associated with the former Department of Engineering Technology (ENT). The former ENT courses are taken by students in the BAS program administered through Regional Campuses.

Collectively, the courses offered by CECS cover a wide range of topics and are taken by students with a wide range of backgrounds and degree objectives. Consequently, a wide range of instructors may be qualified to teach courses offered by the CECS Dean's Office.

Terminal degree(s) for each discipline taught in the unit [3]

A terminal degree in the teaching discipline qualifies a person to teach throughout the broad scope of the teaching discipline at the undergraduate and graduate levels. [4]

There are no terminal degrees alone that would broadly qualify a person to teach under the full complement of CIP codes associated with courses under the purview of the CECS Dean's Office.

Broadly related discipline(s) for each discipline taught in the department

Specialization qualifies a person to teach throughout the broad scope of teaching discipline (approximately five or more courses on distinct topics)

PhD, any Engineering Field for CIP 14.0101.

Related Degrees for CIP 15.0303 include master's and/or doctoral degrees in:

- Electrical/Electronics Engineering
- Electrical/Electronics Engineering Technology
- Information Technology
- Computer Engineering
- Computer Engineering Technology
- Computer Science
- Modeling and Simulation

Related Degrees for CIP 15.0899 include master's and/or doctoral degrees in:

- Mechanical Engineering
- Mechanical Engineering Technology
- Industrial Engineering
- Industrial Engineering Technology
- Manufacturing Engineering
- Manufacturing Engineering Technology

- Modeling and Simulation

Related Degrees for CIP 15.1202 include master's and/or doctoral degrees in:

- Computer Engineering
- Computer Engineering Technology
- Computer Science
- Electrical Engineering
- Electrical Engineering Technology
- Information Technology
- Modeling and Simulation

Selectively related discipline(s) for each discipline taught in the department

Specialization does not qualify a person to teach distinct topics throughout the broad scope of the teaching discipline but does qualify to teach a more restrictive set of courses in the discipline (approximately four or fewer courses on distinct topics)

PhD, any Engineering or Science Field for CIP code 30.0000.

In almost all cases for courses under CIP codes 15.0303, 15.0899, and 15.1202, instructors teaching in this “discipline” will be qualified selectively, that is, on a course-by-course basis, regardless of the graduate degree(s) they hold.

Justification for use of faculty with 'other' teaching qualifications and additional faculty teaching qualifications information [5] [6]

In some cases, persons who hold a master's degree, but not a degree in one of the fields listed above, may be qualified to teach certain courses on the basis of their professional experiences. Such persons would be qualified on a course-by-course basis and not said to be qualified on a broad basis in any of the CIP codes under the purview of the Dean's Office. For many of the courses under CIP codes 15.0303, 15.0899, 15.1202, and 30.0000, professional experience of the instructors may be more valuable than formal academic training. Professional experience might include direct work experience, consulting, and/or collaborative research.

[1] The unit chair/director, in consultation with unit faculty, has responsibility for identifying and articulating commonly accepted good practices in each teaching discipline taught in the unit and for providing appropriate justification as needed. In the case of an emerging discipline for which common collegiate practice has not yet been established, a compelling case must be provided as necessary to substantiate the claims made.

[2] Please provide a general description of the unit course and program offerings at the undergraduate and graduate levels (e.g., degree and certificate programs, minors, departmental contribution to interdisciplinary core

courses). This section may also be used to provide other pertinent information about the unit and the discipline(s) it represents (e.g., discipline accreditation, faculty research emphases).

[3] List those degrees for each discipline taught in the unit that are regarded by the respective disciplinary community as terminal degrees in the discipline and thus, qualify a faculty member to teach throughout the broad scope of that discipline at both the undergraduate and graduate levels. In most fields, a terminal degree is the commonly accepted highest degree in the given field of study. In such instances, the terminal degree is usually considered to be the academic (or research) doctorate (e.g., Doctor of Philosophy). However, some academic fields have, through custom, recognized terminal degrees that are not doctorates (e.g., Master of Fine Arts, Master of Social Work). Note that terminal degrees from other disciplines may be appropriate for teaching in the discipline as well, but such credentials should be listed as broadly or selectively related degrees, as appropriate.

[4] A non-terminal master's degree in the teaching discipline qualifies a person to teach throughout the broad scope of the teaching discipline at the undergraduate level, not at the graduate level.

[5] Please use this section to provide justification that helps to make the case for special circumstances that apply to your unit including the use of faculty qualified to teach by 'other' qualifications and other special situations. Typically the statements provided in this section should be of a general nature, and not address specific individuals. (Justification for specific individuals is typically handled separately during the teaching certification process.) As appropriate, please cite to appropriate authorities to justify departmental practices (e.g., discipline accreditation guidelines, state regulations).

[6] When a faculty member cannot be qualified to teach on the basis of academic credentials (degree(s) and course work) alone, qualifications other than academic credentials (or combined with credentials) may be appropriate for teaching particular courses. Consideration of other teaching qualifications either in conjunction with or in lieu of academic credentials must be made on a case-by-case basis. Such cases should be exceptional and the evidence of other demonstrated competencies and achievements provided must be compelling. It should also show substantial and significant evidence of professional progress as related to the faculty member's teaching assignment.