

## COMPUTER ENGINEERING (CMPE)

### Courses

#### **CMPE 1990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **CMPE 1991. Internship. 1-3 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **CMPE 1993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 1994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

#### **CMPE 1995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 1996. Honors. 1-6 Credits.**

Honors course.

#### **CMPE 2810. Fundamentals of Digital Design. 0 or 4 Credits.**

Combinational logic simplification and design, MSI and PLD components, synchronous and asynchronous sequential design, algorithmic state machines, registers, counters, memory units, introduction to hardware design languages. Digital circuit and system design and analysis laboratory implementation. Prerequisite: CS 1210.

#### **CMPE 2830. Embedded Programming in C. 2-3 Credits.**

Fundamental exercises in C programming for embedded systems (e.g., Arduino platform) including variable types, pointers, memory allocation, input/output, etc. and demonstration of advanced knowledge of these embedded systems concepts (second credit); with embedded systems project (third credit). Prerequisites: CS 1210. Catamount Core: QR.

#### **CMPE 2990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **CMPE 2991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **CMPE 2993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 2994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

#### **CMPE 2995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 2996. Honors. 1-6 Credits.**

Honors course.

#### **CMPE 3815. Microcontroller Systems. 0 or 4 Credits.**

Operation and applications of microcontrollers in embedded digital systems for real-time control and data acquisition. Programming and the design of interfaces. Laboratory experience. Prerequisite: EE 2175, EE 2145, or EE 2125; CS 1210; EE 2810 or CMPE 2810.

#### **CMPE 3990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **CMPE 3991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **CMPE 3993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 3994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

#### **CMPE 3995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **CMPE 3996. Honors. 1-6 Credits.**

Honors course.

#### **CMPE 4990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **CMPE 4991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

**CMPE 4993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**CMPE 4994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

**CMPE 4995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**CMPE 4996. Honors. 1-6 Credits.**

Honors course.