

**KEENE STATE COLLEGE
BACHELOR OF SCIENCE
APPLIED COMPUTER SCIENCE**

It is the student's responsibility to follow the **official** requirements of the degree, found in the Keene State College catalog. This planning sheet is for advising purposes.

Name: _____ Student I.D.#: _____
 Institution(s) _____
 Attended: _____ Credits: _____
 _____ Update: _____

I. GENERAL EDUCATION

A. **English Language Competence:** ENG 101 is required of all students.

ENG 101: _____

B. **Arts & Humanities:** A minimum of five courses totaling at least 15 credits as follows:

One course in Literature _____
 Any English course other than Eng 101, 202, 203, 204, 205, 301, 302, 303, 310, 311, 382. FR 340 or FR, GER or SP 498 are acceptable when topics focus on French, German or Spanish literature.

HIST _____ ART, COMM, FILM, MU or TAD _____

Two courses from Arts & Humanities disciplines: AMST, ART, COMM, FILM, ENG, FR, GER, HIST, JRN, ML, MU, PHIL, SP, TAD, or IDAH (an approved interdisciplinary course).

C. **Social Sciences:** A minimum of four courses totaling at least 12 credits in **three** or more of the Social Science disciplines: ECON, GEOG, POSC, PSYC, SOC or an approved interdisciplinary course (designated IDSS).

D. **Sciences/Math:** A minimum of four courses totaling at least 12 credits as follows: One course in BIOLOGY. One course in a PHYSICAL SCIENCE (ASTR, CHEM, GEOL, MET, PHYS).

BIO _____ PHYSICAL SCIENCE _____

MATH 120: Intermed. Alg & Trig. _____ 3 **MATH 141: Intro Statistics _____ 3

**Statistics competency may be fulfilled by completing PSYC 251: Psychological Statistics. which will then count toward C: Social Sciences. A science elective will then be taken towards completion of D: Sciences/Math, in place of MATH 141: Intro Statistics.

II. **MAJOR REQUIREMENTS** 36 - 51 credits

A. **Programming Core:**

CS 140: Computer Programming I	___ 3	CS 185: Computer Programming II	___ 3
		CS 160: Microcomputer Applications	___ 3
		CS 280: Data Structures	___ 3

Capstone Course

CS 495: Seminar: Information Systems ___ 3

B. **Second Language Requirement**

CS : _____ ___ 3 _____ (Advisor Sig.)
A CS course in a programming language other than primary language taken in CS 140./185 & approved by advisor. Current offerings are: CS 220, CS 265. Other courses available on an irregular basis as industry changes. Check with department.

C. **Four CS 300 level courses**

CS : _____ ___ 3	CS : _____ ___ 3
CS : _____ ___ 3	CS : _____ ___ 3

D. **Two CS 400 level courses not listed above**

CS : _____ ___ 3	CS : _____ ___ 3
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E. **Computer Architecture Requirement:**

CS : _____ ___ 3 _____ (Advisor Sig.)
One CS course approved by student's advisor, in a second non-windows/NT (Intel) computer architecture. Currently, this requirement can be satisfied by a course utilizing AS 400 or UNIX operating systems. Course may satisfy this requirement as well as the above listed requirements simultaneously, or be a separate elective.

F. Social Science requirements (may count toward Gen. Ed. Requirements) - Four approved courses (12 Credits) from three of the following areas: ECON, GEOG, POSC, or IDSS.

Advisor Signature

III. **INTERDISCIPLINARY REQUIREMENTS:** Select one of the following three choices

A.1. **Applied Computer Science** 18 credits

MATH 120; Intermed Algebra and Trig. ___ 3

Note: Pre-Calculus & Calculus are encouraged and may be used in place of MATH 120.

B. **ELECTIVES** (Computer Content Related in non - CS disciplines) 9 credits

Three electives from one single department with no more than one intro. course. Approved by CS dept

_____ ___ 3	_____ ___ 3
_____ ___ 3	_____

Advisor Signature

2. Two advanced courses usually in any one discipline approved by CS dept. Course may be in same or different discipline from B.

_____ ___ 3	_____ ___ 3

- B. **Dual Major** Completion of one of the following teacher certification majors:
Note: The New Hampshire Board of Education has not approved certification for the following options as of 6/00.

- a). Education - Early Childhood Education Option
- b). Education - Elementary Education Option
- c). Education - Elementary/Special Education Option

3. **TEACHER CERTIFICATION** 28 credits

Completion of the K-12 computer technology certification. (Since they are CS courses, they automatically fulfill CS requirements). Currently, CS courses in this option include:

- a). CS 161: Microcomputer Systems in place of normal CS 160 requirement
- b) Selection of the following CS 300 electives: CS 305: Computer Usage in Educational Settings; CS 390: Methods: Computer Education; CS 391; Methods: Field Experience (note: CS 391 does not qualify as required CS 300 level elective, two or three other CS 300 level electives required. See (d) below.
- c) One additional CS 300 elective may be substituted for a required CS 400 elective with permission of CS faculty advisor.
- d). One additional CS 300 or CS 400 elective, approved by CS faculty advisor. (Total: 5 CS 300 electives, 1 CS 400 or 4 CS 300 and 2 CS 400 level electives)
- e). Elementary Education mathematics (MATH 171) may be substituted for MATH 120 requirements
- f). A U.S. history and a geography course are also required for teacher certification.

Orientation

ESEC 100: Introduction to Teaching _____ 1

Learners

*ESEC 150: Development, Exceptionality & Learning I _____ 3

ESEC 250: Development, Exceptionality & Learning II _____ 3

Settings

•ESEC 320: Educational Environment and Practices _____ 3

Pedagogy

•ESEC 387: Creating Social. Contexts for Learning. _____ 3

Systems

•ESEC 450: Seminar - Educational Principles* _____ 3 taken concurrently w/student teaching

Practice

•ESEC 465: Student Teaching (elementary) _____ 6

ESEC 465: Student Teaching (secondary) _____ 6

*=Taken concurrently with Student Teaching

• Admission to Teacher Education required for these courses.

Refer to KSC catalog (Teacher Education Programs Section) for guidelines regarding admission to Teacher Education and eligibility for student teaching.

* Requires a minimum of one to three hours of field work in the schools or service learning.

IV. ELECTIVES:

Pick additional courses of your choice to bring your total number of credits earned to 126.

If you wish to use transferred courses toward major/minor requirements, you must use the course substitution process. Contact the Academic and Career Advising Center for more information.

