

2005-06 CHECKLIST FOR GRADUATION REQUIREMENTS IN COMPUTER SCIENCE - BACHELOR OF SCIENCE

Minimum of 132 s.h. required for graduation (36 s.h. must be 300/400-level courses)

(Additional hours to total 132 s.h. -- includes second major, minor, and elective hours.)

Name \_\_\_\_\_ I.D. # \_\_\_\_\_ H.S. deficiencies: Math \_\_\_\_\_ Foreign Language \_\_\_\_\_

General Studies Requirements

(General Studies must total at least 58 s.h.)

FIRST-YEAR CORE:

GST 110 - Global Experience (4 s.h.) \_\_\_\_\_

ENG 110 - College Writing (4 s.h.) \_\_\_\_\_
(C- or better required for graduation)

MTH 112 or 121 (4 s.h.) \* \_\_\_\_\_

HED 111 - Contemp. Wellness Issues (2 s.h.) \_\_\_\_\_

Experiential Learning Requirement (ELR): (One Unit)

[May be met by any one of the following:
internship, practicum, co-op, study abroad, student teaching,
or an approved field-based course. Also may be met by
service, leadership, or individualized learning experience.]

Foreign Language Requirement:

Students must meet one of the following: placing beyond FL 122 on the
CAPE placement test, completing a 122-level language course, completing a
semester or summer in a university approved program in a non-English
speaking country with language study at the 122-level or above, scoring 4 or 5
on an Advanced Placement language exam or similar exam.

STUDIES IN THE ARTS AND SCIENCES:

[Transfer students with at least 18 s.h. of transfer credit must complete 32
hours total in Studies in the Arts & Sciences, but may have as few as 7 hours
in one or more of the four Studies in the Arts & Sciences areas.]

Expression \_\_\_\_\_ (8 s.h.) \_\_\_\_\_

[Eight hours chosen from at least two of the following:
literature (in English or foreign languages), philosophy, & fine arts
(art, dance, fine arts, music, music theater, and theater arts).
At least one course must be literature.]

Civilization \_\_\_\_\_ (8 s.h.) \_\_\_\_\_

[Eight hours chosen from at least two of the following:
history, foreign languages, and religion. Students taking foreign
language courses to meet Elon's proficiency requirement may only
apply 4 s.h. of that coursework toward Civilization.]

Society \_\_\_\_\_ (8 s.h.) \_\_\_\_\_

[Eight hours chosen from at least two of the following:
economics, geography, political science, psychology, and sociology.]

Science \* \_\_\_\_\_ (Lab: \_\_\_\_\_) \*CSC 130 \_\_\_\_\_ (8 s.h.) \_\_\_\_\_

Eight hours chosen from one or more of the following:
mathematics, science, and computer science (must have the CSC
department designation). At least one course must be a physical or
biological laboratory science.]

ADVANCED STUDIES (Must be outside major.)

\_\_\_\_\_ (8 s.h.) \_\_\_\_\_

[Eight hours of 300-400 level courses outside the major field chosen
from departments and areas listed under Studies in the Arts and
Sciences.]

GST Interdisciplinary Seminar \_\_\_\_\_ (4 s.h.) \_\_\_\_\_

[300-400 level GST course; requires junior/senior status.]

\*Required in major; may count in General Studies.

Major Requirements

A minimum of 64 s.h. in the following courses is required.

\*CSC 130 (4) - Introduction to Computer Science

CSC 230 (4) - Algorithm Development

CSC 331 (4) - Algorithm Analysis

CSC 335 (4) - Programming Languages

CSC 342 (4) - Computer Organization & Architecture

CSC 351 (4) - Theory of Computation

CSC 441 (4) - Operating Systems and Networking

CSC 462 (4) - Software Development/Capstone

MTH 206 (4) - Discrete Structures

MTH 221 (4) - Calculus & Analytic Geometry II

Select one (1) course beyond core math requirements:

Probability/Statistics; if core math requirement was MTH 121, then
MTH 112 - General Statistics or a probability and/or statistics course

-OR-

Quantitative Analysis, if core math requirement was MTH 112, then
MTH 121 - Calculus and Analytic Geometry I

\* \_\_\_\_\_

Select three (3) courses from the following:

CSC 410 (4) - Artificial Intelligence

CSC 415 (4) - Numerical Analysis

CSC 420 (4) - Game Programming and Computer

Graphics

CSC 430 (4) - Advanced Programming Concepts

CSC 431 (4) - Parallel and Distributed Computation

CSC 499 (4) - Research

CSC 300-400 level elective

Select 8 s.h. from one of the following 2-course sequence:

\*CHM 111 & 113 (4) - Gen. Chemistry I and Lab

CHM 112 & 114 (4) - Gen. Chemistry II and Lab

-OR-

\*PHY 113 & 117 (4) - Gen. Physics I w/ Calculus

PHY 114 & 118 (4) - Gen. Physics II w/ Calculus

-OR-

\*BIO 111 & 113 (4) - Intro. to Cell Biology and Lab

BIO 112 & 114 (4) - Intro. to Population Bio. and Lab

Major Total (s.h.) \_\_\_\_\_