

Proposed Changes in the BA-CIS and BS-CIS Programs

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Background

The university recently approved changes in the GEC requirements for all BA and BS degree programs in Arts and Sciences. The result is to reduce, by varying amounts, the GEC requirements in each program; One goal of the change was to reduce the overall size of the programs with the goal of bringing the individual programs to be as close to 181 credit hours as possible (but not below 181). Thus the reduction in the GEC requirements are not meant to be used to increase the major requirements (unless the total number of hours would go below 181). During Autumn '07, the CSE faculty discussed ways to change the BA-CIS and BS-CIS programs to make them consistent with the new GEC requirements and to consider any other desirable changes.

Summary of changes

The net results, as detailed on page 4, in the case of the BS-CIS program are that the number of GEC hours is somewhat reduced at the same time providing some additional flexibility; and the 15 hours of “free electives” is eliminated. With no other changes, this would make the program size 176 hours. Hence we propose adding 5 hours to the major program, four hours for a *capstone design course*, and one for CSE 601 (Social and Ethical Issues in Computing).

In the case of BA programs in ASC, the net results are that the number of GEC hours is somewhat reduced and includes some additional flexibility; and the 15 hours of “free electives” is eliminated. This brings the program size to 181 hours, hence no changes in the number of hours in the major portion of the program is being proposed. However, given the importance of the topic, especially to BA students, it is proposed that CSE 601 be added to the *core* portion of the major and the number of elective hours correspondingly reduced by one hour.

The details of these changes appear on pages 3–4 of this document.

Additional changes

Some changes are also being proposed in the technical electives portion of the BS-CIS program. The main changes are the inclusion, with the addition described above of a capstone design course requirement for all BS-CIS students, of a *suggested* capstone design course in each option; the inclusion of specific *tracks* in the *Individualized* option; the removal, given its very low popularity, of the *Advanced Studies* as an option and the addition of a corresponding track in the *Individualized* option; and the removal of BusMgmt 630 as a required course in the *Information Systems* option. Again the new *Business Information Systems* track in the *Individualized* option should be attractive to students interested in business information systems.

These changes are described on page 5.

Process/Recommendation

These changes were discussed extensively at a number of UGSC meetings during October and November. A student representative from the CIS program was part of these discussions. The committee approved all of the changes and recommended them to the CSE faculty for its approval. The faculty discussed the proposal at its meeting of November 19, 2007 and approved all of the proposed changes.

BA-CIS

Summary of changes

The main changes are in the GEC requirements. The only changes in the major are the addition of CSE 601 as a required course, the reduction of electives by 1 hour, and the moving of Stat 245 to the GEC category (for counting purposes).

Net result: Program size reduced by 10 hrs.

Details of new program

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GEC (100 hrs):

Engl 110, Second writing:	10 hrs
Math & data analysis:	10 hrs
Math 151, Stat 245	
Nat. Sc.@1	15 hrs
Foreign language through 104@2	20 hrs
Soc. Sc.@3	10 hrs
Arts & Hum.@4	10 hrs
Historical study@5	10 hrs
Issues of contemp. world	5 hrs
Two additional courses from	10 hrs
Nat.Sc./Soc.Sc./Arts & Hum.	

@1: must include one 2-course sequence in biological or physical sc;
at least one course from each of bio. and phy. sc.

@2: some/all of these hours may be EM hours;

@3: two courses selected from two of the following three categories:
Individuals and groups; Organizations & Politics; Human,
Natural, and Economic resources.

@4: at least five hours from the Literature category; and
at least five hours from the second from Visual/Perf. Arts (VPA);

@5: This *doesn't* have to be a sequence.

Major (81 hours):

Core: CSE 221, 222, 321, 360, 560, 601, 670: 25 hrs

Electives: 19 hrs

 chosen from CSE 541, 551, 581, 616, 625, 630,
 655, 660, 671, 675.02, 680, 757

Additional major requirements: 37 hrs

 Math 152, 153, 366; CSE 459.xx;
 approved related field (intro course: 5 hrs,
 above intro level: 10 hrs);

 General elec. in major: 8 hrs
 (courses CSE, Math, or related field)

Total for degree: 181 hrs

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BS-CIS

Summary of changes

Changes with respect to the GEC as specified by ASC. Major is strengthened (to make it technically more comparable to the BS-CSE program) as follows: require CSE 601, and a capstone design course; the number of hours in each option (not including 601 or the capstone design course) will be 24 hours. *Net result:* Program size reduced by 10 hrs.

Details of new program

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GEC (100 hrs):

Engl 110, Second writing:	10 hrs
Quantitative/Logical Analysis:	10 hrs
Math 151, Math 152	
Foreign language through 104@1	20 hrs
Nat. Sc.:	20 hrs
Phys 111/112 or 131/132;	
two additional sc. courses, at least	
one must be biological;	
Soc. Sc.@2	10 hrs
Arts & Hum.@3	10 hrs
Historical study	10 hrs
Additional breadth	10 hrs

 Math 153, 366; 2 hrs. of Stat 427

 (these courses are "prerequisites" for the major but may be taken after the student has been admitted to the major.

 Students also have the option of taking other courses as specified by the college to meet the "additional breadth" requirement; but they would they would still have to take these courses.)

@1: some or all of these hours may be EM hours;

@2: two courses selected from two of the following three categories:
 Individuals and groups; Organizations & Politics; Human,
 Natural, and Economic resources.

@3: at least five hours from the Literature category; and

 at least five hours from the second from Visual/Perf. Arts (VPA);

@4: This *doesn't* have to be a sequence.

Major (81 hrs):

Core:	46 hrs
221, 222, 321, 360, 459, 541, 560,	
601, 625, 655, 660, 670, 675.02, 680	
Tech Option including capstone course (minimum):	28 hrs
Additional math	7 hrs
Math 566, 1 hr. of Stat 427, Stat 428	

Total for degree: 181 hrs

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BS-CIS technical elective options

(Note: Proposed changes are marked with “*”).

1. Information and Computation Assurance (28 hours):

Required: CSE 551, 651, 677, 678, capstone course: 16 hours;

Suggested capstone course: CSE 762 (*).

Electives: 12 hours; at least 3 of the 12 hours must be CSE;

the remaining 9 may be CSE or non-CSE or combination of the two.

2. Software Systems (28 hours):

Required: CSE 551, 677, 757 (*); capstone course: 13 hours;

Suggested capstone course: CSE 758 (*).

Electives: 15 hours; at least 10 of the 15 hours must be CSE.

Advanced Studies: Drop this option.

3. Information Systems (28 hours):

Required: CSE 616, 671; AMIS 211/310; capstone course: 16 hours;

(*omit: Bus Mgt 630 (4 hrs)*)

Suggested capstone course: CSE 772 (*).

Electives: 12 hours; at least 8 of the 12 hours must be CSE courses.

4. Individualized (28 hours):

Required: 18 hours of CSE courses including a capstone course;

Electives: 10 hours of CSE+non-CSE courses approved by advisor;

OR a minor program approved by advisor.

Students in this option may want to consider following one of the tracks listed below.

Tracks (*):

Graphics/Animation: Req: CSE 581;

Suggested capstone course: CSE 682 or 786;

Other recommended courses: CSE 681, 694A, 781, 782, 784; 786/682;

For students pursuing a minor, recommended minor(s):

Studio Art; Industrial, Interior & Visual Comm. Design.

AI: Req: CSE 630;

Suggested capstone course: CSE 786 or 731;

Other recommended courses: CSE 612, 634, 730, 732, 733, 735, 779, 731/786;

For students pursuing a minor, recommended minor(s):

Linguistics; Psychology.

Advanced Studies:

Req: One of CSE 725/755/780; one of 760/775; one of Math 568/571/647/648 (or similar);

For students pursuing a minor, recommended minor(s):

Mathematics.

Business Information Systems:

Req: CSE 616, 671; Business Minor;

Suggested capstone course: CSE 772.