

COMPSCIDPTINST 1531.2A  
9 MAY 2019

COMPUTER SCIENCE DEPARTMENT INSTRUCTION 1531.2A

From: Chair, Computer Science Department  
Ref: (a) AcYear 2016 Visiting Committee Report  
Encl: (1) Elective Sequence Proposal Template

Subj: SPECIALIZED ACADEMIC ELECTIVE SEQUENCES FOR COMPUTER SCIENCE  
AND INFORMATION TECHNOLOGY MAJORS

1. Cancellation. None.

2. Purpose. This instruction establishes guidelines for specialized academic elective sequences that may be pursued by Computer Science (CS) and Information technology (IT) majors. Defined specialized sequences allow for increased depth of study in select areas, enriching the overall academic experience, as recommended in reference (a). Enclosure (1) presents a template for Elective Sequence Proposals. Elective sequences serve as a record of intent on the part of midshipmen to pursue an area of interest, and a commitment by the department to offer courses supporting currently available academic elective sequences. Elective sequences are not analogous to an honors program and contain no minimum grade requirements. Elective sequences do not change the matrices or graduation requirements for the CS or IT major and they do not require modification to existing major courses.

3. Background. There is a fundamental tension in balancing the breadth and depth of an academic program. Enhancing breadth and depth both require offering more distinct courses, each taken by relatively fewer students. However, opportunities for students to study a broad range of topics, and to explore some topics in greater detail are all important to maintaining a rich, robust, and successful academic program.

Elective sequences are a mechanism allowing the department to provide increased depth of exposure to students in topics that are of contemporaneous academic interest, and may be important to the U.S. Navy and the Department of Defense. Elective sequences also enhance the department's ability to plan its academic offerings over multiple terms. Since the elective sequences offered to successive year groups may change, the department can also be responsive to new trends in the discipline, new faculty interests, and the evolving needs of the Navy and Marine Corps.

4. Implementation. Completion of a specialized academic elective sequence is optional. It is not a requirement for completion of the CS or IT major.

a) Elective Sequence Requirements.

1. An elective sequence consists of three courses. Sequence courses may be sequence-required (the named course must be taken) or sequence-elective (chosen from among an approved set). A sequence must include at least one sequence-required course.

2. At most one sequence course can be a required SI/IT/IC course in the CS or IT matrix.

3. A non-CS/IT course may be part of a sequence, but only as a sequence elective.

4. The sequence must include at least one regularly offered CS/IT course that counts as a sequence course.

5. Sequences are strongly encouraged, but not strictly required, to be structured such that at least one of the courses has another course as a prerequisite, to facilitate depth of exploration in the topic.

b) Elective Sequence Management.

1. Proposals for new elective sequences must be approved by the Curriculum Committee. The final decision to approve the addition or removal of an elective sequence is made by the department chair, but should include input from a general faculty discussion. Only department faculty may propose new sequences.

2. The Curriculum Committee is responsible for approving courses as counting for sequence elective credit. Proposals must include suggested criteria to use in making the approval decision.

3. The Department Webmaster is responsible for maintaining on the department website a list, by class year, of the sequences available and requirements for the available elective sequences.

4. Academic Advisers are responsible for maintaining a list of their advisees who have declared pursuit of a sequence.

5. The department Senior Academic Advisor is responsible for producing a list of graduating midshipmen who have completed elective sequence requirements.

6. The department chair will formally recognize midshipmen who have completed an academic elective sequence.

7. The department chair and Executive Committee are responsible for considering elective sequence obligations in academic course planning.

8. Midshipmen will typically decide to pursue an elective sequence during the fall of second class year, prior to preregistration for spring. That decision should be communicated to the midshipman's academic advisor and factored into preregistration. Midshipmen should also notify their advisor if they no longer wish to pursue an elective sequence.



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Enclosure (1)

Elective Sequence Proposal: <Name>

1. Rationale

<Why this sequence should be added>

2. Sequence Required Course

<required course - number/name/does it exist? What new would be required? etc.>

3. Sequence Electives

Note: sequences are encouraged to contain a sequence of at least one Sequence course that has another sequence course as a prerequisite.

a. Existing courses

- SI/IT XXX - NAME

<What semesters? What's new or not? etc.>

b. Criteria for evaluating future courses

<How should the Curriculum Committee determine whether a particular course should count? Give examples of the kinds of future courses that might count? Negative examples could be helpful too. Address courses outside of the Department.>