TOPIC: PROPOSAL TO OFFER A BACHELOR OF ARTS IN

COMPUTER SCIENCE AT THE UNIVERSITY OF

**COLORADO BOULDER** 

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# I. <u>SUMMARY</u>

This consent item recommends approval for the University of Colorado Boulder (CU Boulder) to offer a Bachelor of Arts in Computer Science.

# II. <u>BACKGROUND</u>

The following is summarized from CU Boulder's proposal:

Computer Science, broadly defined, is the theory and practice of the digital representation, processing, and use of information; it is the scientific and mathematical approach to computation, and specifically to the design of computing machines and computational processes.

The Bachelor of Arts in Computer Science degree program represents a collaboration between the College of Engineering and Applied Science and the College of Arts & Sciences. Through the degree's curriculum track mechanism, the Department of Computer Science will work with the College of Arts & Sciences departments to offer paths to students in the proposed BA program to acquire double majors in the fields that make heavy use of computation.

### ROLE AND MISSION SUPPORT

This degree program proposal supports the role and mission of CU Boulder. The statutory mission states:

The Boulder campus of the university of Colorado shall be a comprehensive graduate research university with selective admission standards. The Boulder campus of the university of Colorado shall offer a comprehensive array of undergraduate, master's, and doctoral degree programs. The Boulder campus of the university of Colorado has exclusive authority to offer graduate programs in law. The Colorado commission on higher education, in consultation with the board of regents, shall designate those graduate level programs that are the primary responsibility of the Boulder campus of the university of Colorado. The university has the responsibility to provide on a statewide basis, utilizing when possible and appropriate the faculty and facilities of other educational institutions, those graduate level programs. The

commission shall include in its funding recommendations a level of general fund support for these programs. C.R.S.,  $\S23-20-101(1)(a)$ .

#### EVIDENCE OF NEED

CU Boulder estimates that the proposed B.A. program will draw up to thirty (30) new students a year initially and, eventually, via increased marketing and recruiting, reach a steady state of forty (40) to fifty (50) new students each year.

Workforce demand is high for this program. Demand will remain high for many years; CU's National Center for Women & IT documents that Computer Science departments are not producing enough Computer Science graduates to meet demand for technology skills across the nation. It is believed that employers will find students that have a liberal arts degree combined with a Computer Science degree to be particularly attractive, especially in certain areas.

# **DUPLICATION**

There are no significant duplications issues. In Colorado, only Colorado College offers a Bachelor of Arts in Computer Science degree; all other higher education institutions in Colorado offer a Bachelor of Science or Bachelor of Innovation in Computer Science or offer a business-oriented information systems degree.

# III. STAFF ANALYSIS

Pursuant to Colorado Revised Statutes 23-5-129 (6) (b), department staff finds that CU Boulder's proposed Bachelor of Arts in Computer Science is consistent with its statutory role and mission.

## IV. STAFF RECOMMENDATION

Staff recommends that the Commission approve the University of Colorado Boulder's proposal to offer a Bachelor of Arts in Computer Science.

# V. SUPPLEMENTAL INFORMATION

Copies of all relevant materials are on file in the Academic Affairs office and are available upon request.

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# STATUTORY AUTHORITY

C.R.S. §23-5-129