



# The ACM Two-Year College Education Committee

providing resources in support of computing education

acmtyc.org

## Revised Associate-Level Curricular Guidelines in Computer Science

### Some Significant Features

- ◆ Inclusion of student learning outcomes reflecting updated content for the CS I, CS II, and CS III course sequence.
- ◆ Detailed student assessment at both the program and course levels.
- ◆ Explicit progressive integration of security, software engineering, HCI, ethics and professionalism topics in the three-course sequence.
- ◆ Shift from three computing paradigms to a blended approach that promotes OOP principles.
- ◆ Updated mathematics recommendations.
- ◆ Expanded list of computing and mathematics elective courses.
- ◆ Relationship to the computer science Body of Knowledge as well as the Computing Ontology.
- ◆ Expanded Bloom's Taxonomy to include both cognitive and affective domains.
- ◆ Articulation considerations with *Computer Science Curriculum 2008 Update: An Interim Revision of CS 2001*

[www.acm.org/education/curricula/ComputerScience2008.pdf](http://www.acm.org/education/curricula/ComputerScience2008.pdf)

### COMPUTING DISCIPLINES

#### Associate-Degree Curricular Guidelines

Guidelines for Associate-Degree Transfer Curriculum in Computer Science	Guidelines for Associate-Degree Transfer Curriculum in Computer Engineering	Guidelines for Associate-Degree Transfer Curriculum in Software Engineering	Guidelines for Associate-Degree Programs in Information Systems	Under Revision Guidelines for Associate-Degree Programs to Support Computing in a Networked Environment  Information Technology
Emphasis on Theory			Emphasis on Application	

#### Associate Degrees

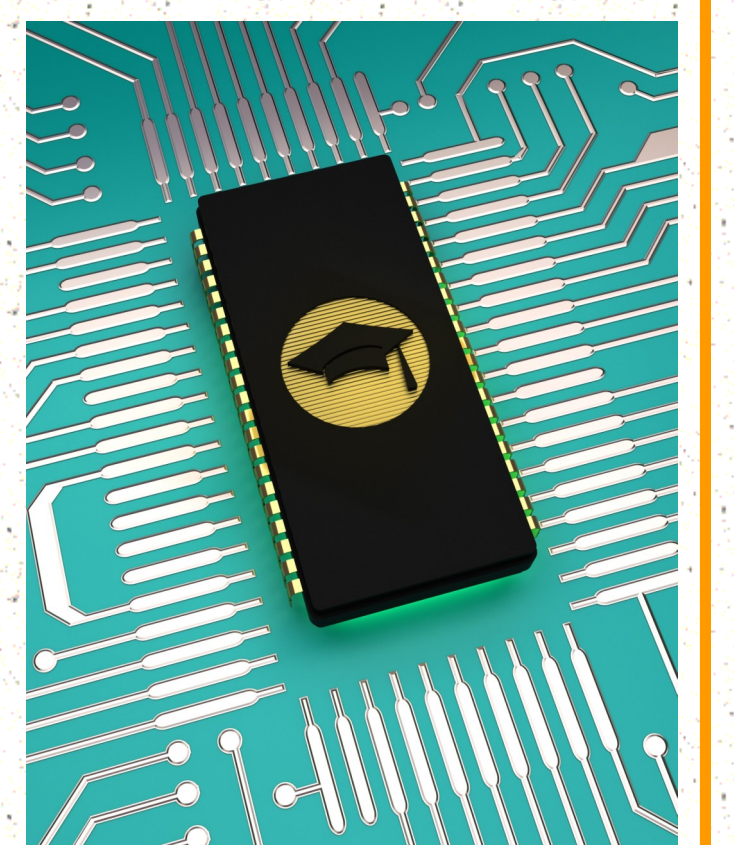
are completion points after the first two years of college study, leading to either

- ⇒ Transfer into the upper division of a BA or BS program (*AA or AS degree*)
- ⇒ Employment as a technology professional (*AAS degree*)

### Currently Under Development

#### CAP Space [www.capspace.org](http://www.capspace.org)

- ◆ Web 2.0-based information repository for two-year college computing *Curricula*, *Assessment* and *Pedagogy*
- ◆ Designed for computing educators, prospective students, parents and advisors
- ◆ New interactive format is user-friendly and flexible, replacing the static PDF document format
- ◆ Will feature an integrated collection of associate-level computing curricula including CS, CE, SE, IS, IT and emerging computing disciplines – eliminating the 'silos' of computing curricula
- ◆ Will provide a community of practice for educators; promoting participation in online moderated discussions as well as contribution of resources to the repository
- ◆ Will allow users to select topics of interest and generate custom reports
- ◆ Will launch in 2009 with the revised *Computer Science Transfer Guidelines*



#### Members of the ACM TYCEC

~Elizabeth K. Hawthorne, Union County College (Chair)  
ehawthorne@acm.org

~Robert D. Campbell, CUNY Graduate Center  
rcampbell@gc.cuny.edu

~Karl J. Klee, Alfred State College of Technology  
kleekj@alfredstate.edu

~Anita M. Wright, Camden County College  
amwright@acm.org