



University  
of Houston  
Clear Lake

## Computer Science

*Bachelor of Science at UHCL*

(2008-2009 2+2 Transfer Plan to University of Houston-Clear Lake)

### UNIVERSITY-REQUIRED TRANSFER COURSES

FOOTNOTE	CORE CURRICULUM REQUIREMENTS*	HRS	CODE	FOOTNOTE	ADDITIONAL FOUNDATION REQUIREMENTS	HRS
a	ENGL 1301 Composition I	3	10	c, #	MATH 2414 Calculus II	3 hrs
a, #	ENGL 2311 Tech Writing (preferred) or 1302	3	10	c, #	MATH 2318 Linear Algebra **	3 hrs
b	Speech Communication**	3	11	c, #	MATH 2320 Ordinary Differential Equations**	3 hrs
c, #	MATH 2413 Calculus I	3	20	c, #	C or C++ Programming Language**	3 hrs
d, #	PHYS 2425 University Physics I	4	30	#	CHEM 1411 General Chemistry I	4 hrs
d, #	PHYS 2426 University Physics II	4	30			16 hrs
e	Humanities**	3	40			
f	Visual & Performing Arts **	3	50			
g	HIST 1301 U.S. History I**	3	60			
g	HIST 1302 U.S. History II** or HIST 2301, 2302 or 2303 Texas History	3	60			
g	GOVT 2301 U.S. and TX Constitutions	3	70			
g	GOVT 2302 U.S. and TX Institutions	3	70			
h	Social & Behavioral Science **	3	80			
c, #	Visual Basic**, ADA, or PASCAL**	3	90			
		44*			Total transfer credit hours	60

#### EXPLANATION OF FOOTNOTES

- \* UHCL's requirements are consistent with the 42-hour Texas core curriculum. If a student completes components of the core at one Texas institution, those courses will substitute for UHCL's same core components. If a student is core complete at any Texas Institution the student is also core complete at UHCL, however, foundation (#) courses are still required. The Core Code is used by Texas schools to identify which area of the 42-hour core curriculum a course fulfills.
- \*\* These courses may be fulfilled by approved upper-level equivalents at UHCL.
- # These courses are included in the Program Foundation Core and must be completed with a grade of "C-" or better.
- a Admission to UHCL requires **prior** completion of six hours of English Composition/Writing classes with grade of "C-" or better. *ENGL 1301 Composition I* (3 hrs) is an admission requirement for all UHCL applicants. *ENGL 2311 Technical Writing* (3 hrs), a program foundation course, will satisfy the second (3 hr) English entrance requirement for UHCL Science and Computer Engineering majors if taken at the transfer institution **prior** to admission. If an applicant takes *ENGL 1302 Composition II* instead of Technical Writing, UHCL entrance requirements are satisfied, but *Technical Writing* must also be completed before graduation.
- b Suggested courses for Speech/Communication include any SPCH course. At some transfer institutions, foreign languages may also fulfill state core Speech requirements.
- c Transfer institutions may require one or more prerequisites for these required program foundation courses, depending on the individual student's high school preparation and test scores. Students are advised to take all prerequisites required for them by their particular transfer institution.
- d *MATH 2413 Calculus I* must be completed before taking *PHYS 2425 University Physics*. Students completing PHYS courses at HCC or at other transfer institutions where labs are separate courses must also complete the labs (at HCC the labs are PHYS 2125 and 2126).
- e Suggested courses for Humanities include any ENGL literature, HUMA, PHIL, RELI, or sophomore-level foreign language course – also any SPCH or HIST taken in addition to core requirements.
- f Suggested courses for Visual & Performing Arts include: any ARTS, DANC, DRAM, MUSI, or MUAP course. Three semester credit hours required.
- g Six hours of U.S. History required; three hours may be in Texas History. Six hours of U.S. Government are required and three of the six hours must, by state law, include Texas Constitutional Government.
- h Suggested courses for Social & Behavioral Science include: any ANTH, ECON, GEOG, PSYC, or SOCI course - also any GOVT, HIST, or POLS course taken in addition to core requirements.

## Bachelor of Science in Computer Science

The Computer Science program at UHCL is accredited by the Computing Accreditation Commission of ABET, Inc.

*2008-2009 Catalog*

### GENERAL DEGREE REQUIREMENTS

- 120 semester hours of applicable college credit are required for the Bachelor of Arts or the Bachelor of Science degrees. A maximum of three hours of lower-level "activities" credits may apply toward graduation. If approved, up to 18 hours of lower-level correspondence, extension or CLEP credit may apply as lower level credit toward graduation in accordance with catalog rules
- At least 30 hours of the degree plan, including at least 12 hours in the major, must be completed in residence at UHCL.
- A cumulative GPA of at least 2.000 must be maintained for course work completed at UHCL, with grades of "C" or better in at least 30 hours of UHCL classes.
- Students must remain continuously enrolled (complete at least one course in a 12 month period) or meet the requirements of a later catalog.
- Students must complete the degree within seven years or meet requirements of a later catalog.

### BASIC REQUIREMENTS

For the degree being pursued, program requirements listed on the transfer plan section of this document and indicated by the #sign should be completed with grades of "C-" or better before beginning the upper level program and finalizing a Candidate Plan of Study. All program core requirements must be completed with a grade of "C-" or better.

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE – UHCL DEGREE REQUIREMENTS (60 HRS)

#### CORE REQUIREMENTS (48 HOURS)

All plan core courses require a grade of "C-" or better. Lower level credit given for any of the following courses will require students to take additional approved technical electives to satisfy program requirements.

CSCI 3333	Data Structures	3 hrs	CENG 3331/3311	Telecom and Network/Lab	4 hrs
CSCI 3331	Computer Org & Assembly Language	3 hrs	CENG 3132/3112	Digital Circuits/Lab	4 hrs
CSCI 3134	Software Development with JAVA	3 hrs	CENG 3531/3511	Computer Architecture/Lab	4 hrs
CSCI 3233	Object Oriented Design and Programming	3 hrs	MATH 3331	Discrete Mathematics	3 hrs
CSCI 3231	Numerical Methods	3 hrs	MATH 3334	Probability and Statistics for Scientists and Engineers	3 hrs
CSCI 3532	Advanced Data Structures and Algorithms	3 hrs			
CSCI 4333	Design of Data Base Systems	3 hrs	SWEN 4432	Software Engineering	3 hrs
CSCI 4534	Operating Systems	3 hrs	CSCI 4838	Senior Project in Computer Science	3 hrs

#### REQUIRED TECHNICAL ELECTIVES (12 HOURS)

CSCI courses approved by faculty advisor	6 hrs
CSCI/CINF/Related Elective approved by faculty advisor	6 hrs

