

SCHOOL OF SCIENCE & COMPUTER ENGINEERING



University
of Houston
Clear Lake

Mathematical Science

Bachelor of Arts or 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	3	10			
a, #	ENGL 2311 Tech Writing (preferred) or ENGL 1302	3	10	c, #	MATH 2414 Calculus II	4
b	Speech Communication**	3	11	c, j, #	MATH 2415 Calculus III**	4
c, #	MATH 2413 Calculus I	4	20	c	Electives	9
d, #	Natural Science	3	30			17
d, #	Natural Science	3	30			
e	Humanities**	3	40			
f	Visual & Performing Arts **	3	50			
g	HIST 1301 American History I**	3	60			
g	HIST 1302 American History II** or HIST 2301,2302 or 2303 Texas History	3	60			
g	GOVT 2301 US and TX Constitutions	3	70			
g	GOVT 2302 US and TX Institutions	3	70			
h	Social & Behavioral Science **	3	80			
c, #	PASCAL**, Ada, or Visual Basic**	3	90			
		43*			Total transfer credit for B.A and B.S	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. Non-remedial prerequisite courses will be transferred as lower-level electives, as needed.

d Suggested courses for Natural Science include any ASTR, BIOL, CHEM, ESCI, GEOL or PHYS course.

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.

j MATH 2415 may be replaced by UHCL MATH 3231, offered every Fall. Calculus III is required for both the B.A. and the B.S. degrees.

Bachelor of Arts/Bachelor of Mathematical Science

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 ARTS IN MATHEMATICAL SCIENCE DEGREE – UHCL DEGREE REQUIREMENTS (60 HRS)

If lower level credit is given for any of the following courses, additional upper-level course work selected from the list of electives will be required. In addition to Calculus I, II & III (listed on page one) students must complete the following courses

MATH 3131	Intro to Linear Algebra	3 hrs
MATH 4030	Intro To Modern Algebra & Number Theory	3 hrs
MATH 4434	Intro to Probability	3 hrs
MATH Electives	for B.A. chosen from the list below	6 hrs
General Elective or WRIT 3135	Tech Writing (if 2311 not taken)	3 hrs
General Electives – Upper level (UHCL) Electives		42 hrs

Math Electives require prior approval of the student’s faculty advisor. For the B.A. degree, select the two Math Electives from the following list. Note that the lists of accepted electives differ between the BA and BS degrees.

MATH 4031	History of Mathematical Sciences	3 hrs	MATH 4231	Predicate Logic	3 hrs
MATH 4131	Ordinary Differential Equations	3 hrs	MATH 4232	Intro to Abstract Algebra	3 hrs
MATH 4132	Number Theory	3 hrs	MATH 4235	Theory of Models	3 hrs
MATH 4135	Numerical Analysis	3 hrs	MATH 4435	Intro to Statistics	3 hrs
MATH 4136	Math Software Applications	3 hrs			

BACHELOR OF SCIENCE IN MATHEMATICAL SCIENCE DEGREE - UHCL DEGREE REQUIREMENTS (60 HRS)

If lower level credit is given for any of the following courses, additional upper-level course work selected from the list of electives will be required. In addition to Calculus I, II & III (listed on page one) students must complete the following courses:

MATH 3131	Intro to Linear Algebra	3 hrs	MATH 4232	Intro to Abstract Algebra	3 hrs
MATH 4131	Ordinary Differential Equations & Appl.	3 hrs	or MATH 4435	or Intro to Statistics	
MATH 4136	Math Software Applications	3 hrs	MATH Electives	For the B.S. from the list below	9 hrs
MATH 4331	Advanced Calculus	3 hrs	General Elective	(WRIT 3135, if 2311 not taken)	3 hrs
MATH 4434	Introduction to Probability	3 hrs	General Elective	Upper-level (UHCL) Electives	30 hrs

Math Electives require prior approval of the student’s faculty advisor. For the B.S. degree, select the three Math Electives from the following list. Note that the lists of accepted electives differ between the BA and BS degrees.

MATH 4132	Number Theory	3 hrs	MATH 4235	Theory of Models	3 hrs
MATH 4133	Introduction to Topology	3 hrs	MATH 4431	Introduction to Analysis	3 hrs
MATH 4135	Numerical Analysis & Applications	3 hrs	MATH 4435	Introduction to Statistics	3 hrs
MATH 4231	Predicate Logic	3 hrs	MATH 4633	Functions of a Complex Variable	3 hrs
MATH 4232	Intro to Abstract Algebra	3 hrs			

