

## UNIVERSITY-REQUIRED TRANSFER COURSES

### Bachelor of Science- Mathematical Science

High School Certification: 8-12 Mathematics

2009-2010 2+2 Transfer Plan to University of Houston-Clear Lake

CORE CURRICULUM <sup>^</sup>	COURSE TITLE	HOURS	CODE <sup>^</sup>
Communication:	ENGL 1301 – Composition I (Grade must be “C-” or better)	3	10
	ENGL 1302 – Composition II (Grade must be “C-” or better)	3	10
Speech/Communication:	Public Speaking <b>required</b> for certification <sup>3</sup> (suggested courses include: SPCH 1311, 1315, 1321, 1342, 2341, 2335, 2336)	3	11
	MATH 2413 – Calculus I (or higher) <sup>3</sup>	3	20
Mathematics:			
Natural Science:	Natural Science <sup>1,2</sup>	3	30
	Natural Science <sup>1,2</sup>	3	30
Humanities:	ENGL literature <b>preferred</b> (sophomore-level) <sup>1</sup> (other acceptable courses include: HUMA, PHIL, RELI)	3	40
	Suggested courses include <sup>1</sup> : ARTS, DANC, DRAM, MUSI or MUAP	3	50
Visual & Performing Arts:			
Social & Behavioral Science:	HIST 1301 – United States History I <sup>1</sup>	3	60
	HIST 1302 – United States History II <sup>1</sup> or HIST 2301 – Texas History <sup>1</sup> (six hours of American History required, three of which may be Texas History)	3	60
	GOVT 2301 – American Government I	3	70
	GOVT 2302 – American Government II	3	70
	GEOG 1303 – Global Geography preferred <sup>1</sup> (other acceptable courses include: PSYC, SOCI, ECON, ANTH)	3	80
	Scientific Programming Language: choose from C++, C, JAVA, VISUAL BASIC, BASIC, FORTRAN or PASCAL <sup>1,3</sup>	3	90
	<b>Total Hours:</b>		<b>42</b>

#### ADDITIONAL LOWER-LEVEL AND FIELD OF STUDY COURSES

	HOURS
EDUC 1301 – Introduction to the Teaching Profession <sup>3,4</sup>	3
EDUC 2301 – Introduction to Special Populations <sup>3,4</sup>	3
MATH 2318 – Linear Algebra (equivalent to MATH 3131 at UHCL) <sup>1,3</sup>	3
MATH 2320 – Differential Equations (equivalent to MATH 4131 at UHCL) <sup>1,3</sup>	3
MATH 2414 – Calculus II <sup>3</sup>	3
MATH 2415 – Calculus III (equivalent to MATH 3231 at UHCL) <sup>1,3</sup>	3

#### NOTES:

- <sup>^</sup> 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.
- 1** These General Education Requirements may be fulfilled by approved upper-level equivalents at UHCL.
  - 2** PHYS 2425 and 2426 are recommended. Students must include a one-year sequence in either Chemistry or Physics.
  - 3** Must be completed with a grade of “C-” or better.
  - 4** These courses are required for students pursuing the Associate of Arts in Teaching (AAT). Students not pursuing the AAT may replace these courses with approved upper-level electives.
- Associate degree requirements at the community college, including the minimum allowed grade point average, are found in the community college catalog in effect during the candidate's initial semester of continuous enrollment. See a community college counselor for more information. Please note that not all courses are offered at all community colleges. Check with your counselor for availability of courses on your campus.
  - In order to meet the UHCL admission requirement of 54 hours with a cumulative GPA of 2.0 or higher, candidates may complete additional coursework at the lower level. Candidates should contact the School of Education at UHCL about additional lower-level coursework that may apply toward the bachelor's degree.
  - Candidates are encouraged to attend an Admissions Preview during the semester prior to enrollment at UHCL. Contact the Office of Admissions at 281-283-2521 for dates.
  - Undergraduate students who were first-time freshmen between Fall 1999 and Summer 2006 that exceed more than 45 semester credit hours beyond their state-approved degree plans and undergraduate students who were first-time freshmen starting Fall 2006 on forward that exceed more than 30 semester credit hours beyond their state-approved degree plans are subject to a tuition recovery fee to cover the student's educational costs. For more information, contact the Office of Academic Records.



University  
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Clear Lake

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# Bachelor of Science-- Mathematical Science

## High School Certification: 8-12 Mathematics

### SCHOOL OF SCIENCE AND COMPUTER ENGINEERING DEGREE REQUIREMENTS

- A total of 127 semester hours of applicable college credit for the Bachelor of Science degree. No more than 18 semester hours of previously earned lower-level credit may have been taken by correspondence, extension or CLEP.
- At least 30 hours of the degree program must be taken in residence at UHCL.
- A cumulative GPA of 2.0 on coursework completed at UHCL with grades of "C" or better on at least 30 hours of resident upper-level work. Grades of "C-" and below cannot be applied toward the 30 hours of resident upper-level work.
- For teacher certification, all UHCL courses must be "C-" or better. GPA of 2.5 or higher required in the Academic Specialization and GPA of 3.0 required in the Pedagogy coursework.
- Remain continuously enrolled (complete at least one course in a 12 month period) or meet requirements of a later catalog.
- Complete the degree within seven years or meet requirements of a later catalog.

### PREREQUISITES TO TEACHER EDUCATION PROGRAM (9 HOURS)

EDUC 4130 – Theories of Educational Psychology (F/Sp/Su)

INST 3133 – Survey of Instructional Technologies (F/Sp/Su)

SILC 4135 – Theories of American Pluralism (F/Sp/Su)

TASP/THEA with minimum scores of Reading – 260, Writing – 230, Mathematics – 230

Public Speaking requirement met

2.50 GPA overall or in the last 60 semester credit hours

Completed 12 semester credit hours in the subject-specific content area for target teacher certification

Application for admission to Teacher Education Program (TEP) – available in the online ABC Workshop at [www.uhcl.edu/soe](http://www.uhcl.edu/soe)

### ACADEMIC SPECIALIZATION (30 HOURS) 2.50 GPA REQUIRED IN ACADEMIC SPECIALIZATION COURSES

MATH 3034 – Algebra Through Technology (F)

MATH 3035 – Euclidian and Non-Euclidian Geometry (Sp)

MATH 4136 – Math Software Applications (F)

MATH 4331 – Advanced Calculus (F)

MATH 4434 – Introduction to Probability (F)

One course from: MATH 4232 or 4435

Four courses from: MATH 4132, 4133, 4135, 4231, 4232, 4235, 4431, 4435 or 4633

### OTHER REQUIRED COURSES (13 HOURS)

WRIT 3135 – Technical Writing (*grade of B- or better*)

LLLS 4531 – Reading in Content Subjects F/Sp/Su

SPED 4030 – Survey of Exceptionalities (F/Sp/Su)

TCED 4034 – Creating Positive Learning Environments in 4-8 & 8-12 (*perquisites are WRIT 3135 & INST 3133*) (F/Sp/Su)

TCED 4012 – Senior Seminar II (*requires admission to TEP*) (F/Sp/Su)

### PEDAGOGY (15 HOURS): ADMISSION TO TEP REQUIRED AND 3.00 GPA REQUIRED IN PEDAGOGY COURSES (OFFERED FALL/SPRING ONLY)

TCED 4633 – Methods in Secondary Mathematics (*prerequisites are TCED 4034 & MATH 3034*) (F)

**Must Be Taken Semester Immediately Preceding Final Semester:**

TCED 4738 – Pre-Service Internship I (*Every Wednesday in the field*)

**Final Semester:**

TCED 4798 – Pre-Service Internship II (*Every day in the field*)

### PASSING SCORES ON THE APPROPRIATE STATE ASSESSMENTS – TEXAS EXAMINATIONS OF EDUCATOR STANDARDS (TEXES)

8-12 Mathematics TEXES #135

8-12 Pedagogy and Professional Responsibilities TEXES #130

School of Science and Computer Engineering Academic Advising Office 281-283-3711

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School of Education Academic Advising Office 281-283-3600 •

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