

**Transfer Plan**  
**BACHELOR OF SCIENCE – MATHEMATICAL SCIENCE**  
**HIGH SCHOOL CERTIFICATION: 8-12 MATHEMATICS**

<b>Core Curriculum<sup>^</sup></b>	<b>Course Title</b>	<b>Hours</b>	<b>Code<sup>^</sup></b>
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
Humanities:	ENGL literature <b>preferred</b> (sophomore-level) <sup>1</sup> (other acceptable courses include: HUMA, PHIL, RELI)	3	40
Social & Behavioral Science:	HIST 1301 – United States History I <sup>1</sup>	3	60
	HIST 1302 – United States History II <sup>1</sup> <b>or</b> 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 <b>preferred</b> <sup>1</sup> (other acceptable courses include: PSYC, SOCI, ECON, ANTH)	3	80
Mathematics:	MATH 2413 – Calculus I (or higher) <sup>3</sup>	4	20
Visual & Performing Arts:	Suggested courses include <sup>1</sup> : ARTS, DANC, DRAM, MUSI or MUAP	3	50
Natural Science:	Natural Science <sup>1,2,3</sup>	3	30
	Natural Science <sup>1,2,3</sup>	3	30
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
Computer Competency:	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>43</b>	

<b>Additional Lower-Level and Field of Study Courses</b>	<b>Hours</b>
ENGL 2311 or 2314 – Technical Writing ( <i>equivalent to WRIT 3135 at UHCL</i> ) <sup>1,3</sup>	3
MATH 2414 – Calculus II <sup>3</sup>	4
MATH 2415 – Calculus III ( <i>equivalent to MATH 3231 at UHCL</i> ) <sup>1,3</sup>	4
Natural Science <sup>1,2,3</sup>	3
Natural Science <sup>1,2,3</sup>	3

**Notes:**

- <sup>^</sup> UHCL's requirements are consistent with the 42-hour Texas core curriculum. If a candidate completes a component of the core at one Texas institution, that block of courses will be substituted for UHCL's same core component(s). Please refer to the community college's core requirements for specific courses in each area above. The core code number is used by Texas schools to identify which area of the 42-hour core curriculum a course fulfills.
- <sup>1</sup> These General Education Requirements may be fulfilled by approved upper-level equivalents at UHCL.
- <sup>2</sup> Suggested courses for Natural Science include: ASTR, BIOL, CHEM, ESCI, GEOL or PHYS. PHYS 2425 and 2426 are recommended. Students must include a one-year sequence in either Chemistry or Physics.
- <sup>3</sup> Must be completed with a grade of “C-” or better.

- 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 grades of “C” or better, 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 Undergraduate Transfer Seminar during the semester prior to enrollment at UHCL. Contact the Office of Admissions at (281) 283-2521 for dates.

# University of Houston Clear Lake

## BACHELOR OF SCIENCE – MATHEMATICAL SCIENCE HIGH SCHOOL CERTIFICATION: 8-12 MATHEMATICS

### SCHOOL OF SCIENCE AND COMPUTER ENGINEERING DEGREE REQUIREMENTS

- A total of 133 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)

TCED 3133 – Computer Use in Classrooms (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

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 (39 hours): 2.50 GPA required in academic specialization courses

MATH 3034 – Algebra Through Technology (F)

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

MATH 3131 – Applied Linear Algebra (F/Sp/Su)

MATH 4131 – Ordinary Differential Equations & Applications (F/Sp/Su)

MATH 4136 – Math Software Applications (F)

MATH 4331 – Advanced Calculus (F)

MATH 4434 – Introduction to Probability (F)

MATH 4435 – Introduction to Statistics (Sp)

Choose five courses from the following: MATH 4132, 4133, 4135, 4231, 4232, 4235, 4431, or 4633

### OTHER REQUIRED COURSES (7 hours)

LLS 4531 – Reading in Content Subjects (F/Sp/Su)

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

TCED 4010 – Professional Preparation Seminar (requires admission to TEP) (F/Sp/Su)

### PEDAGOGY (18 hours): Admission to TEP required and 3.00 GPA required in Pedagogy courses (offered Fall/Spring only)

EDUC 4132 – Professional Seminar (F/Sp/Su)

TCED 4633 – Methods in Secondary Mathematics (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 EXAMINATION OF EDUCATOR STANDARDS (TEXES)

8-12 Mathematics TExES #135

8-12 Pedagogy and Professional Responsibility TExES #130

**School of Science and Computer Engineering Advising Office (281) 283-3711 • Bayou Building Room 3611  
Academic Advisor: Barbara Coleman**

**School of Education Academic Advising Office (281) 283-3600 • Bayou Building Suite 1231  
Academic Advisors: David Benz, Ken Bogan, Cynthia Castellanos, Virdeen Muñoz, and Jerricia Ulmer  
education@uhcl.edu • www.uhcl.edu/soe**

**On-line advising Tuesday and Thursday 4:30 – 6:00 pm**