

Catalog Year 2008-2009

# College of the Mainland

## Associate Degree of Applied Science in Process Technology

### PTAC Courses, Pre-Requisites<sup>1</sup> & Requirements<sup>1</sup>

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
ENGL 1301	CHEM 1419	PHYS 1401 or 1410	PTAC 2420 *	PTAC 2446 *
Composition & Rhetoric in Communication	Applied Organic, Inorganic & Hydrocarbon Chemistry Pre/CoReq: TECM 1303	College or Applied Physics Prereq: MATH 1314 or TECM 1303 & MATH 0320	Process Tech II - Systems Prereqs: PTAC 1302, PTAC 1408, PTAC1410, PTAC1432, CHEM 1419, PHYS1410/1401	Process Troubleshooting Prereq: PTAC 2420
MATH 1314 or TECM 1303	PTAC 1410 *	Humanities / Fine Arts	CTEC 2445	PTAC 2438 *
College Algebra or Tech Math Prereq: MATH 0320	Process Tech I - Equipment Prereq: PTAC 1302 & PTAC 1408 (Previously PTAC 2410)	Select a 3 credit hour course from: Humanities, Literature, Philosophy, Drama, Art, Music. (See catalog page 61)	Unit Operations "Hands On" GSU Operations & Troubleshooting Capstone Course Pre/Coreq: PTAC 2420	Process Technology III - Operations Prereq: PTAC 2420
PTAC 1408 * ^	COSC 1301	PTAC1350	SPCH 1315 or BUSI 2304	PTAC 2450
Safety, Health & Environment Prereq: CPT Reading 61 (Previously PTAC 1308)	MicroComputer Applications	Industrial Economics Prereq: PTAC 1302 & MATH 0310	Public Speaking or Business Communications	Advanced Industrial Processes Prereq: PTAC 2420
PTAC 1302 *	PTAC 1432 * <sup>1</sup>	PTAC 2314 *	PHED 1107	
Intro to Process Technology Prereq: CPT Reading 61	Instrumentation I Prereq: PTAC 1302 (Previously PTAC 1332/1352)	Quality Prereq: COSC 1301	Foundations of Fitness	
SOC1 1301 or PSYC 2301 or PSYC1300	All course substitutions must be approved by the VP of Instruction.	Prerequisites for all courses <b>MUST</b> be satisfied.	CTEC 2486 #	
Introduction Sociology or Psychology or Psychology for Success			<i>Elective</i> Internship PTEC 300 Hrs. Plant Experience Requirements directed by Industry	

\* These are the 8 Core courses identified by the Gulf Coast Process Technology Alliance.

^ - Students having taken PTAC 1308 must take the Hazmat Course FIRT 1315. The 2005/2006 and later Catalogs offer PTAC 1408 which does not require the Hazmat course.

# - This course is an elective that requires pre-testing, interview and selection by BP personnell only.

! - Students having taken PTAC 1352 or PTAC 1332 must take the PTAC 1432 Instrumentation II Course in place of the PTAC 2436 course. The PTAC 1432 course was implemented in the Fall 2006 and eliminates the need for the Instrumentation II course.

• - General education and core class prerequisites apply. Complete prerequisite information can be found in the class descriptions in the college catalog.

1 - All courses must be completed with a "C" or better.

### Associate of Applied Science in Process Technology

The process technology programs prepare the student to enter the operations or laboratory technician field in refinery and manufacturing.

Subject	Catalog#	Title	Credit Hours
<b>First Semester</b>			
‡ PTAC	1302	Introduction to Process Technology	3
‡ PTAC	1308	Safety, Health, and Environment I	3
PTAC	1410	Process Technology I - Equipment	4
PTAC	1332	Process Instrumentation I	3
SCIT	1414	Applied General Chemistry I	4
Semester Total			<b>17</b>
<b>Second Semester</b>			
PTAC	2314	Principles of Quality	3
PTAC	2420	Process Technology II - Systems	4
TECM	1394	Technical Math Applications	3
PTAC	2346	Process Troubleshooting	3
Elective*	- - - -	- - - -	4
Semester Total			<b>17</b>
<b>Third Semester</b>			
TECM	1341	Technical Algebra	3
<b>PHYS</b>	<b>1401/1405</b>	<b>College Physics I: Mechanics and Heat or General Physics I</b>	<b>4</b>
<b>SPCH</b>	<b>1315</b>	<b>Principles of Speaking</b>	<b>3</b>
‡ ITSC	1309	Integrated Software Applications I	3
Semester Total			<b>13</b>
<b>Fourth Semester</b>			
- - - -	- - - -	<b>Social/Behavioral Science</b>	<b>3</b>
ENGL	- - - -	Composition	3
● PTAC	2438	Process Technology III - Operations	4
- - - -	- - - -	<b>Humanities/Fine Arts</b>	<b>3</b>
Semester Total			<b>13</b>
<b>Total Semester Credit Hours for Degree</b>			<b>60</b>

\*Choose from Natural Science AA/AAT/AS Core listing

### First Semester

Course	Title	Credit Hours
CHEM 1405	Introductory Chemistry	4
MATH 1314	College Level Mathematics	3
PTAC 1432	Process Instrumentation I	4
PTAC 1302	Introduction to Process Technology	3
Social or Behavioral Science Elective	GOVT, HIST, PSYC, or SOCI	3
		17

### Second Semester

Course	Title	Credit Hours
PTAC 1408	Safety, Health, and Environment I	4
CTEC 1441	Applied Instrumental Analysis I	4
CTEC 1401 or PHYS 1401	Applied Petrochemical Technology (Technical Physics) or College Physics I	4
PTAC 1410	Process Technology I - Equipment	4
SPCH 1315 or SPCH 1318	Fundamentals of Speech or Interpersonal Communication	3
		19

### Third Semester

Course	Title	Credit Hours
CTEC 1380 or INTC 1441	Cooperative Education I – Chemical Technician or Principles of Automatic Control	3/4
ENGL 1301	Composition and Rhetoric I	3
BCIS 1405	Business Computer Applications	4
PTAC 2420	Process Technology II - Systems	4
CTEC 1391	Equipment Troubleshooting	3
		17/18

### Fourth Semester

Course	Title	Credit Hours
CTEC 1381 <sup>1</sup>	Cooperative Education II – Chemical Technician <b>or</b> Approved Elective	3
PTAC 2314	Principles of Quality	3
PTAC 2446	Process Troubleshooting	4
American or British Literature	ENGL 2322, 2323, 2327, or 2328	3
PTAC 2438	Process Technology III - Operations	4