

LOUISIANA COMMUNITY & TECHNICAL COLLEGE SYSTEM

Changing Lives,
Creating Futures

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Louisiana
Community
& Technical
College System

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TO: Dr. Monty Sullivan
LCTCS President

THROUGH: Dr. René Cintrón
Chief Academic Affairs Officer

FROM: Dr. Adrienne Fontenot
Director of Adult Learning and Educational Programs

SUBJECT: Louisiana Chemical Association's Process Technology (PTEC) Program

DATE: 5/2/18

APPROVED

Slk 6/13/18
LCTCS BOARD OF SUPERVISORS

FOR BOARD ACTION:

Recommendation: Staff recommends the Board approve the following program revisions listed below.

Program Revisions at River Parishes Community College

- 1. Associate of Applied Science (AAS) in Process Technology (CIP 150699) - 5 STARS
a. Technical Diploma (TD) in Process Technology (CIP150699) - 5 STARS
i. Certificate of Applied Science (CAS) in Industrial Operations Technician (CIP 150699) - 5 STARS
ii. Certificate of Technical Studies (CTS) in Process Technology Support Technician (CIP 150699) - 5 STARS

Program Adoptions at Nunez Community College

- 2. Associate of Applied Science (AAS) in Process Technology (CIP 150699) - 5 STARS
a. Technical Diploma (TD) in Process Technology (CIP150699) - 5 STARS
i. Certificate of Technical Studies (CTS) in Process Technology Support Technician (CIP 150699) - 5 STARS

Program Adoptions at SOWELA Technical Community College

- 3. Associate of Applied Science (AAS) in Process Technology (CIP 150699) - 5 STARS
a. Technical Diploma (TD) in Process Technology (CIP150699) - 5 STARS
i. Certificate of Technical Studies (CTS) in Process Technology Support Technician (CIP 150699) - 5 STARS

Program Adoptions at Louisiana Delta Community College

- 4. Associate of Applied Science (AAS) in Process Technology (CIP 150699) - 5 STARS
a. Technical Diploma (TD) in Process Technology (CIP150699) - 5 STARS

- i. Certificate of Technical Studies (CTS) in Process Technology Support Technician (CIP 150699) – 5 STARS

Program Adoptions at Baton Rouge Community College

5. Associate of Applied Science (AAS) in Process Technology (CIP 150699) – 5 STARS

Background: The LCTCS PTEC Faculty Peer Group decided to strive for a common exit point embedded within the Associate of Applied Science (AAS) pathway that would strengthen and align the competencies taught from one school to another. The requirements for and numbering of the General Education courses will be determined by the individual institutions in accordance with the Master Course Articulation Matrix.

As part of a statewide collaborative effort to standardize and optimize core competencies taught and required for industrial processing occupations (PTEC), the changes being requested will enhance hands on training and reduce courses determined redundant in content for the process technician field of study. The proposed curriculum will better align with the North American Process Technology Alliance (NAPTA) which sets the core curriculum standards for Process Technology programs. In addition, these changes will aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time for completion as well as collaboration among institutions ultimately enhancing resources and costs of operations. Proposed curriculum change has been reviewed and approved by advisory boards and institutional committees.

Fiscal Impact: The requested revisions will not affect the administrative structure and/or allocation of departmental funds. The revised curriculum will help students save money and accelerate programming while streamlining transfers and adding consistency to program outcomes across the state. No additional costs should be incurred.

History of Prior Actions: The original curriculum was based off the Center for the Advancement of Process Technology (CAPT) and implemented independently by numerous institutions. Over time, state and institutional changes were made without coordination or an accredited guiding body. During a LCA-PTEC curriculum committee meeting, numerous institutions voiced the need to better align our curriculums for consistency, transferability, and accreditation. Once LCTCS launched the Faculty Peer Groups the PTEC group decided to focus on the curriculum alignment.

Benefits to the System: These proposed changes to curriculum are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time for completion as well as collaboration among institutions which ultimately enhances resources and costs of operations.



Approved for Recommendation to the Board
Dr. Monty Sullivan

6-13-18

Date



LOUISIANA'S COMMUNITY & TECHNICAL COLLEGE SYSTEM

Requests for Programs: New, Modification, and Adoption

TYPE OF PROPOSED CHANGE		
<input type="checkbox"/> New Program	<input checked="" type="checkbox"/> Curriculum Modification	<input type="checkbox"/> Curriculum Adoption
Program Name:		

AWARD LEVEL(S)	
For Board of Regents and LCTCS Review: <input checked="" type="checkbox"/> Associate of Applied Science (A.A.S.) <input type="checkbox"/> Associate of Science (A.S.) <input type="checkbox"/> Associate of Arts (A.A.) <input type="checkbox"/> Other Associate Degree Name: <input type="checkbox"/> Certificate of Applied Science (C.A.S.) <input type="checkbox"/> Certificate of General Studies (C.G.S.)	For LCTCS Review: <input checked="" type="checkbox"/> Technical Diploma (T.D.) <input checked="" type="checkbox"/> Career and Technical Certificate (C.T.C.) <input checked="" type="checkbox"/> Certificate of Technical Studies (C.T.S.)

Name: AAS – PROCESS TECHNOLOGY			
CIP: 150699	Credit Hours: 60	Contact Hours: 1140	Award Level: A.A.S.
Name: CAS – INDUSTRIAL OPERATIONS TECHNICIAN			
CIP: 150699	Credit Hours: 37	Contact Hours: 600	Award Level: C.A.S.
Name: TD – PROCESS TECHNOLOGY			
CIP: 150699	Credit Hours: 48	Contact Hours: 715	Award Level: T.D.
Name: CTS – PROCESS TECH. SUPPORT TECHNICIAN			
CIP: 150699	Credit Hours: 20	Contact Hours: 360	Award Level: C.T.S.

IBC	Issuing Body	Course Title	Course Prefix	Course Number	Credits Awarded

PROPOSED CHANGE

a) For New Programs, state the purpose and objective; b) For Curriculum Modifications, state previous credit and clock hours; c) For Program Termination, state program and all award levels; d) For Curriculum Adoption, state the college from which curriculum is being adopted and the date it was approved by LCTCS.

Previous credit hours for AAS = 67

Proposed credit hour AAS = 60

Previous clock hours for AAS = 1125

Proposed CLOCK hour AAS = 1140

The committee decided to strive for a common exit point embedded within the Associate of Applied Science (AAS) pathway that would strengthen and align the competencies taught from one school to another. The Technical Diploma (TD) exit point made the most sense to this statewide agenda and laid the foundation for the 45-credit hour TD outlined below and on the attached Program Exit Point Audit Form:

Proposed Curriculum Revisions:

COURSE NAME	Lecture		Laboratory		Work-Based		Course Totals	
	Clock	Credit	Clock	Credit	Clock	Credit	Clock	Credit
Approved Computer Science	45	3					45	3
Approved Humanity	45	3					45	3
PTEC 1010 Introduction to Process Technology	45	3					45	3
PTEC 1330 Process Instrumentation	30	2					30	2
PTEC 1331 Process Instrumentation Lab			60	2			60	2
PTEC 1630 Process Equipment	30	2					30	2
PTEC 1631 Process Equipment Lab			60	2			60	2
PTEC 2030 Plant Safety, Health and Environmental	45	3					45	3
Approved Natural Science	45	3					45	3
Approved Natural Science Lab			30	1			30	1
PTEC 2070 Statistical Quality Control	45	3					45	3
PTEC 2420 Process Systems	45	3					45	3
PTEC 2421 Process Systems Lab			30	1			30	1

PTEC 2440 Process Troubleshooting	30	2	30	1			60	3
PTEC 2630 Fluid Mechanics	45	3					45	3
PTEC 2430 Unit Operations	30	2					30	2
PTEC 2431 Unit Operations Lab			60	2			60	2
PTEC 2911 or 2912 Campus Internship or Independent Internship					135	3	135	3
ENGL 1010 English Composition I	45	3					45	3
Approved Humanity Communications	45	3					45	3
CHEM 1010 General Chemistry	45	3					45	3
CHEM 1011 Chemistry Lab			30	1			30	1
Approved Behavioral Science	45	3					45	3
MATH 1100 College Algebra	45	3					45	3
TOTAL ALL COLUMNS	705	47	300	10	135	3	1140	60

Note: The requirements for and numbering of the General Education courses will be determined by the individual institutions in accordance with Master Course Articulation Matrix.

IMPLEMENTATION DATE (Semester and Year)	Summer 2018
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Proposed Program Revisions:

Change Existing Course/Program:		Proposed	Current
X	Change course contact hours Total contact hours for program	PTEC 2430 (2/0/2) – 30 contact hours PTEC 2440 (2/1/3) – 60 contact hours Total Contact Hours - 1140	PTEC 2430 (0/2/2) – 60 contact hours PTEC 2440 (3/0/3) – 45 contact hours Total Contact Hours - 1230
X	Change course credit hours Total credit hours for program	PTEC 2430 Unit Operations (2/0/2) <i>*Lab (PTEC 2431) will be new & separate course.</i> PTEC 2440 Troubleshooting (2/1/3) Total Credit Hours – 60	PTEC 2430 Unit Operations (3/1/4) PTEC 2440 Troubleshooting (3/0/3) Total Credit Hours – 67

X	Add a course	<p>PTEC 1330 Process Instrumentation (2/0/2) Course Description - This course is designed to introduce the student to the equipment and methodologies used by the industry for monitoring performance and controlling processes. Topics addressed include common terminologies, basic principles of measurement and instrumentation, specific hardware, performance characteristics, control loops, typical applications and operating limits.</p> <p>PTEC 1331 Process Instrumentation Lab (0/2/2) Active lab & prep (2 TLEs per lab credit hour) Course Description - This course is designed to introduce the student to laboratory exercises and activities involving equipment and methodologies used by the industry for monitoring performance and controlling processes. Topics addressed include common terminologies, basic principles of measurement and instrumentation, specific hardware, performance characteristics, control loops, typical applications and operating limits.</p> <p>PTEC 1630 Process Equipment (2/0/2) Course Description - This course is a study of process plant equipment including their construction, principles of operations, maintenance and utilization within the process industry. Equipment to be studied includes piping, valves, pumps, compressors, heat exchangers, fired furnaces, steam and gas turbines.</p>	
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		<p><i>PTEC 1631 Process Equipment Lab (0/2/2) Active lab & prep (2 TLEs per lab credit hour) Course Description - This course is a study of process plant equipment and is designed to introduce the student to laboratory exercises and activities involving equipment materials of construction, principles of operations, maintenance and utilization within the process industry. Equipment to be studied includes piping, valves, pumps, compressors, heat exchangers, fired furnaces, steam and gas turbines.</i></p> <p><i>PTEC 2421 Process Systems Lab (0/3/1) Active lab & prep (2 TLEs per lab credit hour) Course Description - This course is designed to introduce students to laboratory exercises, process systems and other activities that occur within the process industry using existing knowledge of equipment, and instrumentation. Concepts covered will be related to design, line-tracing and identification of control loops.</i></p> <p><i>PTEC 2431 Unit Operations Lab (0/2/2) Active lab & prep (2 TLEs per lab credit hour) Course Description - This course is designed to introduce students to laboratory exercises, process simulations and other activities that occur within the process industry using existing knowledge of equipment, systems, and</i></p>	
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		<p><i>instrumentation. Concepts covered will be related to commissioning, normal startup, operations, normal shutdown, turnarounds, safety, environmental, and abnormal situations, as well as the process technician's daily roles and responsibilities in performing tasks associated with concepts utilized within an industrial processing unit.</i></p> <p><i>PTEC 2912 Independent Internship (0/3/3) Independent Internship designed for students that obtain an external internship with a company approved by the Director of Technical programs.</i></p>	
<i>X</i>	<i>Delete a course</i>	<i>Completed March 10, 2017</i>	<p><i>PTEC 1000 Mechanical Aptitude (0/1/1)</i></p> <p><i>PTEC 1310 Process Instrumentation I (2/1/3)</i></p>
		<p><i>Completed March 10, 2017</i></p> <p><i>Remove from program</i></p>	<p><i>PTEC 1320 Process Instrumentation II (2/1/3)</i></p> <p><i>PTEC 1610 Process Equipment (PT I) (2/1/3)</i></p> <p><i>JOBS 2450 Job Seeking Skills (2/0/2)</i></p>
<i>X</i>	<i>Change exit points</i>	<p><i>Remove TCA</i></p> <p><i>Update the following:</i></p> <p><i>20 total credit hours – CTS</i></p> <p><i>48 total credit hours - TD</i></p> <p><i>60 total credit hours - AAS</i></p>	<p><i>18 total credit hours – CTS</i></p> <p><i>51 total credit hours - TD</i></p> <p><i>67 total credit hours - AAS</i></p>

<p>X</p>	<p><i>Add a pre-requisite or co-requisite</i></p>	<p><i>PTEC 1330 – Pre-req PTEC 1010 C or better & eligibility for MATH1100; Coreq PTEC 1331</i></p> <p><i>PTEC 1331 – Pre-req PTEC 1010 C or better & eligibility for MATH1100; Coreq PTEC 1330</i></p> <p><i>PTEC 1630 – Pre-req PTEC 1010 C or better & eligibility for MATH1100; Coreq PTEC 1631</i></p> <p><i>PTEC 1631 – Pre-req PTEC 1010 C or better & eligibility for MATH1100; Coreq PTEC 1630</i></p> <p><i>PTEC 2421 – Pre-req PTEC1630 & PTEC1631; Coreq PTEC2420 &</i></p> <p><i>PTEC 2431 – Pre-req PTEC2420 & PTEC2421; Coreq PTEC2430 & PTEC 2911 or 2912</i></p>	
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HISTORY OF PRIOR ACTIONS

Provide an overview of changes to this program.

The original curriculum was developed based off the Center for the Advancement of Process Technology (CAPT) and implemented independently by numerous institutions across the nation. State and institutional changes were made without coordination or an accredited guiding body. As the Gulf Coast Process Technology Alliance (GCPTA) became a national organization as North American Process Technology Alliance (NAPTA) and accreditation with that organization required compliance to the curriculum, institutions have been slowly realigning. During a LCA-PTEC curriculum committee meeting, numerous institutions voiced the need to better align our curriculums for consistency, transferability, and accreditation alignment. LCTCS launched the Working Groups and the PTEC group made the curriculum alignment our first action item. This process has been completed in less than one year.

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JUSTIFICATION FOR THE PROPOSED CHANGE
 Include support such as four-year university agreements, industry demand, advisory board information, etc.

These identified courses are part of a statewide collaborative effort to standardize and optimize core competencies taught and required for industrial processing occupations (PTEC). These changes will enhance hands on training, reduce courses reviewed and determined as unnecessary or redundant content for the process technician field of study. This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards for Process Technology programs. In addition, these changes will also aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time for completion as well as collaboration among institutions ultimately enhancing resources and costs of operations. Proposed curriculum change has been reviewed and approved by advisory boards and institutional committees.

LOUISIANA WORKFORCE COMMISSION STAR LEVEL (<http://www.laworks.net/Stars/>)

5 Stars
 4 Stars
 3 Stars
 2 Stars
 1 Star

SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION

<input type="checkbox"/> Main Campus	<input checked="" type="checkbox"/> All Campuses	<input type="checkbox"/> Sites (list below)	<input type="checkbox"/> Distance Education
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Site 1:
 Site 2:
 Site 3:
 Site 4:

QUALIFIED FACULTY (Check all that apply)

<input type="checkbox"/> Use Existing Faculty #: <u>5 (# full-time, 3 part-time)</u>	<input type="checkbox"/> Hire Adjunct Faculty #: _____	<input type="checkbox"/> Hire Full-Time Faculty #: _____
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MINIMUM CREDENTIALS REQUIRED FOR FACULTY		
Education:	Experience:	Certification:
<p>Education: Master's degree or higher in the teaching discipline, OR</p> <p>Master's degree in any discipline with 18 graduate semester hours in the teaching discipline, OR</p> <p>Bachelor's degree in the teaching discipline, OR</p> <p>Bachelor's or Associate degree in any discipline with 18 semester hours in the teaching discipline (graduate, undergraduate, or a combination) and teaching certification at the middle or secondary level or prior college teaching experience.</p>	<p>Experience: Documented work experience directly related to the course(s) being taught, OR</p> <p>Successful completion of a minimum of 18 undergraduate hours directly related to course(s) being taught with work experience related to the course being taught</p>	<p>Certification: Professional, nationally recognized, achievement-based certification OR</p> <p>Licensure in the course(s) being taught</p>

FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS

Department:

Describe how this change will affect the administrative structure and/or allocation of departmental funds in terms of faculty, facilities, support, and any other resources.

The current support faculty, facilities, support, and any other resources, including student services will not affect the administrative structure and/or allocation of departmental funds. Actually, this a plan will help students save money and accelerate programming while streamlining transfers while adding consistency to the programs across the state. No additional costs should be incurred.

ANTICIPATED ENROLLMENT:

Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	253	267	283	295	315
EVENING	103	115	120	120	120

ANTICIPATED ENROLLMENT:					
DISTANCE EDUCATION		50	70	100	120
Describe Process for Attaining & Estimating Enrollment:	Reviewing historical enrollment trends and communicating with Industry Advisory Committee members including Louisiana Chemical Association LCA-PTEC data trends, RPCC Institutional Research (IR) and Student Services personnel have developed estimated enrollments.				

PROGRAM ACCREDITATION:	
Is Program Accreditation, Licensure or Certification Required?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If YES, please provide projected accreditation/licensure/certification date: 2018
Type/Name of Program Accreditation, Licensure or Certification Required:	SACSCOC, NAPTA, and ATMAE – currently in place

PROGRAM CURRICULUM						
(Use the template below or insert separate attachment; all modifications should include the OLD and NEW curriculum with changes appropriately noted so that it is visually clear what has been added, deleted and/or changed)						
Note: Due to the nature of this collaborative effort of multiple schools, RPCC's existing curriculum is used below as a reference to support the program revisions. Each institution will align to the proposed curriculum changes utilizing the TD Core as the standard.						
Subject Code	Course Number	Course Title	Lecture Hours	Lab Hours	Contact Hours	Credit Hours
First Semester - OLD						
CSCI	1010	Intro to Computer Technology (no change)	3	0	45	3
MATH	1100	College Algebra (no change)	3	0	45	3
PTEC	1010	Introduction to Process Technology (no change)	3	0	45	3
PTEC	1000	Mechanical Aptitude/Spatial Relations (deleted from program guide)	0	1	30	1

PTEC	2030	Plant Safety (no change)	3	0	45	3
ENGL	1010	English Composition I (no change)	3	0	45	3
First Semester - NEW						
CSCI	1010	Intro to Computer Technology (Approved Computer Science)	3	0	45	3
MATH	1100	College Algebra	3	0	45	3
PTEC	1010	Introduction to Process Technology	3	0	45	3
PTEC	2030	Plant Safety, Health, & Env.	3	0	45	3
ENGL	1010	English Composition I	3	0	45	3
Second Semester – OLD						
PTEC	1310	Process Instrumentation I (no change)	2	1	60	3
PHSC or PHYS	1010 or 2010	Physical Science or Physics (no change)	3	0	45	3
PHSC or PHYS	1010L or 2010L	Physical Science Lab or Physics Lab (no change)	0	1	30	1
PTEC	1610	Plant Equipment (no change)	2	1	60	3
MATH	1410 or 1110	Technical Mathematics or Plane Trig (no change)	3	0	45	3
PTEC	2070	Statistical Quality Control (moved from 2 nd to 3 rd semester)	3	0	45	3
Second Semester – NEW						
PTEC	1330 (Change Course Number)	Process Instrumentation (Change Credit Hour/Contact Hour)	2	0	30	2
PTEC	1331 (New Course Number)	Process Instrumentation Lab (New Course)	0	2	60	2
PHSC or PHYS	1010 or 2010	Physical Science or Physics	3	0	45	3

PHSC or PHYS	1010L or 2010L	Physical Science Lab or Physics Lab	0	1	30	1
PTEC	1630 (Change Course Number)	Plant Equipment (Change Credit Hour/Contact Hour)	2	0	30	2
PTEC	1631 (New Course Number)	Plant Equipment Lab (New Course)	0	2	60	2
ENGL	2002	Approved Humanity Communications (moved from 4 th to 2 nd semester)	3	0	45	3
Third Semester – OLD						
PTEC	1320	Process Instrumentation 2 (deleted from program guide)	2	1	60	3
SPCH	1200	Techniques of Speech (no change)	3	0	40	3
ECON	2010 or 2020	Economics (Micro or Macro) (moved from 3 rd to 4 th semester)	3	0	40	3
Third Semester – NEW						
PTEC	2070	Statistical Quality Control (moved from 2 nd to 3 rd semester)	3	0	45	3
PTEC	2420	Process Systems (moved from 4 th to 3 rd semester) (Course name change/pre-/co-requisite change) (Change Credit Hour/Contact Hour)	3	0	45	3
PTEC	2421 (New Course Number)	Process Systems Lab (New Course)	0	1	30	1
PTEC	2630	Fluid Mechanics (moved from 4 th to 3 rd semester) (pre-/co-requisite change)	3	0	45	3
CHEM	1010, 2210, or 2220	Chemistry (moved from 4 th to 3 rd semester)	3	0	45	3
CHEM	1010L, 2210L, or 2220L	Chemistry Lab (moved from 4 th to 3 rd semester)	0	1	30	1
SPCH	1200	Techniques of Speech	3	0	45	3

Fourth Semester – OLD						
PTEC	2420	Unit Operations (Systems) (moved from 4 th to 3 rd semester) (pre-/co-requisite change)	3	1	70	4
PTEC	2630	Fluid Mechanics (moved from 4 th to 3 rd semester) (pre-/co-requisite change)	3	0	45	3
CHEM	1010	Chemistry (moved from 4 th to 3 rd semester)	3	0	45	3
CHEM	1010L	Chemistry Lab (moved from 4 th to 3 rd semester)	0	1	30	1
ENGL	1060	Technical Writing (moved from 4 th to 2 nd semester)	3	0	45	3
JOBS	2450	Job Seeking Skills (deleted from program guide)	2	0	27	2
Fourth Semester – NEW						
ECON	2010 or 2020	Approved Humanity Economics (Micro or Macro) (moved from 3 rd to 4 th semester)	3	0	45	3
PTEC	2440	Troubleshooting (moved from 5 th to 4 th semester) (pre-/co-requisite change)	3	0	45	3
PTEC	2430	Unit Operations (moved from 5 th to 4 th semester) (pre-/co-requisite change) (Course name /Change Credit Hour/Contact Hour)	2	0	30	2
PTEC	2431 (New Course Number)	Unit Operations Lab (New Course)	0	2	60	2
PTEC	2911/2912	Internship (Campus/Independent) (New Course)	0	3	135	3
Fifth Semester – OLD						
PTEC	2440	Troubleshooting (moved from 5 th to 4 th semester) (pre-/co-requisite change)	3	0	45	3

PTEC	2430	Unit Operations (Capstone Project) (moved from 5 th to 4 th semester) (pre-/co-requisite change)	3	0	70	4
PTEC	2911	Internship (moved from 5 th to 4 th semester)	1	2	73.3	3
Fifth Semester - NEW						
n/a						

BENEFITS TO THE SYSTEM

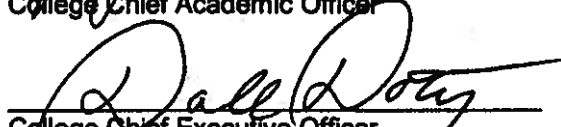
Discuss how this change will benefit your students, your community, and the LCTCS.

These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time for completion as well as collaboration among institutions ultimately enhancing resources and costs of operations. Proposed curriculum change has been reviewed and approved by advisory boards and institutional committees. In addition, these changes will also aid in course transferability throughout the state enabling better options for students and institutions alike. This curriculum will allow the region to have more confidence of the quality and consistency of student graduating from the different institutions. This Faculty Working Group has taken a major step in aligning common course numbering, seamless transferability across multiple institutions, and represents Louisiana and LCTCS as innovative leaders in technical education.

SIGNATURES:


College Chief Academic Officer

3/16/18
Date


College Chief Executive Officer

3-16-18
Date



**PROCESS TECHNOLOGY
PROGRAM GUIDE**

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS
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FIRST SEMESTER

Intro to Computer Technology*._**_.***	CSCI	1010	3
College Algebra **_.***	MATH	1100	3
Intro to Process Technology*._**_.***	PTEC	1010	3
Plant Safety, Health and Environment*._**_.***	PTEC	2030	3
English Composition 1**	ENGL	1010	3
SEMESTER CREDIT HOURS			15

SECOND SEMESTER

Process Instrumentation*._**_.***	PTEC	1330	2
Process Instrumentation Lab*._**_.***	PTEC	1331	2
Physical Science or Physics*._***	PHSC or PHYS	1010 or 2010	3
Physical Science or Physics Lab*._***	PHSC or PHYS	1010L or 2010L	1
Plant Equipment*._**_.***	PTEC	1630	2
Plant Equipment Lab*._**_.***	PTEC	1631	2
Professional Business Communications	ENGL	2002	3
SEMESTER CREDIT HOURS			15

THIRD SEMESTER

Statistical Quality Control*._***	PTEC	2070	3
Process Systems***	PTEC	2420	3
Process Systems Lab***	PTEC	2421	1
Fluid Mechanics***	PTEC	2630	3
Chemistry*._***	CHEM	1010	3
Chemistry Lab*._***	CHEM	1010L	1
Techniques of Speech*	SPCH	1200	3
SEMESTER CREDIT HOURS			17

Fourth SEMESTER

Economics (Micro or Macro)**	ECON	2010 or 2020	3
Troubleshooting***	PTEC	2440	3
Unit Operations ***	PTEC	2430	2
Unit Operations Lab***	PTEC	2431	2
Internship (Campus/Independent)***	PTEC	2911/2912	3
SEMESTER CREDIT HOURS			13
* CTS – Process Technology Support Tech.			20
**CAS – Process Technology			37
*** TD – Process Technology			45
AAS – Process Technology			60



PROCESS TECHNOLOGY 2018-2019 Program Exit Point Audit Form

CIP CODE: 150699 – 60 Semester Credit Hours

Student Name: _____

Student ID#: _____

COURSE #	COURSE DESCRIPTION	SEMESTER TAKEN	YEAR	GRADE
PTEC 1010	Introduction to Process Technology			
PTEC 2030	Plant Safety, Health and Environmental			
PTEC 1330	Process Instrumentation			
PTEC 1331	Process Instrumentation I Lab			
PTEC 1630	Process Equipment			
PTEC 1631	Process Equipment Lab			
PTEC 2070	Statistical Quality Control			
Approved Computer Science	<input type="checkbox"/> CSCI 1010			
Approved Substitution:				
(CTS-PRST) CTS – PROCESS TECH. SUPPORT TECHNICIAN (20)		AWARDED:		
PTEC 2420	Process Systems			
PTEC 2421	Process Systems Lab			
PTEC 2440	Process Troubleshooting			
PTEC 2630	Fluid Mechanics			
PTEC 2430	Unit Operations			
PTEC 2431	Unit Operations Lab			
PTEC 2911 or PTEC 2912	<input type="checkbox"/> PTEC 2911 Campus Internship or <input type="checkbox"/> PTEC 2912 Ind. Internship			
MATH 1100	College Algebra (Gen Ed)			
CHEM 1010	Chemistry (Gen Ed)			
CHEM 1010L	Chemistry Lab (Gen Ed)			
Approved Natural Science and Natural Science Lab	<input type="checkbox"/> PHSC1010 & PHSC1010L or <input type="checkbox"/> PHYS2010 & PHYS2010L (Gen Ed)			
Approved Substitution:				
(TD-PRTD) TD – PROCESS TECHNOLOGY (48)		AWARDED:		
ENGL 1010	English Composition I (Gen Ed)			
Approved Humanity	ENGL 2002, BUSN 2313 (Gen Ed)			
Approved Behavioral Science	<input type="checkbox"/> ECON2010 <input type="checkbox"/> ECON2020 (Gen Ed)			
Approved Humanity	<input type="checkbox"/> SPCH1200 (Gen Ed)			
Approved Substitution:				
(AAS-PRTC) AAS – PROCESS TECHNOLOGY (60)		AWARDED:		

■ SPACE BELOW FOR USE BY ENROLLMENT MANAGEMENT STAFF ONLY ■

SCR Received _____ by _____ STR Received _____ by _____ Graduate Application Rec'd _____

Certificate Issued ___/___/___ Diploma Issued ___/___/___ Degree Posted ___/___/___ Comment(s) _____

* Refer to the 2018-2019 Catalog for Approved General Education Electives



PTEC Advisory Board

March 29, 2018

Board of Supervisors
The Louisiana Community and Technical
College System 265 South Foster Drive
Baton Rouge, Louisiana 70806

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer Research

Subject: Letter of Support for Process Technology Program Modification

Dear Dr. Cintrón:

The Lake Area Industrial Alliance (LAIA) Process Technology Advisory committee is participating in a collaborative effort across the state of Louisiana to standardize and optimize higher education core competencies required for industrial process technician programs. These changes better align with state wide efforts to enhance hands on training and remove unnecessary and redundant content as determined from state-wide representative review of the LCA Education Curriculum Review committee.

The Lake Area Industrial Alliance (LAIA) supports these efforts as this proposal better aligns with the standards established by NAPTA Process Technology curriculum standards and learning outcomes. Students enrolled in the Associate of Applied Science Process Technology program offered at participating institutions will be directly served by these program modifications, which are based upon industry feedback and the approval of the LCA Education Curriculum Review committee. This collaborative effort is an example of successful collaboration when higher education institutions effectively working together with business and industry partners to improve the quality of instruction for the industrial workforce.

A handwritten signature in black ink, appearing to read "Rodney Trahan", is positioned above the typed name and contact information.

Rodney Trahan, 2nd Chair
Lake Area Industrial Alliance
1300 PPG Dr
Westlake, LA, 70669
rjtrahan@westlake.com



03/29/18

Board of Supervisors
The Louisiana Community and Technical
College System 265 South Foster Drive
Baton Rouge, Louisiana 70806

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer Research

Subject: Letter of Support for Process Technology Program Modification


Dear Dr. Cintrón:

The Louisiana Chemical Association (LCA) is contributing to a collaborative effort across the state of Louisiana to standardize and optimize higher education core competencies required for industrial process technician programs, commonly referred to as Process Technology or PTEC programs. These changes better align with state wide efforts to enhance hands on training and remove unnecessary and redundant content as determined from state-wide representative review of the LCA Education Curriculum Review committee.

The Louisiana Chemical Association supports these efforts as this proposal better aligns with the North American Process Technology Alliance (NAPTA) Process Technology curriculum standards. In addition, these revisions will aid in course transferability among post-secondary institutions throughout the state of Louisiana and beyond. These changes align with state wide and institutional strategic plans aimed at reducing the burden of educational costs and completion time for the college student. This collaborative effort will also create opportunities for institutions to encounter shared resources among participating institutions ultimately enhancing resources and reducing costs.

Students enrolled in the Associate of Applied Science Process Technology program offered at participating institutions will be directly served by these program modifications, which are based upon industry feedback as well as the review and approval of the LCA Education Curriculum Review committee. This collaborative effort is an example of collective innovation as a result from higher education institutions effectively working together with business and industry partners to improve the quality of instruction and prepare graduates for real world occupations lasting a lifetime.

Sincerely,


Gregory Bowser
President, LCA & LCIA



Tuesday, March 27, 2018

Board of Supervisors
The Louisiana Community and Technical
College System 265 South Foster Drive
Baton Rouge, Louisiana 70806

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer Research
Subject: Letter of Adoption for Process Technology Program Modification

Dear Dr. Cintrón:

The North American Process Technology Alliance (NAPTA) is contributing to a collaborative effort across the state of Louisiana to standardize and optimize higher education core competencies required for industrial process technician programs, commonly referred to as Process Technology or PTEC programs. These changes better align with state wide efforts to enhance hands on training and remove unnecessary and redundant content as determined from state-wide representative review of the LCA Education Curriculum Review committee.

The North American Process Technology Alliance (NAPTA) supports these efforts as this proposal better aligns with the standards established by NAPTA Process Technology curriculum objectives and learning outcomes. In addition, these revisions will aid in course transferability among post-secondary institutions throughout the state of Louisiana and beyond. These proposed changes align with state wide and institutional strategic plans aimed at reducing the burden of educational costs and completion time for the college student. This collaborative effort will also create opportunities for institutions to encounter shared resources among participating institutions ultimately enhancing resources and reducing costs.

Students enrolled in the Associate of Applied Science Process Technology program offered at participating institutions will be directly served by these program modifications, which are based upon industry feedback and the approval of the LCA Education Curriculum Review committee. This collaborative effort is an example of collective innovation as a result from higher education institutions effectively working together with business and industry partners to improve the quality of instruction and prepare graduates for real world occupations lasting a lifetime.

W Eric Newby - President/Executive Director

A handwritten signature in black ink, appearing to read "W Eric Newby", is written over a horizontal line.

North American Process Technology Alliance – NAPTA
1501 N Amburn Rd Suite 3
Texas City, TX 77591
www.naptaonline.org



LOUISIANA'S COMMUNITY & TECHNICAL COLLEGE SYSTEM

Requests for Programs: New, Modification, and Adoption

TYPE OF PROPOSED CHANGE		
<input type="checkbox"/> New Program	<input type="checkbox"/> Curriculum Modification	<input checked="" type="checkbox"/> Curriculum Adoption
Program Name: Industrial Technology		

AWARD LEVEL(S)	
For Board of Regents and LCTCS Review: <input checked="" type="checkbox"/> Associate of Applied Science (A.A.S.) <input type="checkbox"/> Associate of Science (A.S.) <input type="checkbox"/> Associate of Arts (A.A.) <input type="checkbox"/> Other Associate Degree <u>Name:</u> _____ <input type="checkbox"/> Certificate of Applied Science (C.A.S.) <input type="checkbox"/> Certificate of General Studies (C.G.S.)	For LCTCS Review: <input checked="" type="checkbox"/> Technical Diploma (T.D.) <input checked="" type="checkbox"/> Career and Technical Certificate (C.T.C.) <input type="checkbox"/> Certificate of Technical Studies (C.T.S.)

CIP: 105699	Credit Hours: 60	Contact Hours:	Award Level: Associate of Applied Science
Name:			
CIP: 105699	Credit Hours: 47	Contact Hours:	Award Level: Technical Diploma
Name:			
CIP: 105699	Credit Hours: 20	Contact Hours:	Award Level: Certificate of Technical Studies
Name:			
CIP:	Credit Hours:	Contact Hours:	Award Level:

IBC	Issuing Body	Course Title	Course Prefix	Course Number	Credits Awarded
OSHA 10	Occupational Safety and Health Administration	Industrial and Plant Safety	INDT	1030	3

PROPOSED CHANGE

a) For New Programs, state the purpose and objective; b) For Curriculum Modifications, state previous credit and clock hours; c) For Program Termination, state program and all award levels; d) For Curriculum Adoption, state the college from which curriculum is being adopted and the date it was approved by LCTCS.

The purpose of this change is to comply with the state workgroup's recommendations for standardization of Industrial Technology programs to enhance hands on training and reduce redundancy in coursework. The adoption of this curriculum will result in the reduction in required credit hours in the Associate of Applied Science in Industrial Technology from 64 to 60 credit hours.

IMPLEMENTATION DATE (Semester and Year)

Fall 2018

HISTORY OF PRIOR ACTIONS

Provide an overview of changes to this program.

This program was approved in 2005.

JUSTIFICATION FOR THE PROPOSED CHANGE

Include support such as four-year university agreements, industry demand, advisory board information, etc.

NUNEZ is a member of the LCTCS Process Technology Workgroup and has been a part of the statewide collaborative effort to standardize and optimize the core competencies taught and required for industrial processing occupations. These changes will enhance hands-on training while reducing redundant course content in the Process Technology (PTEC) program of study

LOUISIANA WORKFORCE COMMISSION STAR LEVEL (<http://www.laworks.net/Stars/>)

5 Stars

4 Stars

3 Stars

2 Stars

1 Star

SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION			
<input checked="" type="checkbox"/> Main Campus	<input type="checkbox"/> All Campuses	<input type="checkbox"/> Sites (list below)	<input type="checkbox"/> Distance Education
Site 1: Site 2: Site 3: Site 4:			
QUALIFIED FACULTY (Check all that apply)			
<input checked="" type="checkbox"/> Use Existing Faculty #: 4	<input type="checkbox"/> Hire Adjunct Faculty #: _____	<input type="checkbox"/> Hire Full-Time Faculty #: _____	
MINIMUM CREDENTIALS REQUIRED FOR FACULTY			
Education: AAS	Experience: 3 years	Certification:	

FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS
Department: Technology Programs
Describe how this change will affect the administrative structure and/or allocation of departmental funds in terms of faculty, facilities, support, and any other resources.
This curriculum change will not affect administration structure, fund allocation, faculty or facilities needs for this program. Enrollment is not anticipated to be affected significantly.

ANTICIPATED ENROLLMENT:					
Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
EVENING	<u>330</u>	<u>330</u>	<u>330</u>	<u>350</u>	<u>350</u>
DISTANCE EDUCATION					

ANTICIPATED ENROLLMENT:	
Describe Process for Attaining & Estimating Enrollment:	Participation in current department and institutional enrolment and recruiting process

PROGRAM ACCREDITATION:		
Is Program Accreditation, Licensure or Certification Required?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	If YES, please provide projected accreditation/licensure/certification date: Valid through 11/2019	
Type/Name of Program Accreditation, Licensure or Certification Required:	Association of Technology, Management and Applied Engineering	

PROGRAM CURRICULUM						
Use the template below or insert separate attachment. All modifications should include the OLD and NEW curriculum with changes appropriately noted so that it is visually clear what has been added, deleted and/or changed. Note if any special requirements, such as internships, are part of the curriculum. List all embedded IBCs. If you are adopting curriculum, you do not need to complete this section.						
Subject Code	Course Number	Course Title	Lecture Hours	Lab Hours	Contact Hours	Credit Hours
First Semester						
Second Semester						

Third Semester						
Fourth Semester						
Fifth Semester						


Sixth Semester						

BENEFITS TO THE SYSTEM


Discuss how this change will benefit your students, your community, and the LCTCS.

This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards and is supported by the Louisiana Chemical Association (LCA). In addition, these changes will aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time-to-degree completion. Additionally, this collaboration among institutions ultimately maximizes resources and creates greater efficiencies. The proposed curriculum changes have been reviewed and approved by advisory boards and institutional committees.

SIGNATURES:



 College Chief Academic Officer



 College Chief Executive Officer

4/12/18
 Date

4/12/18
 Date



NUNEZ COMMUNITY COLLEGE

3710 PARIS ROAD • CHALMETTE, LA 70043 • (504) 278-6468 • FAX: (504) 278-6480

CHANCELLOR'S OFFICE

March 29, 2018

Board of Supervisors
The Louisiana Community and
Technical College System
265 South Foster Drive
Baton Rouge, Louisiana 70806

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer Research

Subject: Letter of Adoption for Process Technology Program Modification

Dear Dr. Cintrón:

Elaine P. Nunez Community College (Nunez) is requesting to adopt the Working Group committee's decision to strive for common exit points embedded within the Associate of Applied Science (AAS) pathway that would strengthen and align the competencies taught by participating colleges within the LCTCS.

The Technical Diploma (TD) exit point spoke to this statewide agenda and laid the foundation for the 48-credit hour TD as presented by River Parishes Community College. NUNEZ faculty and staff request the LCTCS approval of the following program adoptions as approved for River Parishes Community College:

1. Certificate of Technical Studies (C.T.S.) Process Technology Support Technician (CIP 150699) – 5 Stars
2. Technical Diploma (T.D.) Process Technology (CIP150699) – 5 Stars
3. Associate of Applied Science (A.A.S.) Process Technology (CIP150699) – 5 Stars


Note: NUNEZ will retain established and approved General Education coursework requirements. See the attached 2018-2019 Program Exit Point Audit Form.

NUNEZ is a member of the LCTCS Process Technology Workgroup and has been a part of the statewide collaborative effort to standardize and optimize

the core competencies taught and required for industrial processing occupations. These changes will enhance hands-on training while reducing redundant course content in the Process Technology (PTEC) program of study.


This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards and is supported by the Louisiana Chemical Association (LCA). In addition, these changes will aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time-to-degree completion. Additionally, this collaboration among institutions ultimately maximizes resources and creates greater efficiencies. The proposed curriculum changes have been reviewed and approved by advisory boards and institutional committees.

SIGNATURES:



College Chief Academic Officer

4/6/18
Date



College Chief Executive Officer

4/6/18
Date

Elaine P. Nunez Community College (Nunez) is requesting to adopt the Working Group committee's decision to strive for common exit points embedded within the Associate of Applied Science (AAS) pathway that would strengthen and align the competencies taught by participating colleges within the LCTCS.

The Technical Diploma (TD) exit point spoke to this statewide agenda and laid the foundation for the 48-credit hour TD as presented by River Parishes Community College. NUNEZ faculty and staff request the LCTCS approval of the following program adoptions as approved for River Parishes Community College:

1. Certificate of Technical Studies (C.T.S.) Process Technology Support Technician (CIP 150699) – 5 Stars
2. Technical Diploma (T.D.) Process Technology (CIP150699) – 5 Stars
3. Associate of Applied Science (A.A.S.) Process Technology (CIP150699) – 5 Stars


Note: NUNEZ will retain established and approved General Education coursework requirements. See the attached 2018-2019 Program Exit Point Audit Form.

NUNEZ is a member of the LCTCS Process Technology Workgroup and has been a part of the statewide collaborative effort to standardize and optimize the core competencies taught and required for industrial processing occupations. These changes will enhance hands-on training while reducing redundant course content in the Process Technology (PTEC) program of study.

This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards and is supported by the Louisiana Chemical Association (LCA). In addition, these changes will aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time-to-degree completion. Additionally, this collaboration among institutions ultimately maximizes resources and creates greater efficiencies. The proposed curriculum changes have been reviewed and approved by advisory boards and institutional committees.

As a member of the Nunez INDT Advisory Board, I approve the proposed changes as listed above.

Signature and company:

 PBF Energy - Chalmette Refining



LOUISIANA DELTA
COMMUNITY COLLEGE

DEPARTMENT OF INDUSTRIAL TECHNOLOGY

April 19, 2018

**Board of Supervisors
The Louisiana Community and Technical College System
265 South Foster Drive
Baton Rouge, Louisiana 70806**

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer

Subject: Letter of Adoption for Process Technology Program Modification

Dear Dr. Cintrón:

Louisiana Delta Community College (LDCC), in alignment with the LCTCS Process Technology Working Group's decision to strive for common exit points within the Associate of Applied Science (AAS) across all LCTCS colleges, seeks approval of the following program adoptions, as already approved for River Parishes Community College:

- 1. Certificate of Technical Studies (C.T.S.) Process Technology Support Technician (CIP 150699) – 5 Stars**
- 2. Technical Diploma (T.D.) Process Technology (CIP150699) – 5 Stars**
- 3. Associate of Applied Science (A.A.S.) Process Technology (CIP150699) – 5 Stars**
Note: LDCC will retain established and approved General Education coursework requirements. See the attached 2018-2019 Program Exit Point Audit Form.

The Technical Diploma (TD) exit point lays the foundation for the 48-credit hour TD as presented by River Parishes Community College.

LDCC is a member of the LCTCS Process Technology Working Group and has been a part of the statewide collaborative effort to standardize and optimize the core competencies taught and required for industrial processing occupations. These changes will enhance hands-on training while reducing redundant course content in the Process Technology (PTEC) program of study.

This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards and is supported by the Louisiana Chemical Association (LCA). In addition, these changes will aid in course transferability throughout the State, enabling

C O U R A G E . A T T I T U D E . K N O W L E D G E .



LOUISIANA DELTA
COMMUNITY COLLEGE

DEPARTMENT OF INDUSTRIAL TECHNOLOGY

better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time-to-degree completion. Additionally, this collaboration among institutions ultimately maximizes resources and creates greater efficiencies. The proposed curriculum changes have been reviewed and approved by advisory boards and institutional committees.

SIGNATURES:

Emily Campbell
College Chief Academic Officer

4-19-18
Date

[Signature]
College Chief Executive Officer

4-20-18
Date

COURAGE. ATTITUDE. KNOWLEDGE.



March 29, 2018

**Board of Supervisors
The Louisiana Community and
Technical College System
265 South Foster Drive
Baton Rouge, Louisiana 70806**

Attention: Dr. Rene Cintrón, Chief Academic Affairs Officer

Subject: Letter of Adoption for Process Technology Program Modification

Dear Dr. Cintrón:

SOWELA Technical Community College (SOWELA) is requesting to adopt the Working Group committee's decision to strive for common exit points embedded within the Associate of Applied Science (AAS) pathway that would strengthen and align the competencies taught by participating colleges within the LCTCS.

The Technical Diploma (TD) exit point spoke to this statewide agenda and laid the foundation for the 48-credit hour TD as presented by River Parishes Community College. SOWELA faculty and staff request the LCTCS approval of the following program adoptions as approved for River Parishes Community College:

- 1. Certificate of Technical Studies (C.T.S.) Process Technology Support Technician (CIP 150699) – 5 Stars**
- 2. Technical Diploma (T.D.) Process Technology (CIP150699) – 5 Stars**
- 3. Associate of Applied Science (A.A.S.) Process Technology (CIP150699) – 5 Stars**

Note: SOWELA will retain established and approved General Education coursework requirements. See the attached 2018-2019 Program Exit Point Audit Form.

SOWELA is a member of the LCTCS Process Technology Workgroup and


March 29, 2018



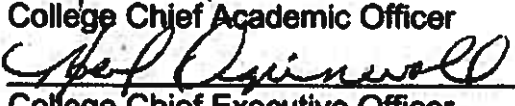
has been a part of the statewide collaborative effort to standardize and optimize the core competencies taught and required for industrial processing occupations. These changes will enhance hands-on training while reducing redundant course content in the Process Technology (PTEC) program of study.

This proposal will better align with the North American Process Technology Alliance (NAPTA), which sets the core curriculum standards and is supported by the Louisiana Chemical Association (LCA). In addition, these changes will aid in course transferability throughout the state enabling better options for students and institutions alike. These proposed changes are in alignment with statewide and institutional strategic plans aimed at reducing student costs and time-to-degree completion. Additionally, this collaboration among institutions ultimately maximizes resources and creates greater efficiencies. The proposed curriculum changes have been reviewed and approved by advisory boards and institutional committees.

SIGNATURES:



College Chief Academic Officer



College Chief Executive Officer

3-28-18
Date

3-28-18
Date

March 29, 2018