



*Changing Lives,  
Creating Futures*

Monty Sullivan  
*System President*

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Stephen C. Smith  
Mark D. Spears, Jr.  
Craig Spohn  
Vincent St. Blanc, III

Student Members:  
Samantha Rushlow  
Shanco "Shawn" Williams

Louisiana  
Community  
& Technical  
College System

265 South Foster Drive  
Baton Rouge, LA 70806

Phone: 225-922-2800  
Fax: 225-922-1185

[www.lctcs.edu](http://www.lctcs.edu)

# LOUISIANA COMMUNITY & TECHNICAL COLLEGE SYSTEM

**TO:** Dr. Monty Sullivan  
LCTCS President

**THROUGH:** Dr. René Cintrón *RC*  
Chief Education and Training Officer

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

**SUBJECT:** Program Requests at Delgado Community College

**DATE:** 07/26/2019

**APPROVED**  
*SK*  
8/14/19  
LCTCS BOARD OF SUPERVISORS

## FOR BOARD ACTION:

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

### Program Additions

1. Career and Technical Certificate (CTC), Water Production Operator (CIP 15.0506) with an IBC in Water Production, Class 1 – Class 4 from the Louisiana Department of Health /Sewage and Water Board of New Orleans– **4 STARS**
2. Career and Technical Certificate (CTC), Water Treatment Operator (CIP 15.0506) with IBCs in Water Treatment Class 1 – Class 4 from the Louisiana Department of Health /Sewage and Water Board of New Orleans – **4 STARS**
3. Career and Technical Certificate (CTC), Water Distribution Operator (CIP 15.0506) with an IBC in Water Distribution Class 1 – Class 4 from the Louisiana Department of Health /Sewage and Water Board of New Orleans – **4 STARS**
4. Career and Technical Certificate (CTC), Wastewater Collection Operator (CIP 15.0506) with an IBC in Wastewater Collection Class 1 – Class 4 from the Louisiana Department of Health /Sewage and Water Board of New Orleans **4 STARS**
5. Career and Technical Certificate (CTC), Wastewater Treatment Operator (CIP 15.0506) with an IBC in Wastewater Treatment Class 1 – Class 4 from the Louisiana Department of Health /Sewage and Water Board of New Orleans – **4 STARS**



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**Program Terminations**

6. Technical Competency Area (TCA), Water Production Operator I (CIP 15.0506)  
– 4 STARS
7. Technical Competency Area (TCA), Water Production Operator II (CIP 15.0506)  
– 4 STARS
8. Technical Competency Area (TCA), Water Production Operator III (CIP 15.0506) – 4 STARS
9. Technical Competency Area (TCA), Water Production Operator IV (CIP 15.0506) – 4 STARS
10. Technical Competency Area (TCA), Water Treatment Operator I (CIP 15.0506) – 4 STARS
11. Technical Competency Area (TCA), Water Treatment Operator II (CIP 15.0506) – 4 STARS
12. Technical Competency Area (TCA), Water Treatment Operator III (CIP 15.0506) – 4 STARS
13. Technical Competency Area (TCA), Water Treatment Operator IV (CIP 15.0506) – 4 STARS
14. Technical Competency Area (TCA), Water Distribution Operator I (CIP 15.0506) – 4 STARS
15. Technical Competency Area (TCA), Water Distribution Operator II (CIP 15.0506) – 4 STARS
16. Technical Competency Area (TCA), Water Distribution Operator III (CIP 15.0506) – 4 STARS
17. Technical Competency Area (TCA), Water Distribution Operator IV (CIP 15.0506) – 4 STARS
18. Technical Competency Area (TCA), Wastewater Collection Operator I (CIP 15.0506) – 4 STARS
19. Technical Competency Area (TCA), Wastewater Collection Operator II (CIP 15.0506) – 4 STARS
20. Technical Competency Area (TCA), Wastewater Collection Operator III (CIP 15.0506) – 4 STARS
21. Technical Competency Area (TCA), Wastewater Collection Operator IV (CIP 15.0506) – 4 STARS



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22. Technical Competency Area (TCA), Wastewater Treatment Operator I (CIP 15.0506) – 4 STARS

23. Technical Competency Area (TCA), Wastewater Treatment Operator II (CIP 15.0506) – 4 STARS

24. Technical Competency Area (TCA), Wastewater Treatment Operator III (CIP 15.0506) – 4 STARS

25. Technical Competency Area (TCA), Wastewater Treatment Operator IV (CIP 15.0506) – 4 STARS

**Background:** Delgado Community College is requesting to replace related Technical Competency Areas (TCA) in Water and Wastewater Management that were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area. The goal of the program is to aid in the development of a workforce pipeline for water and wastewater production operators and to prepare new and existing water and wastewater production operators for the Louisiana State Operator Certification Exam. Upon the completion of these certificate programs, students will be able to obtain employment as an entry-level water and wastewater production operator or advance in current employment. At the local, regional, and state level there is an understaffed, aging, and retiring water production operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**Fiscal Impact:** As the other programs have been in place for several years, only changes in the credential designations are being requested. The administrative structure and allocation of departmental funds will be unchanged, unless otherwise noted.

**History of Prior Actions:** There is a history of modifying curriculum to meet student and industry needs.

**Benefits to the System:** The changes will ensure curriculum is aligned to industry needs and better able to prepare students for successful entry into the workforce.

Approved for Recommendation to the Board  
Dr. Monty Sullivan

8-14-19

Date

## Wastewater Collection Operator, C.T.C. - 05/11/2019

<b>TYPE OF PROPOSED CHANGE</b> : New Program
<b>PROGRAM NAME</b> : Wastewater Collection Operator, C.T.C.

<b>AWARD LEVEL(S)</b>	
<b>For Board of Regents and LCTCS Review:</b>  Name:	<b>For LCTCS Review:</b>  Technical Diploma (T.D.)  Certificate of Technical Studies (C.T.S.)  Career and Technical Certificate (C.T.C.)  TCA - For Archive Purpose Only

<b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b>						
<b>Stars</b> : 4 Stars						
<b>Name:</b> Wastewater Collection Operator, C.T.C.				<b>Program Delivery Mode:</b> Standard		
<b>CIP:</b> 15.0506	<b>Credit Hours:</b> 9.00	<b>Contact Hours:</b> 135.00	Career and Technical Certificate (C.T.C)			
<b>IBC:</b> City of New Orleans Wastewater Collection Operator	<b>Issuing Body:</b> Louisiana Department of Health and Hospitals	<b>Course Title:</b>	<b>Course Prefix:</b>	<b>Course Number:</b>	<b>Credits Awarded:</b> 0.00	<b>IBC Awarded upon Completion?</b> : No-Test is Required

<b>PROPOSED CHANGE</b> 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.
Repackaging of terminated TCAs to one CTC program to meet workforce needs.

<b>IMPLEMENTATION DATE (Semester and Year)</b>	Fall 2019
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<b>HISTORY OF PRIOR ACTIONS</b> Provide an overview of changes to this program.
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Related TCAs were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area.

### JUSTIFICATION FOR THE PROPOSED CHANGE

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

The goal of the program is to aid in the development of a workforce pipeline for wastewater collection operators and to prepare new and existing wastewater collection operators for the Louisiana State Operator Certification Exam. Upon the completion of this certificate program, the student will be able to obtain employment as an entry-level wastewater collection operator or advance in current employment or new based on their current operator certification level in industry or government settings. At the local, regional, and state level there is an understaffed, aging, and retiring wastewater collection operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:** All Campuses

### QUALIFIED FACULTY (Check all that apply)

<b>Use Existing Faculty: Yes</b> # - Full Time: 0 # - Part Time: 0	<b>Hire Adjunct Faculty: No</b> # - 0	<b>Hire Full-Time Faculty: No</b> # - 0
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### ADMINISTRATION and IMPLEMENTATION COSTS

**Department :**

**How will this change affect the administrative structure and/or allocation of departmental funds in terms of:**

<b>Faculty :</b>	<b>Facilities :</b>	<b>Library Resources :</b>
<b>Support :</b>	<b>Related Fields :</b>	<b>Other :</b>

### MINIMUM CREDENTIALS REQUIRED FOR FACULTY

<b>Education:</b> Certification in Wasterwater Collection Operator	<b>Experience:</b>	<b>Certification:</b> Louisiana State Department of Health and Hospitals Certification Wasterwater Collection Operator I-IV, recognized LDHH trainer
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### FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS

**Department :** Division of Science and Mathematics

**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 New Orleans Sewerage and Water Board has volunteered to host courses at their uptown facility and to provide tours of the facility in the hopes of attracting prospective students and future employees. Currently, Delgado has three (3) full-time faculty members who have been trained to teach courses in Water/Wastewater Technology. Library and instructional resources in Water/Wastewater are present as sub-sets of materials used for: Civil and Construction Applied Engineering, Instrumentation and Controls, and general health, safety, and the physical sciences collection. Currently, the Library holds 132 resources, in print and electronic formats, directly related to Water and Wastewater Technology instruction.

**ANTICIPATED ENROLLMENT:**

Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	15	20	25	30	30
EVENING	15	20	25	30	30
DISTANCE EDUCATION					

**Describe Process for Attaining & Estimating Enrollment:**

Projections of estimated enrollment are based on anticipated job openings at the entry-level position. Data provided by the New Orleans Sewerage and Water Board indicate average vacancies at any given time of approximately 10 to 20.

**PROGRAM ACCREDITATION:**

<b>Is Program Accreditation, Licensure or Certification Required?</b>	No
	Accreditation status: N/A
<b>Type/Name of Program Accreditation, Licensure or Certification Required:</b>	N/A

**DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)**

**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	Clinical Hours
<b>Program, Degree or Concentration:</b> Wastewater Collection Operator, C.T.C.						<b>Credit Hours:</b> 9.00	

<b>Semester: First Semester</b>					<b>Credit Hours: 3.00</b>		
WWTC	121	Wastewater Collection Operator I	3.00	0.00	45.00	3.00	0.00
<b>Semester: Second Semester</b>					<b>Credit Hours: 6.00</b>		
WWTC	122	Wastewater Collection Operator II	3.00	0.00	45.00	3.00	0.00
WWTC	123	Wastewater Collection Operator III OR	3.00	0.00	45.00	3.00	0.00
WWTC	124	Wastewater Collection Operator IV OR	3.00	0.00	45.00	3.00	113.00
MATH	113	Algebra for Technology	3.00	0.00	45.00	3.00	0.00

### **BENEFITS TO THE SYSTEM**

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

Instruction in this CTC provides students with the opportunity to master competencies required to successfully sit for and pass the state examination and meet a critical workforce need, providing vital services to various municipal agencies. Successful completion of each level requires one year of work in the field before the student may attempt the next level examination. Successful completion of the first level operator examination in Wastewater Collection makes the completer immediately eligible for entry into the local, regional, state, federal, public or private water or wastewater service entity. The goal of the CTC is to develop a highly trained and highly skilled workforce for wastewater collection operators to meet contemporary workforce needs. After successfully completing the CTC, the student will have foundational knowledge and will have mastered the competencies as developed by the Louisiana Department of Health and Hospitals. The College has partnered with the New Orleans Sewerage and Water Board, and this set of technical competencies has been developed based on expressions of need from that and other public and private entities that are concerned about the present and future of the state's water services.

### **KEYWORDS**

## Water Production Operator, C.T.C. - 05/11/2019

**TYPE OF PROPOSED CHANGE :** New Program

**PROGRAM NAME :** Water Production Operator, C.T.C.

**AWARD LEVEL(S)**

**For Board of Regents and LCTCS Review:**

**Name:**

**For LCTCS Review:**

Technical Diploma (T.D.)  
 Certificate of Technical Studies (C.T.S.)  
 Career and Technical Certificate (C.T.C.)  
 TCA - For Archive Purpose Only

**NAME OF PROGRAM(S) and AWARD LEVEL(S)**

**Stars :** 4 Stars

**Name:** Water Production Operator, C.T.C.

**Program Delivery Mode:** Standard

**CIP:** 15.0506

**Credit Hours:** 9.00

**Contact Hours:** 135.00

Career and Technical Certificate (C.T.C)

**IBC:** City of New Orleans Water Operator

**Issuing Body:** LA Department of Health and Hospitals

**Course Title:**

**Course Prefix:**

**Course Number:**

**Credits Awarded:**  
0.00

**IBC Awarded upon Completion?**  
:

**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.

Repackaging of terminated TCAs to one CTC program to meet workforce needs.

**IMPLEMENTATION DATE (Semester and Year)**

Fall 2019

**HISTORY OF PRIOR ACTIONS**

Provide an overview of changes to this program.



Related TCAs were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area.

**JUSTIFICATION FOR THE PROPOSED CHANGE**

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

The goal of the program is to aid in the development of a workforce pipeline for water production operators and to prepare new and existing water production operators for the Louisiana State Operator Certification Exam. Upon the completion of this certificate program, the student will be able to obtain employment as an entry-level water production operator or advance in current employment or new based on their current operator certification level in industry or government settings. At the local, regional, and state level there is an understaffed, aging, and retiring water production operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:** All Campuses

**QUALIFIED FACULTY (Check all that apply)**

<p><b>Use Existing Faculty: Yes</b></p> <p># - Full Time: 0</p> <p># - Part Time: 0</p>	<p><b>Hire Adjunct Faculty: No</b></p> <p># - 0</p>	<p><b>Hire Full-Time Faculty: No</b></p> <p># - 0</p>
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**ADMINISTRATION and IMPLEMENTATION COSTS**

**Department :**

**How will this change affect the administrative structure and/or allocation of departmental funds in terms of:**

<b>Faculty :</b>	<b>Facilities :</b>	<b>Library Resources :</b>
<b>Support :</b>	<b>Related Fields :</b>	<b>Other :</b>

**MINIMUM CREDENTIALS REQUIRED FOR FACULTY**

<p><b>Education:</b> Certification in Water Production, Water Treatment, Water Distribution, Wastewater Collection, and Wastewater Treatment</p>	<p><b>Experience:</b></p>	<p><b>Certification:</b> Louisiana State Department of Health and Hospitals Certification Water Production Operator I-IV, recognized LDHH trainer</p>
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**FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS**

**Department :** Division of Science & Mathematics

**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 New Orleans Sewerage and Water Board has volunteered to host courses at their uptown facility and to provide tours of the facility in the hopes of attracting prospective students and future employees. Currently, Delgado has three (3) full-time faculty members who have been trained to teach courses in Water/Wastewater Technology. Library and instructional resources in Water/Wastewater are present as sub-sets of materials used for: Civil and Construction Applied Engineering, Instrumentation and Controls, and general health, safety, and the physical sciences collection. Currently, the Library holds 132 resources, in print and electronic formats, directly related to Water and Wastewater Technology instruction.

**ANTICIPATED ENROLLMENT:**

Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	15	20	25	30	30
EVENING	15	20	25	30	30
DISTANCE EDUCATION					
<b>Describe Process for Attaining &amp; Estimating Enrollment:</b>	Projections of estimated enrollment are based on anticipated job openings at the entry-level position. Data provided by the New Orleans Sewerage and Water Board indicate average vacancies at any given time of approximately 10 to 20.				

**PROGRAM ACCREDITATION:**

<b>Is Program Accreditation, Licensure or Certification Required?</b>	No
	<b>Accreditation status:</b> N/A
<b>Type/Name of Program Accreditation, Licensure or Certification Required:</b>	N/A

**DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)**

**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	Clinical Hours
<b>Program, Degree or Concentration:</b> Water Production Operator, C.T.C.						<b>Credit Hours:</b> 9.00	

<b>Semester: First Semester</b>					<b>Credit Hours: 3.00</b>		
WWTC	106	Water Production Operator I	3.00	0.00	45.00	3.00	0.00
<b>Semester: Second Semester</b>					<b>Credit Hours: 6.00</b>		
WWTC	107	Water Production Operator II	3.00	0.00	45.00	3.00	0.00
WWTC	108	Water Production Operator III OR	3.00	0.00	45.00	3.00	0.00
WWTC	109	Water Production Operator IV OR	3.00	0.00	45.00	3.00	0.00
MATH	113	Algebra for Technology	3.00	0.00	45.00	3.00	0.00

### **BENEFITS TO THE SYSTEM**

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

Instruction in this CTC provides students with the opportunity to master competencies required to successfully sit for and pass the state examination and meet a critical workforce need, providing vital services to various municipal agencies. Successful completion of each level requires one year of work in the field before the student may attempt the next level examination. Successful completion of the first level operator examination in Water Production Operator makes the completer immediately eligible for entry into the local, regional, state, federal, public or private water or wastewater service entity. The goal of the CTC is to develop a highly trained and highly skilled workforce for water operators to meet contemporary workforce needs. After successfully completing the CTC, the student will have foundational knowledge and will have mastered the competencies as developed by the Louisiana Department of Health and Hospitals. The College has partnered with the New Orleans Sewerage and Water Board, and this set of technical competencies has been developed based on expressions of need from that and other public and private entities that are concerned about the present and future of the state's water services.

### **KEYWORDS**

## Water Treatment Operator, C.T.C. - 05/11/2019

<b>TYPE OF PROPOSED CHANGE</b> : New Program
<b>PROGRAM NAME</b> : Water Treatment Operator, C.T.C.

<b>AWARD LEVEL(S)</b>	
<b>For Board of Regents and LCTCS Review:</b>  <b>Name:</b>	<b>For LCTCS Review:</b>  Technical Diploma (T.D.)  Certificate of Technical Studies (C.T.S.)  Career and Technical Certificate (C.T.C.)  TCA - For Archive Purpose Only

<b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b>						
Stars : 4 Stars						
Name: Water Treatment Operator, C.T.C.				Program Delivery Mode: Standard		
CIP: 15.0506	Credit Hours: 9.00	Contact Hours: 135.00	Career and Technical Certificate (C.T.C)			
<b>IBC:</b> City of New Orleans Water Treatment Operator	<b>Issuing Body:</b> Louisiana Department of Health and Hospitals	<b>Course Title:</b>	<b>Course Prefix:</b>	<b>Course Number:</b>	<b>Credits Awarded:</b> 0.00	<b>IBC Awarded upon Completion?</b> :

<b>PROPOSED CHANGE</b> 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.
Repackaging of terminated TCAs to one CTC program to meet workforce needs.

<b>IMPLEMENTATION DATE (Semester and Year)</b>	Fall 2019
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<b>HISTORY OF PRIOR ACTIONS</b> Provide an overview of changes to this program.
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Related TCAs were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area.

### JUSTIFICATION FOR THE PROPOSED CHANGE

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

The goal of the program is to aid in the development of a workforce pipeline for water distribution operators and to prepare new and existing water distribution operators for the Louisiana State Operator Certification Exam. Upon the completion of this certificate program, the student will be able to obtain employment as an entry-level water distribution operator or advance in current employment or new based on their current operator certification level in industry or government settings. At the local, regional, and state level there is an understaffed, aging, and retiring water distribution operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:** All Campuses

### QUALIFIED FACULTY (Check all that apply)

<b>Use Existing Faculty: Yes</b> # - Full Time: 0 # - Part Time: 0	<b>Hire Adjunct Faculty: No</b> # - 0	<b>Hire Full-Time Faculty: No</b> # - 0
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### ADMINISTRATION and IMPLEMENTATION COSTS

**Department :**

**How will this change affect the administrative structure and/or allocation of departmental funds in terms of:**

<b>Faculty :</b>	<b>Facilities :</b>	<b>Library Resources :</b>
<b>Support :</b>	<b>Related Fields :</b>	<b>Other :</b>

### MINIMUM CREDENTIALS REQUIRED FOR FACULTY

<b>Education:</b> Certification in Water Treatment	<b>Experience:</b>	<b>Certification:</b> Louisiana State Department of Health and Hospitals Certification Water Production Operator I-IV, recognized LDHH trainer
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### FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS

**Department :** Division of Science and Mathematics

**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 New Orleans Sewerage and Water Board has volunteered to host courses at their uptown facility and to provide tours of the facility in the hopes of attracting prospective students and future employees. Currently, Delgado has three (3) full-time faculty members who have been trained to teach courses in Water/Wastewater Technology. Library and instructional resources in Water/Wastewater are present as sub-sets of materials used for: Civil and Construction Applied Engineering, Instrumentation and Controls, and general health, safety, and the physical sciences collection. Currently, the Library holds 132 resources, in print and electronic formats, directly related to Water and Wastewater Technology instruction.

**ANTICIPATED ENROLLMENT:**

Students	Year One	Year Two	Year Three	Year Four	Year Five
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EVENING	15	20	25	30	30
DISTANCE EDUCATION					
<b>Describe Process for Attaining &amp; Estimating Enrollment:</b>	Projections of estimated enrollment are based on anticipated job openings at the entry-level position. Data provided by the New Orleans Sewerage and Water Board indicate average vacancies at any given time of approximately 10 to 20.				

**PROGRAM ACCREDITATION:**

<b>Is Program Accreditation, Licensure or Certification Required?</b>	No
	<b>Accreditation status:</b> N/A
<b>Type/Name of Program Accreditation, Licensure or Certification Required:</b>	N/A

**DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)**

**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	Clinical Hours
<b>Program, Degree or Concentration:</b> Water Treatment Operator, C.T.C.						<b>Credit Hours:</b> 9.00	

<b>Semester: First Semester</b>					<b>Credit Hours: 9.00</b>		
WWTC	111	Water Treatment Operator I	3.00	0.00	45.00	3.00	0.00
<b>Semester: Second Semester</b>					<b>Credit Hours: 6.00</b>		
WWTC	112	Water Treatment Operator II	3.00	0.00	45.00	3.00	0.00
WWTC	113	Water Treatment Operator III OR	3.00	0.00	45.00	3.00	0.00
WWTC	114	Water Treatment Operator IV OR	3.00	0.00	45.00	3.00	0.00
MATH	113	Algebra for Technology	3.00	0.00	45.00	3.00	0.00

### **BENEFITS TO THE SYSTEM**

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

Instruction in this CTC provides students with the opportunity to master competencies required to successfully sit for and pass the state examination and meet a critical workforce need, providing vital services to various municipal agencies. Successful completion of each level requires one year of work in the field before the student may attempt the next level examination. Successful completion of the first level operator examination in Water Treatment makes the completer immediately eligible for entry into the local, regional, state, federal, public or private water or wastewater service entity. The goal of the CTC is to develop a highly trained and highly skilled workforce for water treatment operators to meet contemporary workforce needs. After successfully completing the CTC, the student will have foundational knowledge and will have mastered the competencies as developed by the Louisiana Department of Health and Hospitals. The College has partnered with the New Orleans Sewerage and Water Board, and this set of technical competencies has been developed based on expressions of need from that and other public and private entities that are concerned about the present and future of the state's water services.

### **KEYWORDS**

## Water Distribution Operator, C.T.C. - 05/11/2019

<b>TYPE OF PROPOSED CHANGE</b> : New Program
<b>PROGRAM NAME</b> : Water Distribution Operator, C.T.C.

<b>AWARD LEVEL(S)</b>	
<b>For Board of Regents and LCTCS Review:</b>  <b>Name:</b>	<b>For LCTCS Review:</b>  Technical Diploma (T.D.)  Certificate of Technical Studies (C.T.S.)  Career and Technical Certificate (C.T.C)  TCA - For Archive Purpose Only

<b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b>						
<b>Stars</b> : 4 Stars						
<b>Name:</b> Water Distribution Operator, C.T.C.				<b>Program Delivery Mode:</b> Standard		
<b>CIP:</b> 15.0506	<b>Credit Hours:</b> 9.00	<b>Contact Hours:</b> 135.00	Career and Technical Certificate (C.T.C)			
<b>IBC:</b> City of New Orleans Water Distribution Operator	<b>Issuing Body:</b> Louisiana Department of Health and Hospitals	<b>Course Title:</b>	<b>Course Prefix:</b>	<b>Course Number:</b>	<b>Credits Awarded:</b> 0.00	<b>IBC Awarded upon Completion?</b> : No-Test is Required

<b>PROPOSED CHANGE</b> 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.
Repackaging of terminated TCAs to one CTC program to meet workforce needs.

<b>IMPLEMENTATION DATE (Semester and Year)</b>	Fall 2019
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<b>HISTORY OF PRIOR ACTIONS</b> Provide an overview of changes to this program.
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Related TCAs were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area.

**JUSTIFICATION FOR THE PROPOSED CHANGE**

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

The goal of the program is to aid in the development of a workforce pipeline for wastewater collection operators and to prepare new and existing water distribution operators for the Louisiana State Operator Certification Exam. Upon the completion of this certificate program, the student will be able to obtain employment as an entry-level water distribution operator or advance in current employment or new based on their current operator certification level in industry or government settings. At the local, regional, and state level there is an understaffed, aging, and retiring water distribution operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:** All Campuses

**QUALIFIED FACULTY (Check all that apply)**

<p><b>Use Existing Faculty: Yes</b></p> <p># - Full Time: 0</p> <p># - Part Time: 0</p>	<p><b>Hire Adjunct Faculty: No</b></p> <p># - 0</p>	<p><b>Hire Full-Time Faculty: No</b></p> <p># - 0</p>
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**ADMINISTRATION and IMPLEMENTATION COSTS**

**Department :**

**How will this change affect the administrative structure and/or allocation of departmental funds in terms of:**

<b>Faculty :</b>	<b>Facilities :</b>	<b>Library Resources :</b>
<b>Support :</b>	<b>Related Fields :</b>	<b>Other :</b>

**MINIMUM CREDENTIALS REQUIRED FOR FACULTY**

<p><b>Education:</b> Certification in Water Distribution Operator</p>	<p><b>Experience:</b></p>	<p><b>Certification:</b> Louisiana State Department of Health and Hospitals Certification Water Distribution Operator I-IV, recognized LDHH trainer</p>
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**FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS**

**Department :** Division of Science and Mathematics

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 New Orleans Sewerage and Water Board has volunteered to host courses at their uptown facility and to provide tours of the facility in the hopes of attracting prospective students and future employees. Currently, Delgado has three (3) full-time faculty members who have been trained to teach courses in Water/Wastewater Technology. Library and instructional resources in Water/Wastewater are present as sub-sets of materials used for: Civil and Construction Applied Engineering, Instrumentation and Controls, and general health, safety, and the physical sciences collection. Currently, the Library holds 132 resources, in print and electronic formats, directly related to Water and Wastewater Technology instruction.

**ANTICIPATED ENROLLMENT:**

Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	15	20	25	30	30
EVENING	15	20	25	30	30
DISTANCE EDUCATION					

**Describe Process for Attaining & Estimating Enrollment:**

Projections of estimated enrollment are based on anticipated job openings at the entry-level position. Data provided by the New Orleans Sewerage and Water Board indicate average vacancies at any given time of approximately 10 to 20.

**PROGRAM ACCREDITATION:**

<b>Is Program Accreditation, Licensure or Certification Required?</b>	No
	Accreditation status: N/A
<b>Type/Name of Program Accreditation, Licensure or Certification Required:</b>	N/A

**DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)**

**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	Clinical Hours
<b>Program, Degree or Concentration:</b> Water Distribution Operator, C.T.C.						<b>Credit Hours:</b> 9.00	

<b>Semester: First Semester</b>						<b>Credit Hours: 3.00</b>		
WWTC	116	Water Distribution Operator I	3.00	0.00	45.00	3.00	0.00	
<b>Semester: Second Semester</b>						<b>Credit Hours: 9.00</b>		
WWTC	117	Water Distribution Operator II	3.00	0.00	45.00	3.00	0.00	
WWTC	118	Water Distribution Operator III OR	3.00	0.00	45.00	3.00	0.00	
WWTC	119	Water Distribution Operator IV OR	3.00	0.00	45.00	3.00	0.00	
MATH	113	Algebra for Technology	3.00	0.00	45.00	3.00	0.00	

### **BENEFITS TO THE SYSTEM**

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

Instruction in this CTC provides students with the opportunity to master competencies required to successfully sit for and pass the state examination and meet a critical workforce need, providing vital services to various municipal agencies. Successful completion of each level requires one year of work in the field before the student may attempt the next level examination. Successful completion of the first level operator examination in Water Distribution makes the completer immediately eligible for entry into the local, regional, state, federal, public or private water or wastewater service entity. The goal of the CTC is to develop a highly trained and highly skilled workforce for water distribution operators to meet contemporary workforce needs. After successfully completing the CTC, the student will have foundational knowledge and will have mastered the competencies as developed by the Louisiana Department of Health and Hospitals. The College has partnered with the New Orleans Sewerage and Water Board, and this set of technical competencies has been developed based on expressions of need from that and other public and private entities that are concerned about the present and future of the state's water services.

### **KEYWORDS**

## Wastewater Treatment Operator, C.T.C. - 05/11/2019

<b>TYPE OF PROPOSED CHANGE</b> : New Program
<b>PROGRAM NAME</b> : Wastewater Treatment Operator, C.T.C.

<b>AWARD LEVEL(S)</b>	
<b>For Board of Regents and LCTCS Review:</b>  Name:	<b>For LCTCS Review:</b>  Technical Diploma (T.D.)  Certificate of Technical Studies (C.T.S.)  Career and Technical Certificate (C.T.C)  TCA - For Archive Purpose Only

<b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b>						
Stars : 4 Stars						
Name: Wasterwater Treatment Operator, C.T.C.				Program Delivery Mode: Standard		
CIP: 15.0506	Credit Hours: 9.00	Contact Hours: 135.00	Career and Technical Certificate (C.T.C)			
IBC: City of New Orleans Wastewater Treatment Operator	Issuing Body: Louisiana Department of Health and Hospitals	Course Title:	Course Prefix:	Course Number:	Credits Awarded: 0.00	IBC Awarded upon Completion? : No-Test is Required

<b>PROPOSED CHANGE</b> 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.
Repackaging of terminated TCAs to one CTC program to meet workforce needs.

<b>IMPLEMENTATION DATE (Semester and Year)</b>	Fall 2019
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<b>HISTORY OF PRIOR ACTIONS</b> Provide an overview of changes to this program.
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Related TCAs were approved and developed as part of the College's mission to serve the water/wastewater technology needs of the Greater New Orleans area.

### JUSTIFICATION FOR THE PROPOSED CHANGE

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

The goal of the program is to aid in the development of a workforce pipeline for wastewater treatment operators and to prepare new and existing wastewater treatment operators for the Louisiana State Operator Certification Exam. Upon the completion of this certificate program, the student will be able to obtain employment as an entry-level wastewater treatment operator or advance in current employment or new based on their current operator certification level in industry or government settings. At the local, regional, and state level there is an understaffed, aging, and retiring wastewater treatment operator workforce. This set of technical competencies has been developed based on the needs expressed by the New Orleans Sewerage and Water Board and several public and private entities that are concerned about the present and future of our water services.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:** All Campuses

### QUALIFIED FACULTY (Check all that apply)

<b>Use Existing Faculty: Yes</b> # - Full Time: 0 # - Part Time: 0	<b>Hire Adjunct Faculty: No</b> # - 0	<b>Hire Full-Time Faculty: No</b> # - 0
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### ADMINISTRATION and IMPLEMENTATION COSTS

**Department :**

**How will this change affect the administrative structure and/or allocation of departmental funds in terms of:**

<b>Faculty :</b>	<b>Facilities :</b>	<b>Library Resources :</b>
<b>Support :</b>	<b>Related Fields :</b>	<b>Other :</b>

### MINIMUM CREDENTIALS REQUIRED FOR FACULTY

<b>Education:</b> Certification in Wastewater Treatment Operator	<b>Experience:</b>	<b>Certification:</b> Louisiana State Department of Health and Hospitals Certification Wastewater Treatment Operator I-IV, recognized LDHH trainer
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### FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS

**Department :** Division of Science and Mathematics

**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 New Orleans Sewerage and Water Board has volunteered to host courses at their uptown facility and to provide tours of the facility in the hopes of attracting prospective students and future employees. Currently, Delgado has three (3) full-time faculty members who have been trained to teach courses in Water/Wastewater Technology. Library and instructional resources in Water/Wastewater are present as sub-sets of materials used for: Civil and Construction Applied Engineering, Instrumentation and Controls, and general health, safety, and the physical sciences collection. Currently, the Library holds 132 resources, in print and electronic formats, directly related to Water and Wastewater Technology instruction.

**ANTICIPATED ENROLLMENT:**

Students	Year One	Year Two	Year Three	Year Four	Year Five
DAY	15	20	25	30	30
EVENING	15	20	25	30	30
DISTANCE EDUCATION					

**Describe Process for Attaining & Estimating Enrollment:**

Projections of estimated enrollment are based on anticipated job openings at the entry-level position. Data provided by the New Orleans Sewerage and Water Board indicate average vacancies at any given time of approximately 10 to 20.

**PROGRAM ACCREDITATION:**

<b>Is Program Accreditation, Licensure or Certification Required?</b>	No
	<b>Accreditation status:</b> N/A
<b>Type/Name of Program Accreditation, Licensure or Certification Required:</b>	N/A

**DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)**

**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	Clinical Hours
<b>Program, Degree or Concentration:</b> Wastewater Treatment Operator, C.T.C.						<b>Credit Hours:</b> 9.00	

<b>Semester: First Semester</b>					<b>Credit Hours: 9.00</b>		
WWTC	126	Wastewater Treatment Operator I	3.00	0.00	45.00	3.00	0.00
<b>Semester: Second Semester</b>					<b>Credit Hours:</b>		
WWTC	127	Wastewater Treatment Operator II	3.00	0.00	45.00	3.00	0.00
WWTC	128	Wastewater Treatment Operator III OR	3.00	0.00	45.00	3.00	0.00
WWTC	129	Wastewater Treatment Operator IV OR	3.00	0.00	45.00	3.00	0.00
MATH	113	Algebra for Technology	3.00	0.00	45.00	3.00	0.00

### **BENEFITS TO THE SYSTEM**

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

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### **KEYWORDS**