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Changing Lives,
Creating Futures

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TO: Dr. Monty Sullivan
LCTCS President
THROUGH: Dr. René Cintrón
Chief Education and Training Officer
FROM: Dr. Adrienne Fontenot
Director of Adult Learning and Educational Programs
DATE: July 27, 2020
SUBJECT: Program Requests at Fletcher Technical Community College

APPROVED

RC

Signature and date 8/12/20
LCTCS BOARD OF SUPERVISORS

FOR BOARD ACTION:

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

Program Addition

- 1. Associate of Science (AS) in Environmental Science (CIP 03.0104) – 5 STARS

Program Modification

- 2. Technical Diploma (TD) in Automotive Technology (CIP 47.0604) – 4 STARS

Background: Fletcher Technical Community College (FTCC) is requesting to add an AS in Environmental Science. This program is both designed for students who plan to transfer to a four-year college and those interested in entry-level field and technical employment within Louisiana Wildlife and Fisheries, Department of Environmental Quality, Department of Health and Hospitals, or coastal restoration efforts.

Fletcher Technical Community College (FTCC) is requesting to modify the TD in Automotive Technology at the request of the Advisory Board. The credit hours/clock hours will be reduced to accelerate student completion without compromising learning outcomes to meet the needs of industry.

Fiscal Impact: There are no anticipated expenditures associated with these changes unless otherwise noted.

History of Prior Actions: There is a history of revising and creating new programs to meet student and workforce needs.

Benefits to the System: These requests will allow FTCC to better meet student and workforce needs.

Signature of Dr. Monty Sullivan

Approved
Dr. Monty Sullivan

Date 8-12-20

**Associate of Science in Environmental Science - 07/14/2020**

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| <b>TYPE OF PROPOSED CHANGE :</b> New Program                        |
| <b>PROGRAM NAME :</b> Associate of Science in Environmental Science |

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

|  |                           |                               |                             |
|--|---------------------------|-------------------------------|-----------------------------|
| <b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b> |                           |                               |                             |
| <b>Stars :</b> 5 Stars                       |                           |                               |                             |
| <b>Name:</b>                                 |                           | <b>Program Delivery Mode:</b> |                             |
| <b>CIP:</b> 03.0104                          | <b>Credit Hours:</b> 0.00 | <b>Contact Hours:</b> 0.00    | Associate of Science (A.S.) |

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| <p><b>PROPOSED CHANGE</b><br/> <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.</b></p>  |
| <p>This program is intended for students either interested in pursuing a baccalaureate degree in environmental science or who want to obtain an entry level technician position. An Associates of Science in Environmental Science degree is a great starting point for students to learn basic fundamental principles, practices, and field techniques in preparation for careers in research, government, and academia where there is a growing demand for environmental scientists. There are 2 concentrations for the A.S. in Environmental Science: Biology or Chemistry.</p> |

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| <b>IMPLEMENTATION DATE (Semester and Year)</b> | Spring 2021 |
|--|-------------|

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| <p><b>HISTORY OF PRIOR ACTIONS</b><br/> <b>Provide an overview of changes to this program.</b></p> |
| No prior actions, this is a new program proposal   |

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

An Associate of Science in Environmental Science is both designed for students who plan to transfer to a four-year college and will also help place students in entry level field and technical job positions. This program is designed for students who aim for employment in Louisiana Wildlife and Fisheries, Department of Environmental Quality, Department of Health and Hospitals, or coastal restoration efforts, as an example. Currently, there is a high demand for students with a field experience skills. This program will allow students to build a strong foundation in math, science, and an introduction to Environmental issues.

**Overall Program Objectives:**

Understand the basic principles of environmental science, including the basis of scientific laws and theories.  
Effectively communicate and critically evaluate scientific observations through collecting, analyzing, and interpreting environmental data.

Pursue meaningful careers as environmental scientists who maintain continuing educational growth during their careers.  
Engage in effective partnerships with academic institutions and industrial organizations in coastal restoration, as well as environmental investigations.

**Biology Concentration Objectives:**

Understand the importance of the biological levels of organization (i.e. individual/organismal, population, community, ecosystem) in the study of environmental science

Understand the role of evolutionary processes in the study of environmental science  
Understand how human activity can influence the health and wellness of ecosystems

**Chemistry Concentration Objectives:**

Apply analytical and scientific concepts in identifying and solving environmental concerns.  
Summarize professional and ethical responsibility in environmental issues.  
Demonstrate knowledge and skills required to perform environmental testing.

**SITE(S) OF NEW PROGRAM OR CURRICULUM MODIFICATION:****QUALIFIED FACULTY (Check all that apply)**

|   |  |  |
|---|--|--|
| <b>Use Existing Faculty: No</b><br># - Full Time: 0<br># - Part Time: 0 | <b>Hire Adjunct Faculty: No</b><br># - 0 | <b>Hire Full-Time Faculty: No</b><br># - 0 |
|---|--|--|

**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> Education: Master's Degree or 18 hours of graduate credit in Biology, Environmental Science, Chemistry, Geology or related fields | <b>Experience:</b> | <b>Certification:</b> |
|---|--------------------|-----------------------|

**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 Associates of Science in Environmental Science will be housed in the STEM department. The proposed program will not require any additional administrative responsibilities. Existing space will be utilized to its fullest extent; however, two new chemistry labs will have to be built to support this program. One Chemistry lab will reside in the new Maritime building at our Dickson Road site and the other Chemistry lab will reside in the new Allied Health building.

**ANTICIPATED ENROLLMENT:**

| Students                  | Year One | Year Two | Year Three | Year Four | Year Five |
|---------------------------|----------|----------|------------|-----------|-----------|
| <b>DAY</b>                | 10       | 20       | 25         | 30        | 35        |
| <b>EVENING</b>            |          |          |            |           |           |
| <b>DISTANCE EDUCATION</b> | 5        | 10       | 15         | 20        | 25        |

|  |  |
|--|--|
| <b>Describe Process for Attaining &amp; Estimating Enrollment:</b> | These projections were based off of the need to fill positions in the local economy and in student interest. |
|--|--|

**PROGRAM ACCREDITATION:**

|   |                              |
|---|------------------------------|
| <b>Is Program Accreditation, Licensure or Certification Required?</b> | No                           |
|   | <b>Accreditation status:</b> |

|   |  |
|---|--|
| <b>Type/Name of Program Accreditation, Licensure or Certification Required:</b> |  |
|---|--|

**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> |               |              |               |           | <b>Credit Hours: 0.00</b> |              |                |

**BENEFITS TO THE SYSTEM**

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

Our community is facing a multitude of problems as a result of climate change and sea level rise. As a result, many of our students can find employment in positions to help us combat these problems. Our students will be trained to conduct investigations to identify, mitigate, or eliminate sources that pollute our environment or pose hazards to the health and well-being of our community. This program also helps students become informed citizen scientists concerning the issues our state is facing. In a collective effort to restore, support, and build our state, many partnerships will be built with universities, state agencies, businesses, and community based organizations. Building these partnerships also helps further the mission of Fletcher and LCTCS.

**KEYWORDS**

Environmental Science

| Subject Code                           | Course Number | Course Title  | Lecture Hours | Lab Hours | Contact Hours | Credit Hours |
|--|---------------|---|---------------|-----------|---------------|--------------|
| <b>First Semester (16 cr hrs)</b>      |               |   |               |           |               |              |
| ENGL                                   | 1010          | English Composition I   | 3             | 0         | 3             | 3            |
| MATH                                   | 1100          | College Algebra   | 3             | 0         | 3             | 3            |
| BIOL                                   | 1030          | Biology I (majors)  | 3             | 0         | 3             | 3            |
| BIOL                                   | 1031          | Biology I Laboratory (majors)   | 0             | 1         | 3             | 1            |
|  |               | Humanity  | 3             | 0         | 3             | 3            |
|  |               | <b>Social Science</b>   | <b>3</b>      | <b>0</b>  | <b>3</b>      | <b>3</b>     |
| <b>Second Semester (16 cr hrs)</b>     |               |   |               |           |               |              |
| ENGL                                   | 1020          | English Composition II  | 3             | 0         | 3             | 3            |
| MATH                                   | 1110          | Trigonometry  | 3             | 0         | 3             | 3            |
| CHEM                                   | 1123          | Chemistry I (majors)  | 3             | 0         | 3             | 3            |
| CHEM                                   | 1121          | Chemistry I Laboratory (majors)   | 0             | 1         | 3             | 1            |
| ENSC                                   | 1103          | Introduction to Environmental Science   | 3             | 0         | 3             | 3            |
| ENSC                                   | 1010          | Introduction to Ecology   | 3             | 0         | 3             | 3            |
| <b>Third Semester (14 (15) cr hrs)</b> |               |   |               |           |               |              |
| CHEM                                   | 1133          | Chemistry II (majors)   | 3             | 0         | 3             | 3            |
| CHEM                                   | 1131          | Chemistry II Laboratory (majors)  | 0             | 1         | 3             | 1            |
| BIOL                                   | 1040          | Biology II (majors)   | 3             | 0         | 3             | 3            |
| BIOL                                   | 1041          | Biology II Laboratory (majors)  | 0             | 1         | 3             | 1            |
| MATH                                   | 2100          | Introductory Statistics   | 3             | 0         | 3             | 3            |
| ENSC,<br>CHEM,<br>GEOL                 | XXXX          | ENSC Electives<br>For Biology track choose from:<br>BIOL 2121/2131, ENSC 1020, ENSC 1030, ENSC 2010, GEOL 1400<br>For Chemistry track, choose from:<br>CHEM 1140, CHEM 2213/2211, ENSC 2030, ENSC 2040, GEOL 1310 | 3             | (1)       | 3 (4)         | 3 (4)        |
| <b>Fourth Semester (16 cr hrs)</b>     |               |   |               |           |               |              |
| PHYS                                   | 1030          | Physics I (algebra/trig based)  | 3             | 0         | 3             | 3            |
| PHYS                                   | 1031          | Physics I (algebra/trig based)  | 0             | 1         | 3             | 1            |
| ENSC                                   | 2020          | Environmental Science: Field and Research Methods   | 3             | 0         | 3             | 3            |
| ENSC                                   |               | ENSC Electives<br>For Biology track choose from:<br>BIOL 2121/2131, ENSC 1020, ENSC 1030, ENSC 2010, GEOL 1400<br>For Chemistry track, choose from:<br>CHEM 1140, CHEM 2213/2211, ENSC 2030, ENSC 2040, GEOL 1310 | 6             | 0         | 6             | 6            |
|  |               | Fine Arts   | 3             | 0         | 3             | 3            |

The total in the parenthesis reflects if the student chooses the lab option with either BIOL 2121/2131 or CHEM 2213/2211

## Automotive Technology - 06/03/2020

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| <b>TYPE OF PROPOSED CHANGE :</b> Curriculum Modification |
| <b>PROGRAM NAME :</b> Automotive Technology              |

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

|  |  |   |                                   |  |                                     |   |
|--|--|---|-----------------------------------|--|-------------------------------------|---|
| <b>NAME OF PROGRAM(S) and AWARD LEVEL(S)</b>     |  |   |                                   |  |                                     |   |
| <b>Stars :</b> 4 Stars                           |  |   |                                   |  |                                     |   |
| <b>Name:</b> Automotive Technology               |  |   |                                   | <b>Program Delivery Mode:</b> Standard |                                     |   |
| <b>CIP:</b> 470604                               |  | <b>Credit Hours:</b> 47.00  |                                   | <b>Contact Hours:</b> 1065.00          |                                     | Technical Diploma (T.D.)  |
| <b>IBC:</b> S/P2<br>Automotive<br>Service Safety | <b>Issuing<br/>Body:</b> S/P2  | <b>Course Title:</b><br>Intro to<br>Automotive<br>Technology        | <b>Course<br/>Prefix:</b><br>AUTO | <b>Course<br/>Number:</b><br>1000      | <b>Credits<br/>Awarded:</b><br>1.00 | <b>IBC<br/>Awarded<br/>upon<br/>Completion?</b><br>: No-Partial<br>Requirements |
| <b>IBC:</b> S/P2<br>Automotive<br>Service Safety | <b>Issuing<br/>Body:</b> S/P2  | <b>Course Title:</b><br>Intro to<br>Automotive<br>Technology<br>Lab | <b>Course<br/>Prefix:</b><br>AUTO | <b>Course<br/>Number:</b><br>1001      | <b>Credits<br/>Awarded:</b><br>1.00 | <b>IBC<br/>Awarded<br/>upon<br/>Completion?</b><br>: No-Partial<br>Requirements |
| <b>Name:</b> Power Train Technician              |  |   |                                   | <b>Program Delivery Mode:</b> Standard |                                     |   |
| <b>CIP:</b> 470604                               |  | <b>Credit Hours:</b> 19.00  |                                   | <b>Contact Hours:</b> 435.00           |                                     | Technical Diploma (T.D.)  |
| <b>IBC:</b> Manual<br>Drive Train<br>and Axles   | <b>Issuing<br/>Body:</b><br>National<br>Institute for<br>Automotive<br>Service<br>Excellence | <b>Course Title:</b><br>Manual Drive<br>Trains                      | <b>Course<br/>Prefix:</b><br>AUTO | <b>Course<br/>Number:</b><br>1300      | <b>Credits<br/>Awarded:</b><br>2.00 | <b>IBC<br/>Awarded<br/>upon<br/>Completion?</b><br>: No-Test is<br>Required     |

|  |   |   |  |                            |                              |  |
|--|---|---|--|----------------------------|------------------------------|--|
| <b>IBC:</b> Manual Drive Train and Axles                 | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Manual Drive Trains Lab              | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1301 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>Name:</b> Engine Performance Technician               |   |   | <b>Program Delivery Mode:</b> Standard |                            |                              |  |
| <b>CIP:</b> 470604                                       | <b>Credit Hours:</b> 20.00  | <b>Contact Hours:</b> 465.00                              | Technical Diploma (T.D.)               |                            |                              |  |
| <b>Name:</b> Engine Repair Technician                    |   |   | <b>Program Delivery Mode:</b> Standard |                            |                              |  |
| <b>CIP:</b> 470604                                       | <b>Credit Hours:</b> 6.00   | <b>Contact Hours:</b> 135.00                              | Technical Diploma (T.D.)               |                            |                              |  |
| <b>IBC:</b> Engine Repair                                | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Repair                        | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1100 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>IBC:</b> Engine Repair                                | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Repair Lab                    | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1101 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>Name:</b> Transmission Technician                     |   |   | <b>Program Delivery Mode:</b> Standard |                            |                              |  |
| <b>CIP:</b> 470604                                       | <b>Credit Hours:</b> 8.00   | <b>Contact Hours:</b> 180.00                              | Technical Diploma (T.D.)               |                            |                              |  |
| <b>IBC:</b> Automatic Transmission/Transaxle             | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Automatic Transmission & Transaxle   | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1200 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>IBC:</b> Automatic Transmission/Transaxle             | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Automatic Transmission/Transaxle Lab | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1201 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>Name:</b> Steering & Suspension and Brakes Technician |   |   | <b>Program Delivery Mode:</b> Standard |                            |                              |  |
| <b>CIP:</b> 470604                                       | <b>Credit Hours:</b> 9.00   | <b>Contact Hours:</b> 210.00                              | Technical Diploma (T.D.)               |                            |                              |  |
| <b>IBC:</b> Suspension and Steering                      | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Steering & Suspension                | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b> 1400 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |



|  |  |  |  |                               |                                 |   |
|--|--|--|--|-------------------------------|---------------------------------|---|
| <b>IBC:</b><br>Suspension and Steering             | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Steering & Suspension Lab      | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1401 | <b>Credits Awarded:</b><br>3.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>Name:</b> Electrical Technician                 |  |  | <b>Program Delivery Mode:</b> Standard |                               |                                 |   |
| <b>CIP:</b> 470604                                 | <b>Credit Hours:</b> 8.00  | <b>Contact Hours:</b> 180.00                           | Technical Diploma (T.D.)               |                               |                                 |   |
| <b>IBC:</b><br>Electrical/Electronic Systems       | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Electrical/Electronic I        | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1600 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>IBC:</b><br>Electrical/Electronic Systems       | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Electrical/Electronic I Lab    | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1601 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>IBC:</b><br>Electrical/Electronic Systems       | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Electrical/Electronic II       | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1610 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>IBC:</b><br>Electrical/Electronic Systems       | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Electrical/Electronic II Lab   | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1611 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>Name:</b> Heating & Air Conditioning Technician |  |  | <b>Program Delivery Mode:</b> Standard |                               |                                 |   |
| <b>CIP:</b> 470604                                 | <b>Credit Hours:</b> 6.00  | <b>Contact Hours:</b> 135.00                           | Technical Diploma (T.D.)               |                               |                                 |   |
| <b>IBC:</b> Heating and Air Conditioning           | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Heating & Air Conditioning     | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1700 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>IBC:</b> Heating and Air Conditioning           | <b>Issuing Body:</b><br>National Institute for Automotive Service Excellence | <b>Course Title:</b><br>Heating & Air Conditioning Lab | <b>Course Prefix:</b> AUTO             | <b>Course Number:</b><br>1701 | <b>Credits Awarded:</b><br>2.00 | <b>IBC Awarded upon Completion?:</b><br>No-Test is Required |
| <b>Name:</b> Engine Performance Technician         |  |  | <b>Program Delivery Mode:</b> Standard |                               |                                 |   |
| <b>CIP:</b> 470604                                 | <b>Credit Hours:</b> 10.00   | <b>Contact Hours:</b> 240.00                           | Technical Diploma (T.D.)               |                               |                                 |   |

|                                |   |  |                            |                            |                              |  |
|--------------------------------|---|--|----------------------------|----------------------------|------------------------------|--|
| <b>IBC:</b> Engine Performance | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Performance I      | <b>Course Prefix:</b> AUTO | <b>Course Number:</b> 1800 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>IBC:</b> Engine Performance | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Performance I Lab  | <b>Course Prefix:</b> AUTO | <b>Course Number:</b> 1801 | <b>Credits Awarded:</b> 3.00 | <b>IBC Awarded upon Completion?:</b> No-Test is Required |
| <b>IBC:</b> Engine Performance | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Performance II     | <b>Course Prefix:</b> AUTO | <b>Course Number:</b> 1810 | <b>Credits Awarded:</b> 2.00 | <b>IBC Awarded upon Completion?:</b>                     |
| <b>IBC:</b> Engine Performance | <b>Issuing Body:</b> National Institute for Automotive Service Excellence | <b>Course Title:</b> Engine Performance II Lab | <b>Course Prefix:</b> AUTO | <b>Course Number:</b> 1811 | <b>Credits Awarded:</b> 3.00 | <b>IBC Awarded upon Completion?:</b>                     |

**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.

Curriculum Modifications: Previous credit hours: 59  
Previous clock hours: 1,395

|  |           |
|--|-----------|
| <b>IMPLEMENTATION DATE (Semester and Year)</b> | Fall 2020 |
|--|-----------|

**HISTORY OF PRIOR ACTIONS**  
Provide an overview of changes to this program.

Refer to curriculum library

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

Advisory board supports reducing credit hours/clock hours to facilitate students completing the program more quickly to meet the needs of industry.

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

|   |  |  |
|---|--|--|
| <b>QUALIFIED FACULTY (Check all that apply)</b>                         |  |  |
| <b>Use Existing Faculty:</b> No<br># - Full Time: 1<br># - Part Time: 0 | <b>Hire Adjunct Faculty:</b> No<br># - 0 | <b>Hire Full-Time Faculty:</b> No<br># - 0 |

|  |                         |                            |
|--|-------------------------|----------------------------|
| <b>ADMINISTRATION and IMPLEMENTATION COSTS</b>   |                         |                            |
| <b>Department :</b>  |                         |                            |
| <b>How will this change affect the administrative structure and/or allocation of departmental funds in terms of:</b> |                         |                            |
| <b>Faculty :</b>   | <b>Facilities :</b>     | <b>Library Resources :</b> |
| <b>Support :</b>   | <b>Related Fields :</b> | <b>Other :</b>             |

|   |   |   |
|---|---|---|
| <b>MINIMUM CREDENTIALS REQUIRED FOR FACULTY</b> |   |   |
| <b>Education:</b> Associate's Degree            | <b>Experience:</b> Prior teaching experience preferred but not required | <b>Certification:</b> ASE Professional Technician/Master Technician |

|   |  |  |
|---|--|--|
| <b>FISCAL IMPACT: ADMINISTRATION and IMPLEMENTATION COSTS</b>   |  |  |
| <b>Department :</b> Automotive Technology   |  |  |
| <b>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.</b> |  |  |
| No additional costs to be incurred as a result of program curriculum changes.   |  |  |

|                                |                 |                 |                   |                  |                  |
|--------------------------------|-----------------|-----------------|-------------------|------------------|------------------|
| <b>ANTICIPATED ENROLLMENT:</b> |                 |                 |                   |                  |                  |
| <b>Students</b>                | <b>Year One</b> | <b>Year Two</b> | <b>Year Three</b> | <b>Year Four</b> | <b>Year Five</b> |
| <b>DAY</b>                     | 25              | 28              | 30                | 33               | 35               |
| <b>EVENING</b>                 |                 |                 |                   |                  |                  |
| <b>DISTANCE EDUCATION</b>      |                 |                 |                   |                  |                  |

|  |  |
|--|--|
| <b>Describe Process for Attaining &amp; Estimating Enrollment:</b> | Anticipated enrollment is based on current and enrollment and enrollment trends. |
|--|--|

|   |   |
|---|---|
| <b>PROGRAM ACCREDITATION:</b>   |   |
| <b>Is Program Accreditation, Licensure or Certification Required?</b>           | Mandatory<br><br><b>Accreditation status:</b> Approved  |
| <b>Type/Name of Program Accreditation, Licensure or Certification Required:</b> | If YES, please provide projected accreditation/licensure/certification date: Program is already ASE NATEF accredited. |

|   |
|---|
| <b>DESCRIBE IMPLEMENTATION COSTS (Include Faculty, Facilities, Library Resources, etc.)</b> |
|   |

| <b>PROGRAM CURRICULUM</b><br>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>   |               |              |               |           |               | <b>Credit Hours:</b> 0.00 |                |

|   |
|---|
| <b>BENEFITS TO THE SYSTEM</b>   |
| <b>Discuss how this change will benefit your students, your community, and the LCTCS.</b>   |
| This curriculum modification will benefit students by allowing them to complete the program more quickly and thus enter the workforce sooner. Advisory board members have indicated a great need to have individuals available for hire |

|                 |
|-----------------|
| <b>KEYWORDS</b> |
|                 |

**FLETCHER TECHNICAL COMMUNITY COLLEGE**  
**PROGRAM CURRICULUM CHANGES**

| Old Program Title<br>Automotive Technology |  |              | New Program Title<br>Automotive Technology |   |              |
|--|--|--------------|--|---|--------------|
| OLD CURRICULUM                             |  |              | NEW CURRICULUM                             |   |              |
| Major Requirements                         |  |              | Major Requirements                         |   |              |
| Course No.                                 | Course Title   | Credit Hours | Course No.                                 | Course Title  | Credit Hours |
| AUTO 1000                                  | Intro to Automotive Technology                                       | 2            | AUTO 1000                                  | Intro to Automotive Technology  | 1            |
| AUTO 1001                                  | Intro to Automotive Technology Lab                                   | 1            | AUTO 1001                                  | Intro to Automotive Technology Lab  | 1            |
| AUTO 1100                                  | Engine Repair  | 2            | AUTO 1100                                  | Engine Repair   | 2            |
| AUTO 1101                                  | Engine Repair Lab  | 3            | AUTO 1101                                  | Engine Repair Lab   | 2            |
|  | CTC- Engine Repair Technician (8)                                    |              |  | CTC- Engine Repair Technician (6)   |              |
| AUTO 1200                                  | Automatic Transmission & Transaxle                                   | 2            | AUTO 1200                                  | Automatic Transmission & Transaxle  | 2            |
| AUTO 1201                                  | Automatic Transmission and Transaxle Lab                             | 3            | AUTO 1201                                  | Automatic Transmission and Transaxle Lab  | 2            |
| AUTO 1300                                  | Manual Drive Trains  | 2            | AUTO 1300                                  | Manual Drive Trains   | 2            |
| AUTO 1301                                  | Manual Drive Trains Lab  | 3            | AUTO 1301                                  | Manual Drive Trains Lab   | 2            |
|  | CTC- Transmission Technician (10)                                    |              |  | CTC- Transmission Technician (8)  |              |
| AUTO 1400                                  | Steering & Suspension  | 2            | AUTO 1400                                  | Steering & Suspension   | 2            |
| AUTO 1401                                  | Steering & Suspension Lab  | 3            | AUTO 1401                                  | Steering & Suspension Lab   | 3            |
| AUTO 1500                                  | Brakes   | 2            | AUTO 1500                                  | Brakes  | 2            |
| AUTO 1501                                  | Brakes Lab   | 2            | AUTO 1501                                  | Brakes Lab  | 2            |
|  | CTC- Steering and Brakes (9)   |              |  | CTC- Steering & Suspension and Brakes Technician (9)                            |              |
| AUTO 1600                                  | Electrical/Electronic I  | 2            | AUTO 1600                                  | Electrical/Electronic I   | 2            |
| AUTO 1601                                  | Electrical/Electronic I Lab  | 3            | AUTO 1601                                  | Electrical/Electronic I Lab   | 2            |
| AUTO 1610                                  | Electrical/Electronic II   | 2            | AUTO 1610                                  | Electrical/Electronic II  | 2            |
| AUTO 1611                                  | Electrical/Electronic II Lab   | 3            | AUTO 1611                                  | Electrical/Electronic II Lab  | 2            |
|  | CTC- Electrical Technician (10)                                      |              |  | CTC- Electrical Technician (8)  |              |
| AUTO 1700                                  | Heating & Air Conditioning   | 2            | AUTO 1700                                  | Heating & Air Conditioning  | 2            |
| AUTO 1701                                  | Heating & Air Conditioning Lab                                       | 3            | AUTO 1701                                  | Heating & Air Conditioning Lab  | 2            |
|  | CTC- Heating & Air Conditioning (8) (includes AUTO 1000 & AUTO 1001) |              |  | CTC- Heating & Air Conditioning Technician (6) (includes AUTO 1000 & AUTO 1001) |              |
| AUTO 1800                                  | Engine Performance I   | 2            | AUTO 1800                                  | Engine Performance I  | 2            |
| AUTO 1801                                  | Engine Performance I Lab   | 3            | AUTO 1801                                  | Engine Performance I Lab  | 3            |
| AUTO 1810                                  | Engine Performance II  | 2            | AUTO 1810                                  | Engine Performance II   | 2            |
| AUTO 1811                                  | Engine Performance Lab II  | 3            | AUTO 1811                                  | Engine Performance Lab II   | 3            |

|           |   |   |           |   |   |
|-----------|---|---|-----------|---|---|
| AUTO 1820 | Engine Performance III                  | 2 |           |   |   |
| AUTO 1821 | Engine Performance Lab III              | 3 |           |   |   |
|           | CTC- Engine Performance Technician (15) |   |           | CTC- Engine Performance Technician (10) |   |
| CLCR 2000 | Career Preparation                      | 2 | CLCR 2000 | Career Preparation                      | 2 |

### Certificate of Technical Studies Tracks

| Course No. | Course Title                             | Credit Hours | Course No. | Course Title                             | Credit Hours |
|------------|--|--------------|------------|--|--------------|
| AUTO 1000  | Intro to Automotive Technology           | 2            | AUTO 1000  | Intro to Automotive Technology           | 1            |
| AUTO 1001  | Intro to Automotive Technology Lab       | 1            | AUTO 1001  | Intro to Automotive Technology Lab       | 1            |
| AUTO 1100  | Engine Repair                            | 2            | AUTO 1100  | Engine Repair                            | 2            |
| AUTO 1101  | Engine Repair Lab                        | 3            | AUTO 1101  | Engine Repair Lab                        | 2            |
| AUTO 1200  | Automatic Transmission & Transaxle       | 2            | AUTO 1200  | Automatic Transmission & Transaxle       | 2            |
| AUTO 1201  | Automatic Transmission and Transaxle Lab | 3            | AUTO 1201  | Automatic Transmission and Transaxle Lab | 2            |
| AUTO 1300  | Manual Drive Trains                      | 2            | AUTO 1300  | Manual Drive Trains                      | 2            |
| AUTO 1301  | Manual Drive Trains Lab                  | 3            | AUTO 1301  | Manual Drive Trains Lab                  | 2            |
|            |  |              | AUTO 1400  | Steering & Suspension                    | 2            |
|            |  |              | AUTO 1401  | Steering & Suspension Lab                | 3            |
|            | CTS- Power Train Technician (18)         |              |            | CTS- Power Train Technician (19)         |              |
| AUTO 1000  | Intro to Automotive Technology           | 2            | AUTO 1000  | Intro to Automotive Technology           | 1            |
| AUTO 1001  | Intro to Automotive Technology Lab       | 1            | AUTO 1001  | Intro to Automotive Technology Lab       | 1            |
|            |  |              | AUTO 1500  | Brakes                                   | 2            |
|            |  |              | AUTO 1501  | Brakes Lab                               | 2            |
| AUTO 1600  | Electrical/Electronic I                  | 2            | AUTO 1600  | Electrical/Electronic I                  | 2            |
| AUTO 1601  | Electrical/Electronic I Lab              | 3            | AUTO 1601  | Electrical/Electronic I Lab              | 2            |
| AUTO 1610  | Electrical/Electronic II                 | 2            | AUTO 1610  | Electrical/Electronic II                 | 2            |
| AUTO 1611  | Electrical/Electronic II Lab             | 3            | AUTO 1611  | Electrical/Electronic II Lab             | 2            |
| AUTO 1700  | Heating & Air Conditioning               | 2            | AUTO 1700  | Heating & Air Conditioning               | 2            |
| AUTO 1701  | Heating & Air Conditioning Lab           | 3            | AUTO 1701  | Heating & Air Conditioning Lab           | 2            |
|            | CTS- Electrical Technician (18)          |              |            | CTS- Electrical Technician (18)          |              |
| AUTO 1000  | Intro to Automotive Technology           | 2            | AUTO 1000  | Intro to Automotive Technology           | 1            |
| AUTO 1001  | Intro to Automotive Technology Lab       | 1            | AUTO 1001  | Intro to Automotive Technology Lab       | 1            |
|            |  |              | AUTO 1600  | Electrical/Electronic I                  | 2            |
|            |  |              | AUTO 1601  | Electrical/Electronic I Lab              | 2            |
|            |  |              | AUTO 1610  | Electrical/Electronic II                 | 2            |
|            |  |              | AUTO 1611  | Electrical/Electronic II Lab             | 2            |

