### Pathway

**Statewide Pathway**

The Four Stroke Engine Tech graduation pathway is a Statewide pathway. Students must:
1) pass 9 Carnegie credits of courses from this pathway;
2) including at least one Career Readiness course (one Carnegie credit); and
3) attain one statewide credential (or the LCTCS equivalent certificate / diploma).

<table>
<thead>
<tr>
<th>High-Demand Careers Related to this Pathway</th>
<th>5 Star: First Line Supervisors of Mechanics, Installers, and Repairers,</th>
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<tbody>
<tr>
<td></td>
<td>4 Star: Farm Equipment Mechanics and Service Technicians, Maintenance and Repair Workers</td>
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<tr>
<td></td>
<td>2 Star: Outdoor Power Equipment and other Small Engine Mechanics, Landscaping and Groundskeeper Workers</td>
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| Starting Salary Ranges for this Pathway | $21,000 - $31,000 |

### Four Stroke Engine Tech Graduation Pathway: Sections

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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</table>
| 1       | **Pathway-Specific Courses**
This section lists the course titles and codes for courses specific to this pathway.
Each table also indicates those courses that qualify for the basic 6% CTE adder *(course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses)* as well as those courses that qualify for the additional 6% Career Development Fund (or CDF) payment. |
| 2       | **Universal Jump Start Courses**
This section lists the course titles and course codes for courses that are part of every Jump Start graduation pathway. |
| 3       | **Career Readiness Courses**
This section lists the course titles and codes for courses that qualify as Career Readiness Courses. Students must pass at least one Carnegie credit of Career Readiness courses, but may apply more than one Career Readiness course to their 9 credit Jump Start graduation requirement. |
| 4       | **Internships**
This section indicates the three types of internships and the appropriate course codes. |
| 5       | **Culminating Credentials**
This section indicates the required culminating credential(s) for this pathway. |
| 6       | **Sample Schedule**
This section provides a sample schedule for students pursuing this graduation pathway. Each high school will develop its own standard schedules for Jump Start students. |

Approved 2017-2018 Graduation Pathway  
Effective as of: August 31, 2017  
page 1 of 40
**Jump Start Graduation Pathway Revision Policy**

Jump Start graduation pathways are continuously updated. Please use the most updated graduation pathways.  

*Future changes to Jump Start graduation pathways will always increase student opportunities. No one will ever need to compare an old pathway with an updated pathway.*

Please send any recommended graduation pathway changes to JumpStart@la.gov using the subject line: *Recommended Graduation Pathway Change.*

The Department reserves the right to make administrative updates to Jump Start graduation pathways, including but not limited to updating course codes, correcting errors on course codes, correcting spelling errors and other similar changes.

The Department reserves the right to delete courses no longer meeting state standards. When this occurs, the Department may add a section to the graduation pathway indicating: “Courses Deleted from this Graduation Pathway.”

The Department reserves the right to make changes on credentialing requirements based on guidance provided by the Jump Start Graduation Pathways Review Panel. (Please see the *All Things Jump Start* web portal for information about this Panel.) The Department will also maintain contact with certifying agencies and the Workforce Investment Council (WIC) to update the Statewide, Core and Complementary credentials indicated in each graduation pathway.

*Louisiana educators can seek assistance with Jump Start graduation pathways at any time by emailing their questions to JumpStart@la.gov*

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**Help Resources**

The updated portal provides easier access to:

- updated Jump Start graduation pathways;
- updated industry credential fact sheets that provide comprehensive details on over 100 Jump Start industry credentials;
- guidance on how your school can implement workplace internships and virtual workplace experiences; *and much, much more.*
## Pathway-Specific Courses: Four Stroke Engine Tech

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LCTCS course(s) that generate Dual Enrollment credit aligned with approved pathway courses

* Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.

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Approved 2017-2018 Graduation Pathway

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*- Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: *course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.
Career Readiness Courses – these courses are part of every Jump Start pathway

These courses all qualify as Career Readiness courses. Every Jump Start student must take a minimum of one Carnegie credit of Career Readiness courses.

There is no limit on the number of Career Readiness course credits a student may apply to the 9 CTE course credit requirement for the Jump Start Career Diploma.

Career Readiness courses are universal courses – they apply to every Jump Start graduation pathway.

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<thead>
<tr>
<th>Course Title</th>
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*- Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.
Internships, Cooperative Courses and Virtual Workplace Experience Courses

Cooperative courses, Virtual Workplace Experience courses, Pre-Apprenticeship and Internships (with the exception of Non-CTE Internships) are universal courses - they apply to every Jump Start graduation pathway.

Internships

There are three types of internships:

1) **CDF-Qualifying Internships** where students are placed in a company that operates in one of the WIC-approved high-demand industry sectors. CDF-Qualifying Internships qualify for both the 6% MFP adder paid for all CTE courses and the 6% Career Development Fund (CDF) adder;

2) **CTE Internships** where students are placed in a company that operates in any other industry sectors. CTE Internships qualify only for the 6% MFP adder for all CTE courses; and

3) **Non-CTE Internships** where students are placed in a non-business internship. Non-CTE Internships do not qualify for any MFP adder.

Examples of Non-CTE Internships include internships at a school office, a volunteer organization or a religious organization. **Non-CTE Internships are not part of any Jump Start graduation pathway.**

WIC-Approved High-Demand Industry Sectors

Internships that qualify for the 6% CDF payment must be in a WIC-approved high-demand industry sector.

- Automotive Service/Repair
- Construction Crafts
- Culinary (only for students pursuing the statewide ProStart/ SafeServ credentials)

- Healthcare
- HVAC
- Information Technology

- Manufacturing
- Pharmacy
- Transportation and Logistics

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## Internships

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<tr>
<th>Course Title</th>
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Non-CTE Internships are not part of any Jump Start graduation pathway.

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## Virtual Workplace Experience Courses approved for 2016-2017

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<td>CTE 6%</td>
<td>CDF 6%</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------</td>
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</tr>
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<td>CDF-QUALIFYING PRE-APPRENTICESHIP I (1 CREDIT)</td>
<td>080230</td>
<td>1</td>
<td>✔️</td>
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<tr>
<td>CDF-QUALIFYING PRE-APPRENTICESHIP II (1 CREDIT)</td>
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<tr>
<td>CDF-QUALIFYING PRE-APPRENTICESHIP II (2 CREDITS)</td>
<td>080234</td>
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<td>CDF-QUALIFYING PRE-APPRENTICESHIP III (1 CREDIT)</td>
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<td>CDF-QUALIFYING PRE-APPRENTICESHIP III (2 CREDITS)</td>
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<td>✔️</td>
<td>✔️</td>
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<tr>
<td>CDF-QUALIFYING PRE-APPRENTICESHIP IV (1 CREDIT)</td>
<td>080239</td>
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<td>✔️</td>
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</tr>
<tr>
<td>CDF-QUALIFYING PRE-APPRENTICESHIP IV (2 CREDITS)</td>
<td>080240</td>
<td>2</td>
<td>✔️</td>
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</tr>
</tbody>
</table>
### Culminating Credential(s)

To graduate using a Statewide graduation pathway students must attain only the Statewide credential (which is approved by the Workforce Investment Council) or the equivalent LCTCS Certificate of Technical Studies / Technical Diploma.

- Students who graduate with a Basic Statewide credential earn their school 110 accountability points.
- Students who graduate with an Advanced Statewide credential earn their school 150 accountability points.

<table>
<thead>
<tr>
<th>Culminating Credential(s) / Certifying Industry Agency(ies)</th>
<th>ADVANCED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attain a Louisiana post-secondary institution Technical Diploma (TD) or above aligned with this pathway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BASIC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment and Engine Training Council (EETC) Four-Stroke Gas Engine</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>Attain a Louisiana post-secondary institution Certificate of Technical Studies (CTS) aligned with this pathway</td>
</tr>
</tbody>
</table>
Sample Schedule

This schedule is only one example of how a student can meet the requirements of this pathway and graduate on time with the required culminating credential(s).

Each high school will develop its own standard schedules for Jump Start students based on the courses available to its students (in school, at the local technical college, or via Course Choice).

<table>
<thead>
<tr>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I</td>
<td>Business Math</td>
<td>Financial Literacy</td>
<td>Math Essentials</td>
</tr>
<tr>
<td>English I</td>
<td>English II</td>
<td>English III</td>
<td>Business English</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>Biology</td>
<td>U.S. History</td>
<td>Oil and Gas Production</td>
</tr>
<tr>
<td>Civics</td>
<td>Outdoor Power Equipment 1</td>
<td>Outdoor Power Equipment 2</td>
<td>T-2 Safety Systems</td>
</tr>
<tr>
<td>IBCA</td>
<td>NCCER Core</td>
<td>Auto Technician 1</td>
<td>Auto Technician 2</td>
</tr>
<tr>
<td>Journey to Careers</td>
<td>Elective</td>
<td>Elective Course</td>
<td>Elective Course</td>
</tr>
<tr>
<td>Physical Education I</td>
<td>Physical Education II / Health</td>
<td>Elective Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 credits</td>
<td>7 credits</td>
<td>7 credits</td>
</tr>
<tr>
<td>Credential Earned by this Hypothetical Student</td>
<td>Equipment and Engine Training Council (EETC) Four-Stroke Gas Engine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bold italicized courses count as one of the required 9 Carnegie credits for graduating via this CTE pathway

Every Pathway Can be Adapted for Students Meeting Act 833 (2014) Eligibility Criteria

Every Jump Start graduation pathway can be adapted for students with disabilities who meet Act 833 (2014) eligibility criteria. Students must complete nine credits of CTE courses from the courses listed in the pathway. The IEP team has the authority to determine the credentialing level a student must achieve for the purposes of graduation (analogous to using individual performance criteria to meet EOC requirements for the purposes of graduation).

IEP teams with questions about how to adapt this graduation pathway for their student should contact JumpStart@la.gov

Approved 2017-2018 Graduation Pathway

Effective as of: August 31, 2017