

# Environmental Protection and Sustainability

<b>K-16 Pathway</b>	The Environmental Protection and Sustainability graduation pathway is a K-16 pathway. Students must pass 8 of the Environmental Protection and Sustainability courses listed on this pathway (see below)	
<b>High-Demand Careers Related to this Pathway</b>	5 Star: Environmental Engineer, Wastewater Engineer 4 Star: Compliance Officer, Conservation Scientist, Environmental Technicians	
<b>Starting Salary Ranges for this Pathway</b>	\$35,000 - \$55,000	
<b>Environmental Protection and Sustainability Graduation Pathway: Sections</b>		
1	<b>Pathway-Specific Courses</b>	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 ( <i>course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses</i> ) as well as those courses that qualify for the additional 6% Career Development Fund (or CDF) payment.
2	<b>Universal Jump Start Courses</b>	This section lists the course titles and course codes for courses that are part of every Jump Start graduation pathway. <b>Universal courses may <i>not</i> substitute for the eight required courses on this pathway.</b>
3	<b>Career Readiness Courses</b>	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.
4	<b>Internships</b>	This section indicates the three types of internships and the appropriate course codes. <b>Internships may <i>not</i> substitute for the eight required courses on this pathway.</b>
5	<b>Culminating Credentials</b>	This section indicates the required culminating credential(s) for this pathway.

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**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](mailto: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](mailto:JumpStart@la.gov)**

**Help Resources**

Please see the updated *All Things Jump Start* web portal: <http://www.louisianabelieves.com/courses/all-things-jump-start/> 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.*

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**Pathway-Specific Courses: Environmental Protection and Sustainability**

Unlike other Jump Start pathways, this pathway requires students to complete the eight courses listed below. All courses below are offered in partnership with local colleges and universities.

Course Title		Course Code	Carnegie Credits	CTE 6%	CDF 6%
<b>REQUIRED COURSES</b>	Louisiana Wetlands Ecology	312090	1	✓	✓
	Intro to Maritime Careers & Opportunities*	312091	1	✓	✓
	Introduction to History of Water Management	312092	1		
	Environmental Awareness	312093	1	✓	✓
	Physical Geography	010100	1	✓	✓
	Introductory Statistics	010101	1		
	Elementary Surveying Measurements	010102	1	✓	✓
<b>CHOOSE 2 COURSES</b>	AP Biology	150307	1		
	AP Statistics	160352	1		
	AP Human Geography	220310	1		
	GIS Entry Level 1	010103	1	✓	✓
	GIS Entry Level 2	010104	1	✓	✓
	Water Production Operator – DCC	110500	1	✓	✓
	Water Treatment Operator – DCC	110501	1	✓	✓
	Water Distribution Operator – DCC	110502	1	✓	✓

\* - This course will be used as a Career Readiness course and count towards the requirement of 9 Carnegie credits for the Environmental Protection and Sustainability graduation pathway

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<b>Career Readiness Courses</b>
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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.**

Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%
AgriScience I*	010301	1	✓	
Career Readiness Agriscience Agribusiness Natural Resources	010331	1	✓	
JAG I	042010	1	✓	✓
JAG II	042020	1	✓	✓
Education for Careers	080400	½	✓	
Education for Careers	080401	1	✓	
Journey to Careers Part 1	080402	½	✓	
Journey to Careers	080403	1	✓	
Journey to Careers Part 2	080404	½	✓	
Education for Careers Part I	080405	½	✓	
Education for Careers Part II	080406	½	✓	
Basic Career Readiness	080409	1	✓	
Advanced Career Readiness (including regionally-developed Career Readiness Courses)	080410	1	✓	
Quest for Success Career Readiness	080411	1	✓	✓

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

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**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.**

<b>WIC-Approved High-Demand Industry Sectors</b>		
Internships that qualify for the 6% CDF payment <u>must</u> be in a WIC-approved high-demand industry sector.		
<ul style="list-style-type: none"> <li>● Automotive Service/Repair</li> <li>● Construction Crafts</li> <li>● Culinary (<u>only</u> for students pursuing the statewide ProStart/ ServSafe credentials)</li> </ul>	<ul style="list-style-type: none"> <li>● Healthcare</li> <li>● HVAC</li> <li>● Information Technology</li> </ul>	<ul style="list-style-type: none"> <li>● Manufacturing</li> <li>● Pharmacy</li> <li>● Transportation and Logistics</li> </ul>

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<b>Internships</b>				
Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%
CDF-Qualifying CTE Internship I (2 CREDITS)	080200	1	✓	✓
CDF-Qualifying CTE Internship II (2 CREDITS)	080201	2	✓	✓
CDF-Qualifying CTE Internship I (1 CREDIT)	080202	1	✓	✓
CDF-Qualifying CTE Internship II (1 CREDIT)	080203	2	✓	✓
CTE Internship I (1 credit; Non-CDF)	110402	1	✓	
CTE Internship I (2 credits; Non-CDF)	110403	2	✓	
CTE Internship II (1 credit; Non-CDF)	110404	1	✓	
CTE Internship II (2 credits; Non-CDF)	110405	2	✓	
<b>Non-CTE Internships are <u>not</u> part of any Jump Start graduation pathway.</b>				
Non-CTE Internship I	400200	1		
Non-CTE Internship I	400210	2		
Non-CTE Internship II	400220	2		
Non-CTE Internship II	400230	1		

<b>Virtual Workplace Experience Courses approved for 2016-2017</b>				
Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%
Virtual Workplace Experience I	080204	½	✓	
Virtual Workplace Experience I	080205	1	✓	
Virtual Workplace Experience II	080206	½	✓	✓
Virtual Workplace Experience II	080207	1	✓	✓

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Authentic Workplace Experience	080212	1	✓	
<b>Cooperative Courses</b>				
<b>Course Title</b>	<b>Course Code</b>	<b>Carnegie Credits</b>	<b>CTE 6%</b>	<b>CDF 6%</b>
Cooperative AgriScience Education I	010323	3	✓	
Cooperative AgriScience Education II	010325	3	✓	
Cooperative Office Education	040205	3	✓	
Cooperative Marketing Education I	041010	3	✓	
Cooperative Marketing Education II	041011	3	✓	
General Cooperative Education I	080300	3	✓	
General Cooperative Education II	080301	3	✓	
Cooperative Health Occupations	090004	3	✓	
Cooperative Family and Consumer Services	100800	3	✓	
Cooperative Technology Education	110098	3	✓	

<b>Pre-Apprenticeship Courses</b>				
<b>Course Title</b>	<b>Course Code</b>	<b>Carnegie Credits</b>	<b>CTE 6%</b>	<b>CDF 6%</b>
Pre-Apprenticeship I (2 credits)	080208	2	✓	
Pre-Apprenticeship II (2 credits)	080209	2	✓	
Pre-Apprenticeship I (1 credit)	080210	1	✓	
Pre-Apprenticeship II (1 credit)	080211	1	✓	

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<b>CDF-Qualifying Pre-Apprenticeship Courses</b>				
<b>Course Title</b>	<b>Course Code</b>	<b>Carnegie Credits</b>	<b>CTE 6%</b>	<b>CDF 6%</b>
CDF-QUALIFYING PRE-APPRENTICESHIP I (1 CREDIT)	080230	1	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP I (2 CREDITS)	080231	2	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP II (1 CREDIT)	080233	1	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP II (2 CREDITS)	080234	2	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP III (1 CREDIT)	080236	1	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP III (2 CREDITS)	080237	2	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP IV (1 CREDIT)	080239	1	✓	✓
CDF-QUALIFYING PRE-APPRENTICESHIP IV (2 CREDITS)	080240	2	✓	✓



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<b>Culminating Credential(s)</b>
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<b>Statewide Credentials</b>	
<p><b><u>ADVANCED:</u></b></p> <ol style="list-style-type: none"> <li>1) Attain a Louisiana post-secondary institution Technical Diploma (TD) or above aligned with this pathway</li> <li>2) Associate of Applied Science Maritime Technology (AAS)</li> </ol>	<p><b><u>BASIC:</u></b></p> <ol style="list-style-type: none"> <li>1) GIS Technician Level 1 – STARS GIS</li> <li>2) S/P2 Automotive Safety and Pollution Prevention</li> <li>3) Attain a Louisiana post-secondary institution Certificate of Technical Studies (CTS) aligned with this pathway (CTS General Marine Transportation Technology)</li> </ol>

<b>Regional Credentials</b>
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<p>Culminating Credential(s) / Certifying Industry Agency(ies)</p>	<p><b><u>Core Credentials: students must attain one credential from the list below:</u></b></p> <ol style="list-style-type: none"> <li>1) Water Production Operator</li> <li>2) Water Treatment Operator</li> <li>3) Water Distribution Operator</li> <li>4) Completion of 8 main pathway course will constitute a Regional Core Credential</li> </ol>
	<p><b><u>Complementary Credentials: students must attain two credentials from the list below:</u></b></p> <p><b>Complementary Credentials</b></p> <ol style="list-style-type: none"> <li>1) Basic Safety Orientation - Association of Reciprocal Safety Councils</li> <li>2) First Aid for Students Certification – American Red Cross, American Heart Association, National Safety Council or approved equivalent or approved equivalent*</li> <li>3) OSHA 10 – General Industry - OSHA Certificate of Completion</li> <li>4) OSHA 10 – Construction - OSHA Certificate of Completion</li> </ol>

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	<p>* - Jump Start policy is flexible in recognizing all legitimate First Aid programs. Currently-approved First aid for Student Certification include American Red Cross, American Heart Association and National Safety Council. If a district or charter school wants to use a different First Aid certification, they must provide Jump Start with evidence that their intended First Aid certification includes all required components as well as a practical certification. Successful completion of First Aid certification requirements in Regional and Integrated pathways may include First Aid only, CPR and AED only, or a comprehensive combination of First Aid, CPR and AED.</p> <p><b>Recommended Computer Literacy Complementary Credentials</b></p> <ol style="list-style-type: none"> <li>1) Microsoft Office Specialist Excel – Microsoft and Certiport</li> <li>2) Microsoft Office Specialist PowerPoint – Microsoft and Certiport</li> <li>3) Microsoft Office Specialist Word – Microsoft and Certiport</li> </ol>
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<b><i>Every Pathway Can be Adapted for Students Meeting the April Dunn Act Eligibility Criteria</i></b>
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***Every Jump Start graduation pathway can be adapted for students with disabilities who meet the April Dunn Act 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](mailto:JumpStart@la.gov)