



## TOPS University Associate of Applied Science in Technical Studies: Industrial Marine Electronics Postsecondary Partner: South Louisiana Community College

## Overview

The Industrial Marine Electronics Technology program provides specialized classroom instruction and practical shop experience to prepare students for employment in a variety of jobs in the field of Industrial Marine Electronics. The program includes instructions in using motors, mechanical diagrams/schematics, radar, fiber optics, laser technology, computer applications, telecommunications, microwave, hydraulics, PLC, video industrial controls, industrial wiring, diagnostic and troubleshooting techniques and the use of testing equipment.

## Capstone Credentials

| Regional (emerging)   | Basic  | Advanced   | Fast Forward<br>Advanced Plus  |
|---|--|--|--|
| - <u>Maritime Safety</u><br><u>Credentials Suite: Personal</u><br><u>Safety/Social</u><br><u>Responsibilities, Basic</u><br><u>Water Survival, Basic</u><br><u>Firefighting AND Basic First</u><br><u>Aid/CPR AED</u><br>-PEC Basic | -Certificate of Technical<br>Studies: Electronics<br>Technician<br>-Certificate of Technical<br>Studies: Industrial Marine<br>Electronics and Hydraulics<br>Technician | -Technical Diploma:<br>Industrial Marine<br>Electronics Technology | -Associate of Applied<br>Science (Technical Studies):<br>Industrial Marine<br>Electronics Technology |

## \*Core Academic Course

\*\*Jump Start CTE Course

| Grade 9                      |  |  |  |  |
|------------------------------|--|--|--|--|
| Semester 1                   | Semester 2   |  |  |  |
| LDOE Course/Code             | LDOE Course/Code   |  |  |  |
| *English I 120331            | *English II 120332   |  |  |  |
| *Algebra I 160321            | *Algebra II 160322   |  |  |  |
| *World Geography 220300      | *Environmental Science: AP Environmental Science<br>150311 or Earth Science 150901 |  |  |  |
| *Physical Education I 190105 | *½ Physical Education II 190106 ½ Health Education 190500                          |  |  |  |





| Grade 10              |                      |  |  |
|-----------------------|----------------------|--|--|
| Semester 1            | Semester 2           |  |  |
| LDOE Course/Code      | LDOE Course/Code     |  |  |
| *Geometry 221001      | *Core art selection  |  |  |
| *Biology 321001       | *U.S. History 411001 |  |  |
| *World History 451001 | *Chemistry I 331001  |  |  |
| *Foreign Language I   | *Foreign Language II |  |  |

Additional and/or equivalent TOPS core aligned courses can be found in Bulletin 741.

| Grade 11                                    |   |  |   |  |  |
|---|---|--|---|--|--|
| Semester 1                                  |   | Semester 2   |   |  |  |
| Postsecondary Course                        | LDOE Course/Code  | Postsecondary Course                                     | LDOE Course/Code  |  |  |
| *Rhetoric & Composition<br>ENG 1010         | *English III: DE - CENL 1013<br>English Composition I<br>120601           | *College Algebra MATH<br>1105                            | *Algebra III: DE - CMAT<br>1213 College Algebra<br>160500 |  |  |
| *Environmental Science<br>ENSC 1000         | *Environmental Science: DE<br>- CEVS 1103 Environmental<br>Science 150914 | **Semiconductors and<br>Transistor Circuits IMEL<br>1206 | **DE Semiconductors and<br>Transistor Circuits 891304     |  |  |
| **Direct Current Circuits<br>IMEL 1005      | **DE Direct Current Circuits<br>890812                                    | **Digital Circuits IMEL<br>1307                          | **DE Digital Circuits 890811                              |  |  |
| **Alternating Current<br>Circuits IMEL 1105 | **DE Alternating Current<br>Circuits 890810                               |  |   |  |  |





| Grade 12                                    |  |  |   |  |
|---|--|--|---|--|
| Semester 1                                  |  | Semester 2   |   |  |
| Postsecondary Course                        | LDOE Course/Code   | Postsecondary Course   | LDOE Course/Code  |  |
| *American National<br>Government POLI 1100  | *US Government: DE - CPOL<br>2013 Intro to American<br>Government 220514 | *Introduction to Fiction<br>ENG 2055 or British<br>Literature ENG 2020 | *English IV: DE - CENL 2303<br>Introduction to Fiction<br>120614 or CENL 2103<br>British Literature I<br>120608 |  |
| **Industrial Marine<br>Hydraulics IMEL 1406 | **DE Industrial Marine<br>Hydraulics 891301                              | **Advanced Remote<br>Operated Vehicles IMEL<br>1805                    | **DE Remote Controlled<br>Vehicle Technologies<br>110796  |  |
| **Motor Controls IMEL<br>1503               | **DE Motor Controls<br>891302  | **Programmable Logic<br>Controllers IMEL 1603                          | **DE Programmable Logic<br>Controllers 891303   |  |
| **Remote Operated<br>Vehicles IMEL 1705     | **DE Introduction to<br>Remote Controlled Vehicle<br>Technologies 110795 | **Basic Industrial<br>Scaffolding (SLCC<br>Corporate College)          | **DE Fundamentals of<br>Industrial Scaffolding<br>310631  |  |
|   |  | **Marine Operations<br>(SLCC Corporate College)                        | **DE Marine Operations<br>312100  |  |

This pathway framework is an outline of how the approved courses can be implemented. Schools may opt to rearrange the order of course sequencing in order to meet local scheduling requirements. Additionally, Fast Forward pathways are dynamic and the Jump Start Review panel will consider course equivalents on an as needed basis.