

Coastline Community College
Military Program
Associate in Arts (AA) Degree
Major: Electronics

This sequence of classes is designed to give the student a solid foundation in Electronics using applied theory to solve practical applications utilizing the materials and forces of nature for the benefit of society. Students who successfully complete this sequence of classes will be able to pursue a Bachelor's degree in Engineering, Engineering Technology, or be employed as a skilled productive member of an Engineering team in Industry. Area of interest in this program include: theory and application of electric and electronic systems and components, including circuits, electro-magnetic fields, energy sources, communications devices, computers, and other components and devices powered by electricity. Design, assembly, installation, operation, maintenance, and repair of electronic equipment used in industry and manufacturing including the fabrication and assembly of related components. Design, development, testing, and maintenance of electro-mechanical and servo-mechanical devices and systems.

Courses denoted in **bold** are available online through Coastline's Military Program. Other course requirements may be met by coursework completed at another regionally accredited institution and ACE recommended credits.

Navy Ratings applicable to this degree major (**see below**).

Total Semester Hours Required: 24-25 SH

Required courses: 14 SH

| | | |
|-----------|-----------------------------|------|
| ELEC C101 | Introduction to Electronics | 3 SH |
| ELEC C102 | D/C Circuits | 4 SH |
| ELEC C103 | A/C Circuits | 4 SH |
| ELEC C104 | Digital Circuits | 3 SH |

Program Electives: Choose 10 – 11 SH from courses listed below:

| | | |
|-----------|--|------|
| ELEC C204 | Semiconductor Devices & Circuits | 4 SH |
| ELEC C210 | Analog Electric Circuit Analysis | 4 SH |
| ELEC C230 | Advanced Digital Electronics | 3 SH |
| ELEC 284 | **Work Based Learning | 4 SH |
| ELEC C272 | Electronic Manufacturing | 3 SH |
| ELEC C280 | Basic Electrical Machines | 4 SH |
| ELEC C240 | Microcomputer Systems & Assembly Programming | 4 SH |

** 4 SH for Work Based Learning is satisfied for Military Rank E4 and higher and for Rates that include AT, CTM, ET, FC, FT and MT or military occupations with ACE recommended credit in Electronics.

2009 SMOLAA RATING GRID

RATE: AT

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 2 | 8 | 9 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 5 | 35 | 36 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: CTM

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 7 | 9 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 34 | 36 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: ET

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 5 | 13 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 32 | 40 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: ET NUC

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 5 | 13 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 32 | 40 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: FC

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 13 | 13 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 40 | 40 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: FT

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 13 | 13 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 40 | 40 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.

RATE: MT

DEGREE: ELECTRONICS

| | Seaman | 3rd Class | 2nd Class | 1st Class | Chief | Sr Chief | Master Chief |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| RANK | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Recruit Training (Satisfies Self Development Req.) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| MC Military Training (A School & Rating)-Major | 0 | 24 | 24 | 24 | 24 | 24 | 24 |
| Electives | 6 | 13 | 13 | 13 | 13 | 13 | 13 |
| *Total Possible ACE Credit Awarded: | 9 | 40 | 40 | 40 | 40 | 40 | 40 |

*Credits may vary depending on individual assessment. Credit evaluated from training experience and course work may not be duplicated.