

# Engineering Technology

- **Associate in Applied Science-Transfer Degree**

Wenatchee Valley College's Engineering Technology AAS-T is a two-year program geared for today's high technology-based job market. It closely couples electrical and automation principles with high-level math and science coursework. The degree's primary focus is to have graduates that can integrate complex repairs and upgrades fresh off the planning stage and see them to completion. This degree can offer students three paths to follow after graduation:

- The first path: Technician level employment. The two-year degree earning student will be qualified for similar employment as our ATS graduates in INDT-Industrial Electricity. With the increased quantity of college-level courses, these graduates should be more apt to take on leadership roles within their chosen fields.
- The second path: This degree allows seamless transfer into our four-year BAS-ET program. It encompasses all the classes required to make the BAS-ET program a true four-year time investment.
- The third path: With the addition of two extra quarters of course work, the AAS-T degree will provide the student with enough credits to also earn a two-year transfer degree (DTA). The DTA will allow them to pursue engineering or similar degree at other four-year institutions.

## Program outcomes:

Graduates of the AAS-T degree program at WVC should:

- Be able to apply their knowledge of the discipline to identify, analyze, synthesize, and solve problems within the field of engineering technology.
- Possess the technical skills to be immediately productive in the workforce and have successful careers in regional, state, or national electronic and mechanical product and system development industries.
- Utilize effective management methods with a commitment to quality, timeliness, and efficiency.
- Be able to successfully communicate in oral, written, and visual modalities.
- Demonstrate increasing levels of leadership and responsibility during their careers.

- Have demonstrated professionalism and ethics understanding, respect for diversity, and awareness of societal and global issues.
- Display a desire and commitment for life-long learning through continued education, technical training, and/or professional development.

## Pre-enrollment requirements

- Math 099 with a B or better, Math 140, or appropriate placement score.
- Appropriate assessment scores in language usage and reading or a grade of "C" or higher in ENGL 097 or a grade of "B-" or higher in ABE 019 or a grade of "B" or higher in the Bridge-to-College English Language Arts course or a grade of "3" or higher on the Smarter Balanced exam.
- One year of high school chemistry or CHEM& 121, or a grade of "3" or higher on the Smarter Balanced exam or instructor's permission.

## Additional requirements:

- To be eligible for the AAS-T degree, students must earn at least a "C" grade (2.0) and a cumulative 2.0 grade point average.
- The courses listed under the suggested course sequence must be part of the 90-course credits.

## Engineering Technology (continued)

**Suggested Course Sequence: Associate in Applied Science-  
Transfer Degree Program**

*Offered at Wenatchee campus*

### First Year

| Fall Quarter |                                 | Credits |
|--------------|---------------------------------|---------|
| ELEC 115     | Applied Electricity .....       | 5       |
| MATH&141     | Precalculus I.....              | 5       |
| PHYS&114     | General Physics I with lab..... | 5       |

### Winter Quarter

|           |                                   |   |
|-----------|-----------------------------------|---|
| ELTRO 121 | Digital Electronics .....         | 5 |
| ELEC 125  | Wiring Diagrams & Schematics..... | 5 |
| MATH&142  | Precalculus II.....               | 5 |
| PHYS&115  | General Physics II with lab ..... | 5 |

### Spring Quarter

|           |                                   |   |
|-----------|-----------------------------------|---|
| ELEC 135  | Control Fundamentals.....         | 5 |
| ELTRO 132 | Introduction to PLCs.....         | 5 |
| MATH&146  | Introduction to Stats .....       | 5 |
| PHYS&116  | General Physics III with lab..... | 5 |

**Total Credits for First Year: 55**

### Second Year

| Fall Quarter |                                   | Credits |
|--------------|-----------------------------------|---------|
| CHEM&161     | General Chemistry I with lab..... | 5       |
| CMST&220     | Public Speaking.....              | 5       |
| ENGL&101     | Composition: General .....        | 5       |
| ELTRO 101    | Basic DC-1 .....                  | 5       |

### Winter Quarter

|           |                                     |   |
|-----------|-------------------------------------|---|
| CHEM&162  | General Chemistry II with lab ..... | 5 |
| ELTRO 220 | Robotics and Automation.....        | 5 |
| ENGL&235  | Technical Writing.....              | 5 |
| ENGR 105  | Computer Aided Design.....          | 5 |

### Spring Quarter

|           |  |   |
|-----------|--|---|
| CHEM&163  | General Chemistry III with lab.....            | 6 |
| ELTRO 240 | Hydraulics and Pneumatics.....                 | 5 |
| ENGR 106  | Computer Aided Design -<br>Solid Modeling..... | 4 |

**Total Credits for Second Year: 55**

**Total Credits for Degree: 110**