<table>
<thead>
<tr>
<th>Course #</th>
<th>Description</th>
<th>AS-CompE/EE MRP</th>
<th>AS-T2</th>
<th>UW</th>
<th>Seattle</th>
<th>Tacoma</th>
<th>Bothell</th>
<th>Pullman</th>
<th>Pullman, Everett</th>
<th>Seattle</th>
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<td>Math&amp; 151, 152, 153</td>
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<td>Not at TCC</td>
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<td>Hum and Soc Sci</td>
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<td>Gen- see back</td>
<td>Gen - see back</td>
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**TCC Key:**
- **R** = Required for the associate's degree. The AS-T2 requires a minimum of 32 additional advisor-approved college level credits. Advisor approval required for Chem& 161 substitution.
- **S** = Specialization Course - Minimum of 5 courses for AS-CompE/EE MRP. You may need to take more than the minimum to meet university requirements. May also be used in the AS-T2.
- **√** = Required for admission or certification to the department. For UW, √-app class must be completed by April 5. √-enr by Fall start at UW.
- **G** = Graduation requirement for the Bachelor of Science at the university. These are freshman/sophomore level courses so take now, if possible.
- **=** = Meets an additional requirement. The university requires the selection of additional classes from specific lists for the BS. Gen = Meets General Education requirement
- **P** = Provides preparation for junior level university coursework and/or for the FE/EIT exam, the first step to being licensed.
- **Gen** = May be used as general education credit within the university BS degree.
- **A** = Meets an additional requirement. The university requires the selection of additional classes from specific lists for the BS. Gen = Meets General Education requirement
- **Hum and Soc Sci** = May be used as general education credit within the university BS degree.

**University Key:**
- **√** = Required for admission or certification to the department. For UW, √-app class must be completed by April 5. √-enr by Fall start at UW.
- **G** = Graduation requirement for the Bachelor of Science at the university. These are freshman/sophomore level courses so take now, if possible.
- **Gen** = May be used as general education credit within the university BS degree.
- **P** = Provides preparation for junior level university coursework and/or for the FE/EIT exam, the first step to being licensed.
- **Hum and Soc Sci** = May be used as general education credit within the university BS degree.

**Additional notes:**
- Economics is recommended. Eng& 104 counts as either a Specialization course or a Social Science, but not both. The AS degrees require 15 credits of Humanities and Social Science. At least 5 credits must be a Humanities and 5 credits must be a Social Science. One class must meet the multicultural requirement. See approved lists. Universities may have specific course Humanities/Social Science course requirements.
- WSU Software E: Chem& 161/162 may be substituted for Phys& 221/222. Require Java or C++ equivalent to both WSU's Cpts 131 and 132 or Cpts 121 and 122.
- While TCC's Engr& 204 has a lab, and course equivalency for WSU's EE 261 and 262, not all community college circuits courses transfer. Check with WSU academic coordinator.

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**Course #**

- Math& 151, 152, 153
- Math& 254
- Math 238
- Math 220
- Phys& 221
- Phys& 222
- Phys& 223
- Biol& 221
- Chem& 161
- Chem& 162
- Engr& 104
- Engr& 204
- Engr& 214
- Engr& 215
- Engr& 224
- Engr 240
- Not at TCC
- CS 142
- CS 143
- Eng& 101
- Eng& 235
- Hum and Soc Sci

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**Description**

- Calculus 1, 2, 3
- Calculus 4
- Differential Equations
- Linear Algebra
- Calc Based Physics 1
- Calc Based Physics 2
- Calc Based Physics 3
- Intro to Evol, Ecol & Biodiv
- General Chem 1
- General Chem 2
- Intro to Design
- Electric Circuits
- Statics
- Dynamics
- Thermodynamics
- App Numerical Methods
- Digital Logic
- Microprocessors
- Electric Circuits 2
- Signals & Systems
- Java 1
- Java 2
- English Comp 1
- Technical Writing
- Human and Social Sciences
Computer Engineering Program Requirements

Tacoma Community College
Students should generally be working toward one of three associate's degrees: 1) the Associate of Science - Computer Engineering and Electrical Engineering - Major Related Program (AS-CompE/EE - MRP), 2) the Associate of Science - Track 2 (AS-T2), and/or 3) the Associate of Arts DTA (AA-DTA). It is important to understand the distinctions. While the AS-CompE/EE-MRP works very well for most electrical engineering students, it generally requires courses that are not needed for computer engineering students. For this reason, we generally recommend the AS-T2, which is less restrictive. The AA-DTA degree is intended for students to complete their general education requirements and is usually a poor fit for engineering students. Some universities give specific benefits for one or more of these degrees. Although we occasionally advise transferring without a degree, please transfer courses back to complete the degree. TCC funding is tied to associate's degree completion, so you help future students by finishing your degree. You may earn more than one degree from TCC, but must have an additional 30 credits for each degree.

University of Washington - Seattle
You must apply to both the university and the major. The Computer Engineering department admits transfer students for spring and fall quarters. Spring quarter deadlines are Dec. 15 for the university and Jan. 15 for the department. Fall quarter deadlines are Feb. 15 for the university and April 5 for the department. (There may be other deadlines for international students.) Some classes must be completed before you apply (V-app). Some courses must be completed before you start in the program (V-eng). University of Washington requires core requirements from high school. This applies even if high school was years ago! High school is considered to start in 9th grade. The core requirements are 4 years of English, 3 years of math, 3 years of social science, 2 years of foreign language, 2 years of lab science, and 0.5 years of art. If you did not complete these in high school, the requirements can be met through TCC courses. In general, 1 year of high school class = 5 credits of college work. See the University of Washington website for more details.

Washington State University - Pullman, Everett
WSU gives advantages to completing the AS-MRP degree. Individual departments have specific requirements, so while a social science may transfer, if you don't choose carefully, you may also have to take another class to meet the requirement. Choose the following courses: HIST& 128 (World Civ 3) and ECON& 202 (Macro). Completion of the AS-T degree (WA) automatically satisfies UCORE WRTG, QUAN, BSCI, PSCI, and three of the following requirements: HUM, SSCI, ARTS, DIVR, ROOTS. Up to three additional lower-division UCORE must be satisfied via transfer credit or in-residence credit prior to completion of a baccalaureate degree, and an individual course completed within the AS-T degree may not satisfy more than one UCORE category. Save samples of written work from TCC for a Writing Portfolio graduation requirement, do it as you are taking classes. WSU is on the semester system, rather than the quarter system. They require application to the university, entry requirements to the program vary by campus. See university website for important deadlines. WSU offers a new Software Engineering (SE) major in Pullman and Everett campuses. Everett SE is a 2.5-year, full-time BS degree completion program for transfer students. Pullman SE is a 4-year BS program but accepts transfer students. The SE program requires the equivalent to WSU's Economics 101 or 102, and two of the following: Calc IV, Math 146-equivalent to WSU Stat 212, Phil 201-equivalent to WSU Phil 201 or Math equivalent to WSU Math 301 (not generally offered at community colleges). The CompE program requires the equivalent to WSU's Economics 101 or 102. The statewide Associate of Arts in Computer Science (DTA MRP) is the best fit associate’s degree for the Software Engineering Program.

University of Washington - Tacoma
The Bachelor of Science in Computer Engineering & Systems at the University of Washington – Tacoma is ABET accredited. This program is separately accredited from the University of Washington – Seattle, since each school has its own programs and requirements. CES is a full-time program that operates in a cohort model. CES admits students once per year for autumn quarter only. You must first apply for admission to UWT and then submit the CES program application. See website for details on admission requirements and the application process. The most appropriate associate’s degree is the AS-T2, with Math 220 replacing Chem& 161.

University of Washington - Bothell
UW-Bothell is separately ABET accredited. The CompE program admits new students for Autumn quarter only. The most appropriate associate’s degree is the AS-T2.

Seattle University
Seattle University is a private Catholic (Jesuit) university. Transfer student priority application deadline is March 1 for Fall Quarter and scholarships are available. Students can begin their studies at Seattle U also in winter and spring quarters. Obtaining an AS-T2 or AS-MRP degree is beneficial since it may reduce the number of CORE courses required for graduation to as few as 3. At least one course each in humanities, social science, and doing art (or creative writing) is highly recommended to maximize the benefit. SU's BS in Computer Engineering program was introduced in Fall 2019. The programming language at SU is Python followed by C++. The SU COMPE program accepts Java as a substitute. It is highly recommended that students transfer after completion of Electric Circuits.

Seattle Pacific University
SPU is a private Christian university. Students can begin their studies at SPU at any point. If you have earned, prior to matriculation at SPU, an AS-T2 degree and junior standing, you will be required to take only two of the three required University Foundations courses, UFDFN 3001 Christian Scriptures and UFDFN 3100 Christian Theology. At least 15 credits of your transfer coursework in humanities and social sciences will be used to fulfill SPU’s humanities and social science requirements, whether or not the courses match SPU requirements on a course by course basis. There are then two years of coursework at SPU. You will be required to complete any remaining general education requirements, demonstrate proficiency in a foreign language, and complete the “W” and cultural understanding and engagement requirements prior to graduation. The introductory programming language at SPU is C++. The Comp E program has a C++ transition class for transfer students who took two quarters of programming in a different object-oriented language (e.g., two quarters of Java). Note the Comp E program requires one additional course in Math/Science, satisfied by either Math& 254 or Chem& 161 (i.e., students do not need to take both). We do require logic, microprocessors, and circuits 2, but their equivalency would be evaluated on a case by case basis.

Gonzaga University
Gonzaga University is a private Catholic (Jesuit) university. It is recommended students complete the appropriate AS-MRP for their engineering discipline which should include ENGL 101, Programming (C++ preferred), and the appropriate lower division engineering courses for the discipline. For Hum/Soc Sci, 10 cr of PHIL (Group A) is recommended (Intro to Phil, Ethics, or Logic/Critical Thinking). Please see our website (www.gonzaga.edu) for academic & transfer policies, application deadlines, and scholarship information.

It is the student’s responsibility to check university websites and meet with university advisors to ensure the accuracy of advising information.