Associate in Science Track 2 MRP
Computer and Electrical Engineering
101 Credits Minimum

This Associate in Science-Transfer degree program is applicable to students planning to prepare for Computer and Electrical Engineering majors at universities in Washington.

Students completing the AS-T, Track 2 degrees will, if admitted to the university, be admitted as juniors with all or most prerequisites for the specific engineering major completed (depending on choices made among engineering electives) and with lower division general education courses partially completed in a manner similar to the partial completion by freshmen-entry engineering students. Note that engineering programs are competitive and may require a higher GPA overall or a higher GPA in specific courses. Baccalaureate institutions will apply up to 110 quarter credits required under this agreement to the credits required in the bachelor's degree, subject to institutional policy on the transfer of lower division credits. AS-T Degree students should, however, maintain careful contact with an advisor at the potential transfer institution in regard to choice in engineering classes. Upon successful completion of this degree a student will be able to:

- Understand patterns and make connections among different disciplines and schools of knowledge and to integrate studies with personal experience
- Learn actively and gain comprehensive understanding; to think critically, creatively, and reflectively in order to solve problems; to communicate with clarity and originality for personal growth and productive work; and to interact in diverse and complex environments and complicated, dynamic, and ambiguous situations
- Demonstrate a solid foundation for baccalaureate science studies through the completion of an appropriate range of courses in the sciences and liberal arts

Completion Requirements

The Associate in Science-Transfer Track 2 Engineering degree requires at least 101 credit hours in college level courses (numbered 100 or above), a minimum cumulative 2.0 grade point average, a minimum of 25 credits in residence at Cascadia, and completion of all of the requirements for this degree. Students must meet with an advisor to complete and submit an application for graduation.

GENERAL EDUCATION CORE REQUIREMENTS   **40 CREDITS**

Foundations for College Success
Must be completed within first 30 credits.

Course ID	Course Name	Lec	Lab	Other	Credits
COLL 101	College Strategies	55			5.0

Communication

Course ID	Course Name	Lec	Lab	Other	Credits
ENGL&101	English Composition I	55			5.0
ENGL&235	Technical Writing	55			5.0

Quantitative or Symbolic Reasoning

Course ID	Course Name	Lec	Lab	Other	Credits
MATH&151	Calculus I	55			5.0
MATH&152	Calculus II	55			5.0

MATH&163	Calculus 3	55			5.0
MATH 208	Linear Algebra	55			5.0
MATH 238	Differential Equations	55			5.0

EQUITY, DIVERSITY, AND POWER REQUIREMENT

Students must complete a 150-series EDP course and at least one more additional EDP-designated course-- totaling ten (10) credits-- to meet the Equity, Diversity, and Power completion requirement. EDP courses in the 150-series ground students in the needed cognitive tools and background to critically analyze their position in our increasingly interconnected, complex, and diverse world so they can pursue further study and seek out their careers more intentionally. EDP designated courses may also apply toward Humanities, Social Science, Natural Science, or General Elective distribution requirements as indicated. See the Cascadia catalog for the complete list of EDP-designated courses.

HUMANITIES / SOCIAL SCIENCES DISTRIBUTION REQUIREMENT   15 CREDITS

Students must complete courses from at least two different disciplines. No more than five credits may be included from those courses designated HP as performance/skills, applied theory or lecture/studio courses. Only one course of a world language or ASL at the 100 level may be included. CMST 150, GS 150, HIST 150, HUMAN 150, or SOC 150 may be used to fulfill 5 credits of the Humanities or Social Sciences Distribution requirement.

Course ID	Course Name	Lec	Lab	Other	Credits
	H designated course	55			5.0
ECON recommended	SS designated course	55			5.0
CMST 150, GS 150, HIST 150, HUMAN 150, or SOC 150	150-series EDP designated course	55			5.0

PRE-MAJOR REQUIREMENTS   31 CREDITS

Course ID	Course Name	Lec	Lab	Other	Credits
CHEM&161	General Chemistry w/ Lab I	44	44		6.0
ENGR&204	Electrical Circuits	55			5.0
BIT 142, or BIT 143	Intermediate Programming Programming Data Structures	55			5.0
PHYS&221	Engineering Physics I	44	22		5.0
PHYS&222	Engineering Physics II	44	22		5.0
PHYS&223	Engineering Physics III	44	22		5.0

PROGRAM REQUIRED ELECTIVES   15-17 CREDITS

Students should select courses from the list below as appropriate for the intended major and baccalaureate institution. Consult an advisor for more information.

Course ID	Course Name	Lec	Lab	Other	Credits
BIOL&211	Majors Cellular	55	22		6.0
BIT 143, **or** BIT 265	Programming Data Structures, **or** Structures and Algorithms	55			5.0
CHEM&162	General Chemistry w/ Lab II	44	44		6.0
ENGR&214	Statics	55			5.0
ENGR&215	Dynamics	55			5.0
ENGR 240	Applied Numerical Methods	44	22		5.0
MATH&264	Calculus 4	55			5.0