



## Associate in Science-Transfer Track 2 Engineering (MRP\*)

### Other Engineering

### 105 Credits

The Associate in Science-Transfer Degree prepares students to transfer to a four-year college or university with a major in the natural science, pre-med, engineering, or computer science.

This degree program is applicable to students planning to prepare for various engineering majors at universities in Washington. This degree represents agreement regarding expanded detail for the existing Associate in Science-Transfer, Track 2 between the baccalaureate institutions offering engineering bachelor's degrees and the community and technical colleges system. AS-T degree students should, however, maintain careful contact with an advisor at the potential transfer institution in regard to choice in engineering classes. 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. The same 2.0 GPA requirement that applies to AS-T in general applies to these expanded pathways. 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.

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 90 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 complete and submit an application for graduation to Enrollment Services for review and approval before the degree is granted. Students must include the graduation fee payment with the application form.

## GENERAL EDUCATION CORE COURSES

**38 CREDITS**

### Foundations for College Success

Must be completed within first 30 credits.

Course ID	Course Name	Lec	Lab	Other	Credits
COLL 101	College Strategies	33			3.0

### Communicating and Thinking Critically:

Course ID	Course Name	Lec	Lab	Other	Credits
ENGL&101, or ENGL& 101T	English Composition I, or English Comp for Technical Writers	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

**Cultural Knowledge Requirement:**

Course ID	Course Name	Lec	Lab	Other	Credits
CMST, GS, HIST, HUMAN, or SOC	150 series CKR designated course	55			5.0
	H or SS course also designated as CKR. <i>*An additional 150 CKR course may be used to satisfy this requirement. This course may also apply to the Humanities or Social Sciences distribution requirements.</i>	55			5.0

**HUMANITIES / SOCIAL SCIENCE DISTRIBUTION REQUIREMENT 10 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 at the 100 level may be included. Economics is recommended.

Course ID	Course Name	Lec	Lab	Other	Credits
	H designated course	55			5.0
	SS designated course	55			5.0

**NATURAL SCIENCE DISTRIBUTION REQUIREMENT 52 CREDITS**

Students must complete courses from at least two different disciplines, and include at least five credits of a lab course (**LAB**). At least 10 credits required in physical, and earth sciences. Students are required to complete the sequence courses listed below at one institution.

Course ID	Course Name	Lec	Lab	Other	Credits
CHEM&161	General Chemistry w/ Lab I	44	44		6.0
CHEM&162	General Chemistry w/ Lab II	44	44		6.0
ENGR&214	Statics	55			5.0
ENGR&215	Dynamics	55			5.0
ENGR&225	Mechanics of Materials	55			5.0
MATH 208	Linear Algebra	55			5.0
MATH 238	Differential Equations	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

**REQUIRED ELECTIVE CREDITS 5 CREDITS**

Remaining elective credits should be planned with the help of an advisor based on the requirements of the specific major at the baccalaureate institution the student selects to attend. Elective credits may be selected from any of the distribution and elective courses. Professional/technical courses numbered 100 or above may be considered restricted electives. No more than 12 credits may be included from Restricted Electives List. Math& 141 will not satisfy specific distribution requirement in the AS-T degrees. Consult an advisor for more information.

\*If the student takes MATH 264 as an elective **AND** two approved courses from Innovation in Design, 3D Visualization and CAD, Thermodynamics, Electrical Circuits, or Materials Science at another institution, they will qualify for the Major Ready Pathway agreed to by Washington State Community Colleges and four-year colleges.