



GENERAL INFORMATION

EvCC offers a number of pathways toward technical careers. This curriculum guide focuses on the **Engineering Technology Transfer Degree**, which is designed to prepare students for transfer to Western Washington University, Central Washington University or Eastern Washington University, for a major in engineering technology. Options in this degree enable students to prepare for manufacturing/mechanical technology, construction management technology, electronics technology, and plastics technology.

WHAT IS THE DIFFERENCE BETWEEN ENGINEERING AND ENGINEERING TECHNOLOGY?

In general, Engineering Technology may not require as much emphasis on theoretical math and science as an Engineering major would. One of the web pages of the American Society for Engineering Education offers this explanation: "Graduates of Engineering programs apply scientific concepts to develop solutions to real world problems. Their job is more theoretical, involving the design of new products such as a robot that will be used in an auto manufacturing plant. Engineers require more theoretical, scientific and mathematical knowledge. At the same time, some colleges and universities offer 2- and 4- year Engineering Technology programs that prepare students for practical design and production work. Graduates of 4-year Engineering Technology programs may get jobs similar to those obtained by graduates with a bachelor's degree in engineering. Technicians install and maintain products, providing a wide range of services: implementation of the design, testing, calibration and supervision of its operation." For more information, go to www.asee.org/precollege

RELATED PROGRAMS

In a separate curriculum guides we describe the **Engineering Transfer Degree**, which includes coursework in math, physics, chemistry and engineering in preparation for transfer to a university engineering program. All curriculum guides for EvCC may be found around campus, on the web at www.everettcc.edu, or you may call 425-388-9219 to request specific copies.

Websites for University Programs (June 2008)

Western Washington U: www.wvu.edu/

Eastern Washington U: <http://www.ewu.edu/x7465.xml>

Central Washington U: <http://www.cwu.edu/~iet/>

SUGGESTED PREPARATION

It is helpful to have the following traits: intellectual curiosity, technical aptitude, a solid mathematical and scientific foundation, interest in solving problems, perseverance, the ability to work accurately and systematically and a basic understanding of the economics and environmental context in which engineering is practiced. The ability to work in unusual locations, and the ability to work under pressure to meet deadlines or to solve problems can be valuable. Students should develop effective communication and interpersonal skills, cultivate opportunities to participate as a team member on job projects, and master relevant computer programs.

Although there are no specific admission requirements to begin your pre-engineering studies at EvCC, preparatory courses in chemistry, mathematics and physics are strongly recommended. Students wishing to transfer to the four-year schools must also meet foreign language requirements.

PROGRAM ADVISORS

Frequent contact with an advisor is highly recommended. Students should also consult closely with department advisors at the university to which they wish to transfer, to keep abreast of possible changes. (Area code for phone numbers below is 425.)

Engineering Technology and Drafting:

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GETTING STARTED AT EVCC

Our Enrollment Services Office provides information about application, advising, orientation and registration for new and continuing students. Though advising is voluntary, all prospective and current students are invited to contact the Enrollment Services Office or the Counseling, Advising and Career Center (CACC) if they would like to speak one-to-one with an advisor about getting started. Contact:

- Enrollment Services, Jackson Ctr, 425-388-9219
admissions@everettcc.edu
- CACC, Third Floor, Parks, 425-388-9263

EvCC Model Course Sequence for AS-ET (MET/PET/MfgET)

	FALL QUARTER	Credits	WINTER QUARTER	Credits	SPRING QUARTER	Credits
First Year	MATH& 142 or 144 [147] CS& 131 [CP 130] ENGL& 101 ENGR 109	5 5 5 2	MATH& 151 [152] CHEM& 161 [140] CMST& 220 [SPCH 101]	5 5.5 5	MATH& 152 [153] ENGR 120 PHYS& 221/231 [121/131] ENGL& 230 [202]	5 2 5.5 3
	TOTAL	17	TOTAL	15.5	TOTAL	15.5
Second Year	MATH& 153 [154] PHYS& 222/232 [122/132] ENGR& 214 [210]	5 5.5 5	PHYS& 223/233 [123/133] MATH 260 Humanities/Social Science	5.5 5 5	ENGR& 225 [220] ENGR& 114 [123] ECON& 201 or 202 [200]	5 4 5
	TOTAL	15.5	TOTAL	15.5	TOTAL	14

EvCC Model Course Sequence for Associate in Technology DTA

	FALL QUARTER	Credits	WINTER QUARTER	Credits	SPRING QUARTER	Credits
First Year	MATH& 141 ENGL& 101 ENGR 109 Humanities/Social Science	5 5 2 5	MATH& 142 CHEM& 161 [140] ENGR& 104 [101]	5 5.5 5	PHYS& 121 [117] ENGL& 102 Humanities/Social Science	5 5 5
	TOTAL	17	TOTAL	15.5	TOTAL	15
Second Year	CS& 131 [CP 130] CMST& 220 [SPCH 101] Humanities/Social Science	5 5 5	PHYS& 122 [118] ENGR& 114 [123] Humanities/Social Science	5 4 5	PHYS& 123 [119] ENG T 259 Humanities/Social Science	5 4 5
	TOTAL	15	TOTAL	14	TOTAL	14

EVENING COURSES

In addition to day classes, the following courses are usually offered evenings during the quarters indicated:
 MATH& 141 (F W Sp Su), 142 (Sp), 151 [152] (F), 152 [153] (W), 153 [154] (Sp)
 CHEM& 161 [140] (W)
 ENGR& 114 [123] (W)
 CS& 131 [CP 130] (F)

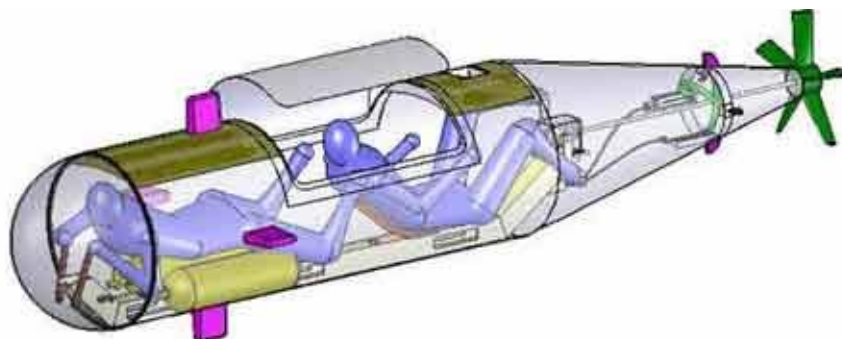
Check out our web site:
www.everettcc.edu
 Go to Majors and Programs
 Go to Engineering Technology

EVCC'S ENGINEERING CLUB WANTS YOU!

Join the fun (and the learning) in producing club projects and competing with other college and university clubs in Washington and around the nation.

- ➔ In 2005, EvCC's team successfully competed and placed in the International Human-Powered Submarine Races in Bethesda, Maryland. The team plans to compete again in 2009.
- ➔ In 2003 EvCC's teams brought home the honors by placing 4th in international competition with their Frisbee Launcher, and 1st in Washington with their project presentation in the Human Powered Paper Vehicle.

Project development experience looks great when you are applying to internships and university engineering programs. We hope you take advantage of the opportunity, and put yourself and EvCC on the map.



Associate of Science – Pre-Engineering Technology

Mechanical, Manufacturing and Plastics (leads to BS in Engineering Technology – ABET Accredited)

This checklist is targeted at transfer students with an interest in an **engineering technology** major at a university. Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. Note: Though courses in a foreign language are not required in the Associate of Science degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Note: Prior to starting some or all of the following courses, students should:

- | | |
|--|---|
| <input type="checkbox"/> Complete ENGL 98 or earn a placement score into ENGL& 101
<input type="checkbox"/> Complete MATH& 144 [147] or MATH&142 or place into MATH& 151 [152]
<input type="checkbox"/> Complete PHYS& 121 [117] or a rigorous high school physics class
<input type="checkbox"/> Complete ENGR 120 and/or PHYS& 221/231 [121/131] before ENGR& 214 [210] | <input type="checkbox"/> Complete CHEM& 140 [98] or place into CHEM& 161 [140]
<input type="checkbox"/> Complete PHYS 130 before PHYS& 233 |
|--|---|

Student: _____ **Advisor Signature:** _____ **Date:** _____

COMPLETION of Diversity Course

	(Where Completed/Course Title)		(Year Completed)	(Grade)
Course Number	Course Title	Credits	Quarter Completed	Grade
COMMUNICATIONS SKILLS (5 credits) ¹				
ENGL& 101	English Composition I	5	_____	_____
MATHEMATICS (Pre-requisite Math courses may also be required.)				
MATH& 151 [152]	Calculus I	5	_____	_____
MATH& 152 [153]	Calculus II	5	_____	_____
MATH& 153 [154] or MATH& 146 [281]	_____	5	_____	_____

HUMANITIES AND SOCIAL SCIENCE (15 credits, in three different disciplines. One course must be selected from Humanities, and another from Social Sciences. The third course may be from Humanities or Social Sciences. For acceptable courses, see course list for the Associate of Science – see separate guide. We recommend economics, history, psychology, sociology, speech (CMST) as good choices. See Note 1.)

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

ADDITIONAL REQUIRED COURSES

CHEM& 161 [140]	General Chemistry I	5.5	_____	_____
PHYS& 221/231 [121/131]	Engineering Physics I	5.5	_____	_____
PHYS& 222/232 [122/132]	Engineering Physics II	5.5	_____	_____
PHYS& 223/233 [123/133]	Engineering Physics III	5.5	_____	_____
ENGR 109	Engineering Orientation	2	_____	_____
ENGR& 114 [123]	Engineering Graphics	4	_____	_____
ENGR 142 or CS& 131 [CP 130]	_____	5	_____	_____
ENGL& 230 [ENGR 231]	Technical Writing	3	_____	_____

ADDITIONAL ELECTIVES (minimum 19 credits; select minimum **four** courses as appropriate for intended major and transfer institution)

ENGR 120	Intro to Scientific Computing	2	_____	_____
ENGR& 214 [210]	Statics	5	_____	_____
ENGR& 215 [230]	Dynamics	5	_____	_____
ENGR& 225 [220]	Mechanics of Materials	5	_____	_____
ECON& 201 or 202 [200]	_____	5	_____	_____
CMST& 220 [SPCH 101]	Public Speaking	5	_____	_____
MATH& 142 or MATH& 144 [147]	_____	5	_____	_____
MATH& 153 [154] or MATH &146 [281]	_____	5	_____	_____
MATH 260	Linear Algebra	5	_____	_____

Total: minimum 90 credits required, minimum 2.0 GPA.

Note 1: Use one of these courses to satisfy the diversity requirement.

Associate of Science – Pre-Engineering Technology

Electrical and Computer (leads to BS in Engineering Technology – ABET Accredited)

This checklist is targeted at transfer students with an interest in an **engineering technology** major at a university. Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. Note: Though courses in a foreign language are not required in the Associate of Science degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Note: Prior to starting some or all of the following courses, students should:

- Complete ENGL 98 or earn a placement score into ENGL& 101
- Complete MATH& 144 [147] or MATH&142 or place into MATH& 151 [152]
- Complete PHYS& 121 [117] or a rigorous high school physics class
- Complete CHEM& 140 [98] or place into CHEM& 161 [140]
- Complete PHYS 130 before PHYS& 233 [133]

Student: _____ **Advisor Signature:** _____ **Date:** _____

COMPLETION of Diversity Course

	(Where Completed/Course Title)		(Year Completed)	(Grade)
<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>	<u>Quarter Completed</u>	<u>Grade</u>
COMMUNICATIONS SKILLS (5 credits) ¹				
ENGL& 101	English Composition I	5	_____	_____
MATHEMATICS (Pre-requisite Math courses may also be required.)				
MATH& 151 [152]	Calculus I	5	_____	_____
MATH& 152 [153]	Calculus II	5	_____	_____
MATH& 153 [154] or MATH &146 [281]	_____	5	_____	_____

HUMANITIES AND SOCIAL SCIENCE (15 credits, in three different disciplines. One course must be selected from Humanities, and another from Social Sciences. The third course may be from Humanities or Social Sciences. For acceptable courses, see course list for the Associate of Science – see separate guide. We recommend economics, history, psychology, sociology, speech (CMST) as good choices. See Note 1.)

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

ADDITIONAL REQUIRED COURSES

CHEM& 161 [140]	General Chemistry I	5.5	_____	_____
PHYS& 221/231 [121/131]	Engineering Physics I	5.5	_____	_____
PHYS& 222/232 [122/132]	Engineering Physics II	5.5	_____	_____
PHYS& 223/233 [123/133]	Engineering Physics III	5.5	_____	_____
ENGR 109	Engineering Orientation	2	_____	_____
ENGR 142 or CS& 131 [CP 130]	_____	5	_____	_____
ENGR 143 or CS 132 [CP 132]	_____	5	_____	_____
ENGR& 204	Electrical Circuits	5	_____	_____
ENGR 2??	Digital Logic (see advisor)	5	_____	_____
CMST& 220 [SPCH 101]	Public Speaking	5	_____	_____
ENGL& 230 [ENGR 231]	Technical Writing	3	_____	_____

ADDITIONAL ELECTIVES (minimum 3 credits; select one course as appropriate for intended major and transfer institution)

ENGR 120	Intro to Technical Computing	2	_____	_____
MATH& 142 or MATH& 144 [147]	_____	5	_____	_____
MATH& 153 [154] or MATH &146	_____	5	_____	_____
MATH 260	Linear Algebra	5	_____	_____

Total: minimum 90 credits required, minimum 2.0 GPA.

Note 1: Use one of these courses to satisfy the diversity requirement.

Associate in Technology DTA

Industrial, Mechanical, Applied, Technology Education – leads to BS in Technology (not ABET Accredited)

This checklist is targeted at transfer students with an interest in a **technology** major at a university. Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. Note: Though courses in a foreign language are not required in the Associate of Science degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Note: Prior to starting some or all of the following courses, students should:

- Complete ENGL 98 or earn a placement score into ENGL& 101
 Complete CHEM& 140 [98] or place into CHEM& 161 [140]
 Complete MATH 99 [65] or place into MATH& 141

Student: _____ **Advisor Signature:** _____ **Date:** _____

COMPLETION of Diversity Course

	(Where Completed/Course Title)		(Year Completed)	(Grade)
<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>	<u>Quarter Completed</u>	<u>Grade</u>
COMMUNICATIONS SKILLS (10 credits) ¹				
ENGL& 101	English Composition I	5	_____	_____
ENGL& 102	Composition II	5	_____	_____
MATHEMATICS (Pre-requisite Math courses may also be required.)				
MATH& 141	Pre-Calculus I: College Algebra	5	_____	_____
MATH& 142	Pre-Calculus II: Trigonometry	5	_____	_____
HUMANITIES (15 credits, in three different disciplines.) ¹				
CMST& 220 [SPCH 101]	Public Speaking	5	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
SOCIAL SCIENCE (15 credits, in three different disciplines.) ¹				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
ADDITIONAL REQUIRED COURSES				
CHEM& 161 [140]	General Chemistry I	5.5	_____	_____
PHYS& 121 [117]	General Physics I	5	_____	_____
ENGR 109	Engineering Orientation	2	_____	_____
ENGR& 114 [123]	Engineering Graphics	4	_____	_____
ENGR 142 or CS& 131 [CP 130]	_____	5	_____	_____
ADDITIONAL ELECTIVES (minimum 18.5 credits; select four or more courses as appropriate for intended major and transfer institution)				
ENGR& 104 [101]	Intro to Design	5	_____	_____
ENGR 120	Intro to Scientific Computing	2	_____	_____
MATH& 151 and higher	Calculus I and higher	5	_____	_____
PHYS& 122 [118]	General Physics II	5	_____	_____
PHYS& 123 [119]	General Physics III	5	_____	_____
ENG T 100 (Note 2)	Engineering Graphics Fundamentals	4	_____	_____
ENG T 105 (Note 2)	Precision, Fits, Tolerancing & GD&T	4	_____	_____
ENG T 112 (Note 2)	Pneumatic, Hydraulic, and Electric Circuits	5	_____	_____
ENG T 230 (Note 2)	Manufacturing Materials and Processes	3	_____	_____
ENG T 259 (Note 2)	Engineering Graphics: 3D CAD/CAM	4	_____	_____

Total: minimum 90 credits required, minimum 2.0 GPA.

Note 1: Use one of these courses to satisfy the diversity requirement.

Note 2: A maximum of 10 credits from these courses can be applied toward the minimum 90 credits needed for the degree.



About Everett Community College

Improve your personal skills, discover new ideas, prepare for work and/or university transfer, and improve your career prospects through programs at EvCC.

Each term, about 9,800 students enroll in a wide variety of courses. Day, evening, distance, and workplace-based options are available. Students may enroll on a full-time or part-time basis. EvCC offers two-year associate degrees, short-term certificates, endorsements and industry certifications.

Student life can be active. Currently, EvCC offers athletic programs in basketball, baseball, and soccer, to name a few.

Student clubs range from Phi Theta Kappa (the Honor Society) to the United Native American Council to the International Club to the German Club, and more. Our Student Government and Programs Board are always on the go with activities that make college life fun. There are also opportunities to develop leadership skills.

Student services are designed to support students in their studies, remove barriers, and enrich student life. Financial aid services offer grant and loan opportunities, as well as scholarships. Our Counseling, Advising and Career Center has a rich array of information and personal assistance for students. The Diversity and Equity Center supports student activities and College programs that promote growth and opportunity toward cultural understanding.

Former EvCC students have found employment at Boeing, in small business, in community service agencies, in schools, and in other locales. Our transfer students are known to do very well at the UW, WWU and other schools.

*Want to build a better world?
Do it through an Engineering career!
Start at EvCC
Small classes
Personal attention
Hands-on activities
Teamwork
Career guidance*

Everett Community College does not discriminate on the basis of race, religion, creed, color, national origin, age, sex, sexual orientation, marital status, the presence of any physical, sensory or mental disability, or status as a disabled or Vietnam era veteran in its programs and activities, or employment. The Vice President of Student Services has been designated to handle inquiries regarding student-related non-discrimination policies and can be reached at 2000 Tower St., Everett WA 98201, or by phone at (425) 388-9589. The Associate Vice President of Human Resources has been designated to handle employment-related inquiries regarding the non-discrimination policies and can be reached at 2000 Tower Street, Everett, WA 98201, or by phone at (425) 388-9232. This publication is effective **September 2008**. The College reserves the right to change courses, programs, degrees and requirements. It is the student's responsibility to be aware of correct information by routinely checking with Enrollment Services and/or the advisors listed in this publication. Requirements applicable to all certificates and degrees are published in the College Catalog. Nothing contained herein shall be construed to create any offer to contract or any contractual rights.

For more information, call 425-388-9219, Everett Community College, 2000 Tower Street, Everett, WA 98201, www.everettcc.edu