

Computer Science and Software Systems

Major Preparation Sheet 2017-2018

Where does my path start?

You will complete an Associate of Arts - Direct Transfer Agreement (AA-DTA) at Shoreline.

Use the AA -DTA Degree Planning Guide, with this sheet, to understand the requirements for graduation.

Once you complete your Shoreline degree, you can transfer to a four-year school to earn a baccalaureate degree in Computer Science or a related field.

Computer Science – What is it?

Computers are an integral part of modern society. People interact with computers and technology on a daily basis using hardware and operating systems, computer software and communication systems, databases, interactive games, educational software and videos. Computer Science programs require a solid foundation in math and science. B.S. degrees typically require advanced study in math, science and computer science courses. B.A. programs include basic computer knowledge and skills and often provide opportunities for multidisciplinary studies, application and specialization in areas such as architecture, engineering, music, mathematics, art, computer animation, computer graphics, science and business. Degrees with titles such as "Information Systems" and "Information Technology" usually focus on applied technical skills, such as learning to use existing products and methods for business purposes.

Areas of Study in Computer Science: Computer Programming, Computer Networking, Algorithms and Data Structures, Operating Systems, Software Development and Design, Computer Graphics, Computer Animation, Databases, Image Processing, Artificial Intelligence and Professional Ethics.

Where can I go for help?

Computer Science Faculty Advisors

Eric Basham	206-546-4625	ebasham@shoreline.edu	Rm 2809
Fred Kuczmarski	206-546-6993	fkuczmar@shoreline.edu	Rm 5348
Stephanie Diemel	206-546-4579	sdiemel@shoreline.edu	Rm 5356
Sasha Malinsky	206-533-6769	smalinsky@shoreline.edu	Rm 5383
Tiffany Meier	206-546-6953	tmeier@shoreline.edu	Rm 5231

General Academic Advising

FOSS (5000) Building, Rm. 5229 206-546-4559 <u>advising@shoreline.edu</u> www.shoreline.edu/advising

International Advising

9000 Building, Rm. 9302

206-546-4697 <u>ieadvisors@shoreline.edu</u> www.shoreline.edu/international/advising/

What can I do with a Bachelor's Degree in Computer Science?

Graduates with a bachelor's degree in Computer Science or Computing and Software Systems have far reaching opportunities in the computer career field, working as computer programmers, network specialists, systems and data communication analyst, software and hardware engineers, technical consultants and educators. Depending on the position, wages are typically strong ranging from \$40,000 to well over \$100,000 a year. Resource: Association for Computing Machinery at www.computingcareers.acm.org.

Potential employers include: Computer software and hardware companies, software publishers, businesses and consulting firms, entertainment industry, schools, health care agencies and manufacturing companies. For more, please visit http://www.shoreline.edu/counseling-center/career-counseling.aspx

What courses should I take?** Required: ENGL& 101; ENGL& 102; One course in Multicultural Understanding; One General Education Requirements (20 Credits) course in Quantitative/Symbolic Reasoning **Strongly Recommended:** MATH& 151 (Quantitative/Symbolic Reasoning) Recommended: World Language if required for university admission or graduation. **Humanities (15 Credits) Strongly Recommended:** PHYS &221, &222, MATH &152 Natural Sciences (15 Credits) **Strongly Recommended:** CS &141 [CS 121 is a prerequisite for CS &141]; CS 143; MATH &163; **PHYS &223** General Electives (Minimum 25 Credits) Recommended: CHEM 171/181, 172/182, 173/183; MATH& 146; MATH 207, 208, 211; BIOL &213; PHYS& 116, 223; PHIL& 120

Where can I transfer and what does my chosen four-year school require?

Before choosing classes, become familiar with the four-year program where you want to apply: visit the website, email the department, and/or speak with a Shoreline advisor. Below are examples from Washington schools with different admissions and graduation requirements. Check with the school for world language requirements. (Non-native speakers of English are often exempt from this requirement.)

School	Transfer Information	School	Transfer Information
<u>Central Washington</u> <u>University* – Des Moines</u>	http://tinyurl.com/jdpjra6	The Evergreen State College	http://tinyurl.com/zhyjy3s
<u>Central Washington</u> <u>University* – Everett</u>	http://tinyurl.com/jdpjra6	<u>University of Puget Sound</u>	http://tinyurl.com/h7yqx8s
<u>Central Washington</u> <u>University* – Lynnwood</u>	http://tinyurl.com/jdpjra6	<u>University of Washington – Bothell</u>	http://tinyurl.com/j9r7so5
<u>City University of Seattle –</u> <u>Renton</u>	http://tinyurl.com/jajtee6	<u>University of Washington – Seattle</u>	http://tinyurl.com/hm3uecl
Eastern Washington University – Bellevue	http://tinyurl.com/gwnh2lw	<u>University of Washington – Tacoma</u>	http://tinyurl.com/j778h7e
Eastern Washington University – South Seattle	http://tinyurl.com/ju358mo	Walla Walla University	http://tinyurl.com/z6zdcok
Gonzaga University	http://tinyurl.com/7c9d6xh	Washington State University – Pullman	http://tinyurl.com/jk3a2v2
Heritage University	http://tinyurl.com/jpqnflm	Washington State University – Richland	http://tinyurl.com/htjyhyr
North Seattle College	http://tinyurl.com/hcxay8v	Washington State University – Vancouver	http://tinyurl.com/j3dqott
Pacific Lutheran University	http://tinyurl.com/zygoljk	Western Governors University (online)	http://tinyurl.com/zzfaedn
Saint Martin's University	http://tinyurl.com/j3pktl2	Western Washington University	http://www.wwu.edu/vtc/
Seattle Pacific University	http://tinyurl.com/z46xxxr	Whitworth University	http://tinyurl.com/zvmnc5x
Seattle University	http://tinyurl.com/z3kjpcm		

^{*}Central Washington's degree program a Bachelor of Science in Information Technology and Administrative Management (IATM).

^{**} This unofficial guide is intended to support you as you prepare for your major. Please consult with an advisor and your chosen four-year school(s), as program and admissions requirements vary and may change without notice.