Computer Engineering Graduation Requirements.

University of Washington (Seattle).

The graduation requirements shown below are subject tochange.
For more information, see the CSE Undergraduate Website, available at
http://www.cs.washington.edu/students/ugrad/degree_requirements/

General Education Component

Written & Oral Communication (12 credits)

- ❑ *English Composition (5)
- ❑ ENGR 231 Intro. to Technical Writing (3)
- ❑ Approved UW Writing or Composition Course (4)

Diversity Requirement (3 credits)

- ❑ UW Diversity Requirement (3)

Areas of Knowledge (30 credits)

- ❑ Visual, Literary, and Performing Arts (10-20)
- ❑ Individuals and Societies (10-20)

NOTE: 8 credits remaining of I&S OR VLPA

Mathematics & Science Component

Mathematics & Natural Sciences (41 credits)

- ❑ *MATH 124, 125, 126 or 134, 135, 136 Calculus with Analytical Geometry (15)
- ❑ MATH 308 (waived if 136 taken) Matrix / Linear Algebra (3)
- ❑ *PHYS 121 Mechanics (5)
- ❑ PHYS 122 Electromagnetism & Oscillatory Motion (5)
- ❑ 10 additional credits from the list of approved natural science courses on the CSE website (10)
- ❑ 3 to 6 additional credits of Math/Science (to bring the total to 41) chosen from approved natural science courses on the CSE website, STAT 390, 391, 394, MATH 307, 309, 334, 335, and AMATH 351, 353. (STAT 391 recommended.) (3-6)

*** Denotes prerequisites (must be fully completed before application date).**

The minimum acceptable grade for any course in the Mathematics & Science or Computer Engineering Components, or UW requirements is a 2.0.

Computer Engineering Component

Required (36 credits)

- ❑ *CSE 142 Computer Programming I (4)
- ❑ *CSE 143 Computer Programming II (5)
- ❑ CSE 311 Foundations of Computing I (4)
- ❑ CSE 312 Foundations of Computing II (4)
- ❑ CSE 332 Data Abstractions (4)
- ❑ EE 205 Intro to Signal Conditioning (4)
  or EE 215 Intro to Electrical Engineering
- ❑ CSE 351 The Hardware/Software Interface (4)
- ❑ CSE 369 Introduction to Digital Design (2)
- ❑ CSE/EE 371 Design of Digital Circuits & Systems (5)

CE Senior Electives (36 credits)

Select enough additional credits from the lists of approved courses on the CSE website, including at least

- ❑ One course chosen from: CSE 403, CSE/EE 474, or **CSE 484 (FALL 18)** (4)
- ❑ 3 additional courses chosen from the Computer Engineering Systems Electives list on the CSE website. **CSE 451 (AUT 18), CSE 452 (SP 19), CSE 461 (WIN 19 OR SPR 19). [12 Cr. Total]** (12-15)
- ❑ 2 additional courses from the CSE Core Courses list on the CSE website **CSE 331 (SPR 18), CSE 333 (SPR 18)** (6-10)
- ❑ a Design Capstone course from the approved list on the CSE website. (SPR 19 OR FAL 19) (5)
- ❑ 4 credits of College of Engineering courses from the CSE elective list on the CSE website **CSE 344 (SUM 18)** (4)
- ❑ Additional courses from the CSE Electives list on the CSE website, to bring the total CSE Elective credits to 36. **MATH 307 (WIN 17) [3 Cr.]** (0-5)

Additional Engineering credits to bring the total Engineering credits to 36, *not including the required section above* (0-5 credits)

Free Electives to bring total credits up to the 180 required for graduation (20-25 credits)

Rev: 11/2016

PAUL G. ALLEN SCHOOL
OF COMPUTER SCIENCE & ENGINEERING

Uday's PROSPECTIVE

ACADAMIC GRADUATION PLAN

Computer Engineering (Software Specialization)

FALL 2018	WINTER 2019	SPRING 2019	SUMMER 2019	FALL 2019
CSE 451 [4] (OS)	**CSE 461 [4] (NETWORKS)**	**CSE 452 [4] (DISTRIBUTED SYSTEMS)**		**CSE 421 [4] (ALGORITHMS)**
CSE 484 [4] (SECURITY)	**CSE 446 [4] (MACHINE LEARNING)**	**CSE 473 [4] (AI)**		**TBD [5] CAPSTONE**
VLPA/I&S [5] **MUSIC 120**	**VLPA/I&S/DIV** ***PSYCH 210***	**ACCESIBILITY CAPSTONE [5]** **OR** **CSE 341 (PROGRAMMING LANGUAGES) [4]**		**COMPILERS**
Notes:	**Notes:**	**Notes:**	**Notes:** **INTERNSHIP**	**Notes:**

Color Key:

High Difficulty, Medium Difficulty, Normal Difficulty, Lower Difficulty, Capstone , Internship.

Easy VLPA / I&S – ESRM 101, ARCH 151, MUSC 120, MUSIC 160

*Easy I&S & **DIV** - PSYCH 210*

UW'S Planned Course Offerings Computer Science & Engineering:

AUTUMN: Compilers, **Algorithms**, HCI I, **OS**, Computer Vision, Animation, **Networks**, AI, Embedded SW, HW Systems, **Security**, *Virtual Reality Capstone*, *Cloud Capstone*, Computer Architecture I

WINTER: *Software Engineering*, **Algorithms**, **Networks**, HCI I, Databases, **Machine Learning**, NLP, **OS**, Computer Architecture I, AI, Embedded SW, HW Systems, Digital System, *Robotics Capstone*, *Sound Capstone*, **Security Capstone**, Entrepreneurship: Company-Building (w/ 599A1,P590A)

SPRING: Compilers, **Algorithms**, Comp Bio Capstone, HCI II, Databases, **Machine Learning**, **OS**, **Distributed Systems**, Graphics, **Networks**, Adv Topics in Animation, Computer Architecture II, AI, Embedded SW, HW Systems, Security, Virtual Reality Capstone, Accessibility Capstone, NLP capstone, Tech for Resource-Constrained Env.