Computer Engineering

(4-year Duration Sequences)

1- The Department will be offering all of the 200 and 300-level courses which are core for both the Electrical Engineering program and Computer Engineering program (except project courses) in all three terms of Summer, Fall and Winter. Courses which are offered in all three terms are shown in the following recommended sequences in blue font.

2- The Department will be offering all of the 200 and 300-level courses which are core to either the Electrical Engineering program or Computer Engineering program in both the Fall and Winter terms. These courses are shown in red font in the following sequences.

3- ENGR290, ELEC390 and COEN390 projects are offered in both the Fall and Winter terms. ELEC490 and COEN490 projects are offered once a year as a two-term project in the Fall/Winter term.

4- Students who have been admitted and registered in the Electrical Engineering or Computer Engineering programs in Fall 2019 or later are required to be either in the COOP program or C-Edge program. Students in the C-Edge or COOP programs are supposed to take and pass at least one or three work terms, respectively. Note that students may not register in COEN490 and ELEC490 projects if they have not completed and passed one work term.

5- Being in the COOP program is optional. A student who is withdrawn from the COOP program will be automatically enrolled in the C-Edge program. COOP students are supposed to follow the sequence as shown below. If a COOP student lags behind in courses, due to taking a low number of courses or failing some of the courses and need to change work terms, they have to fill the sequence change form and contact the corresponding Undergraduate Program Director for the re-scheduling of their COOP work terms.

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4	Winter Year 4
Computer Engineering Program (COOP Fall Entry) 4-year duration	COEN243	COEN311	COEN313	COOP WORK TERM	ELEC242	ELEC372	COEN366	COOP WORK TERM	COOP WORK TERM	COEN490	COEN490
	COEN212	COEN231	COEN352		ELEC311	ELEC342	COEN390			Science	Science
	ELEC273	COEN244	ENGR371		SOEN341	ENGR392	COEN320			GEN-ED	ELECTIVE
	ENGR213	ENGR233	ENGR391		ENGR290	ENGR301	COEN316			ELECTIVE	ELECTIVE
	ENGR201&202	ENCS282			COEN346		COEN317			ELECTIVE	ELECTIVE

6- Note that students may not withdraw from the C-Edge program unless they have been admitted to the COOP program. A student who finishes at least 60 credits is eligible for a C-Edge work term. This is the basis for the decision of the Department in assigning the schedule for the work terms. Based on the recommendation of the Department, the COOP Institute will inform C-Edge students in their first term, and before the DISC deadline, when they are supposed to take their C-Edge work term. Normally, the work terms are assigned for the Fall and Winter terms. In special cases, a Summer work term may be assigned.

7- For C-Edge students, an example of a 4-year sequence is given below. According to this sequence, Fall entry students take their C-Edge work term either in Fall Year 3 or Winter Year 3 but Winter entry students take their C-Edge work term in Winter Year 3.

Option A (work term in Fall Year 3):

Fall Year 3	Winter Year 3
C-Edge WORKTERM	COEN366
	COEN316
	COEN320
	COEN390
	COEN317

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4	Winter Year 4
Computer Engineering Program (C-Edge Fall Entry) 4-year duration	COEN243	COEN311	No activity	ELEC242	ELEC342	ELEC372	COEN366	COEN366	No activity	COEN490	COEN490
	COEN212	COEN231		ELEC311	COEN346	ENGR371	COEN316	COEN390		Science	Science
	ELEC273	COEN244		COEN352	SOEN341	ENGR392	COEN320	COEN317		GEN-ED	ELECTIVE
	ENGR213	ENGR233		COEN313	ENGR290	ENGR301	COEN390	C-Edge WORKTERM		ELECTIVE	ELECTIVE
	ENGR201	ENCS282		ENGR202	ENGR391		COEN317			ELECTIVE	ELECTIVE

(Option B: Fall Year 3 = COEN366, COEN316, COEN320, COEN390, COEN317; Winter Year 3 = C-Edge WORKTERM)

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4	Winter Year 4
Computer Engineering Program (C-Edge Winter Entry) 4-year duration	No activity	COEN243	COEN231	ELEC242	ELEC342	ELEC372	COEN366	C-Edge WORKTERM	No activity	COEN490	COEN490
		COEN212	COEN244	ELEC311	COEN346	ENGR371	COEN316			Science	Science
		ELEC273	ENCS282	COEN352	SOEN341	ENGR392	COEN320			GEN-ED	ELECTIVE
		ENGR213	ENGR233	COEN313	ENGR290	ENGR301	COEN390			ELECTIVE	ELECTIVE
		ENGR201&202		COEN311	ENGR391		COEN317			ELECTIVE	ELECTIVE

Computer Engineering

(4.5 and 5.5-year duration sequence examples)

8- For C-Edge students, an example of a 4.5-year sequence is given below. In this sequence example, students are supposed to take four courses in the Fall and Winter terms and two

Computer Engineering Program (C-Edge Fall Entry) — 4.5-year duration

Years 1–3 (main sequence):

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4
Computer Engineering Program (C-Edge Fall Entry) 4.5-year duration	COEN243 / COEN212 / ENGR213 / ENGR201&202	COEN244 / COEN231 / ELEC273 / ENCS282	No activity	ELEC242 / ELEC311 / ENGR290 / COEN352	ELEC342 / COEN346 / SOEN341 / ENGR301	COEN313 / ELEC372 / No activity	COEN320 / COEN366 / COEN317 / COEN390	C-Edge WORKTERM	No activity	ELECTIVE

C-Edge WORKTERM alternative (WORKTERM in Fall Year 3):

Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4	Winter Year 4	Summer Year 4	Fall Year 5
C-Edge WORKTERM	COEN320 / COEN366 / COEN317 / COEN390	ENGR391 / ENGR371	COEN490 / COEN316 / ELECTIVE	COEN490 / Science / ELECTIVE	ELECTIVE / ENGR392	GEN-ED / Science / ELECTIVE

Computer Engineering Program (C-Edge Winter Entry) — 4.5-year duration

Years 1–3 (main sequence):

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3
Computer Engineering Program (C-Edge Winter Entry) 4.5-year duration	No activity	COEN243 / COEN212 / ENGR213 / ENGR201&202	ELEC273 / COEN311 / No activity	COEN352 / ENCS282 / COEN244 / ENGR233	COEN231 / COEN313 / ENGR290 / ELEC311	ELEC242 / ENGR301 / No activity	ELEC342 / SOEN341 / ELEC372 / COEN346	COEN320 / COEN366 / COEN317 / COEN390	ENGR391 / ENGR371 / No activity

C-Edge WORKTERM continuation (Year 4+):

Fall Year 4	Winter Year 4	Summer Year 4	Fall Year 5	Winter Year 5
C-Edge WORKTERM	ELECTIVE / COEN316 / Science / ELECTIVE	ELECTIVE / ENGR392	COEN490 / ELECTIVE / Science	COEN490 / ELECTIVE / GEN-ED

Alternative (WORKTERM in Winter Year 4):

Fall Year 4	Winter Year 4
ELECTIVE / COEN316 / Science / ELECTIVE	C-Edge WORKTERM

9- For C-Edge students, an example of a 5.5-year sequence is given below. In this sequence example, students are supposed to take four courses in the Fall and Winter terms and no courses in the Summer terms.

Computer Engineering Program (C-Edge Fall Entry) — 5.5-year duration

Years 1–3 (main sequence):

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3
Computer Engineering Program (C-Edge Fall Entry) 5.5-year duration	COEN243 / COEN212 / ENGR213 / ENGR201&202	COEN244 / COEN231 / ENGR233 / ENCS282	No activity	COEN352 / ELEC273 / COEN311 / COEN313	ELEC242 / ENGR301 / ENGR290 / ELEC311	No activity	ELEC342 / COEN346 / ENGR371 / COEN316	COEN390 / COEN317 / SOEN341 / ELEC372	No activity

C-Edge WORKTERM continuation (Year 4+):

Fall Year 4	Winter Year 4	Summer Year 4	Fall Year 5	Winter Year 5	Summer Year 5	Fall Year 6
C-Edge WORKTERM	COEN366 / COEN320 / ENGR391 / ENGR392	No activity	COEN490 / Science / ELECTIVE	COEN490 / Science / ELECTIVE	No activity	GEN-ED / ELECTIVE / ELECTIVE

Alternative (WORKTERM in Winter Year 4):

Fall Year 4	Winter Year 4
COEN366 / COEN320 / ENGR391 / ENGR392	C-Edge WORKTERM

Computer Engineering Program (C-Edge Winter Entry) — 5.5-year duration

	Fall Year 1	Winter Year 1	Summer Year 1	Fall Year 2	Winter Year 2	Summer Year 2	Fall Year 3	Winter Year 3	Summer Year 3	Fall Year 4	Winter Year 4	Summer Year 4	Fall Year 5	Winter Year 5	Summer Year 5	Fall Year 6	Winter Year 6
Computer Engineering Program (C-Edge Winter Entry) 5.5-year duration	No activity	COEN243 / COEN212 / ENGR213 / ENGR201&202	No activity	COEN244 / COEN231 / ENGR233 / ENCS282	COEN352 / ELEC273 / COEN311 / COEN313	No activity	ELEC242 / ENGR301 / ENGR290 / ELEC311	ELEC342 / COEN346 / ENGR371 / COEN316	No activity	COEN390 / COEN317 / SOEN341 / ELEC372	C-Edge WORKTERM	No activity	COEN490 / Science / ENGR391 / COEN366	COEN490 / Science / ENGR392 / COEN320	No activity	GEN-ED / ELECTIVE / ELECTIVE	ELECTIVE / ELECTIVE / ELECTIVE

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