Computer Engineering
Bachelor of Science Degree

Curriculum Year 2024-2025

FRESHMAN YEAR

First Semester		Cr	Term Completed		Second Semester		Cr	Term Completed	
CH 1010/1011	General Chemistry and Lab[1]	4			ENGR 1410/1411	Programming and Problem Solving[1,5]	3		
ENGL 1030	Composition and Rhetoric[1]	3			MATH 1080	Calculus of One Variable II[1]	4		
ENGR 1020/1021	Engineering Disciplines and Skills[1,2]	3			PHYS 1220	Physics with Calculus I[1]	3		
MATH 1060	Calculus of One Variable I[1,3]	4				Arts & Humanities/Social Science Req.[4]	3		
	Arts & Humanities/Social Science Req.[4]	3				Arts & Humanities/Social Science Req.[4]	3		
		17					16		

SOPHOMORE YEAR

First Semester		Cr	Term Completed		Second Semester		Cr	Term Completed	
ECE 2010	Logic and Computing Devices[1]	3			ECE 2000	Introduction to ECE	1		
ECE 2020	Electric Circuits I[1]	3			ECE 2120	Electrical Engineering Lab II[1]	1		
ECE 2090	Logic and Computing Devices Lab	1			ECE 2220	C and Unix Programming for ECE[1]	3		
ECE 2110	Electrical Engineering Lab I[1]	1			ECE 2620	Electric Circuits II[1]	3		
ECE 2210	Python Programming for ECE[1]	3			ECE 2720	Computer Organization[1]	3		
MATH 2060	Calculus of Several Variables[1]	4			ECE 2730	Computer Organization Lab	1		
PHYS 2210	Physics with Calculus II[1]	3			MATH 2080	Intro to Ordinary Differential Equations[1]	4		
		18					16		

JUNIOR YEAR

First Semester		Cr	Term Completed		Second Semester		Cr	Term Completed	
ECE 2230	Data Structures and Algorithms in ECE[1]	3			ECE 3170	Random Signal Analysis[1]	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems[1]	3		
ECE 3200	Electronics I[1]	3			ECE 3270	Digital Computer Design[1]	3		
ECE 3300	Signals, Systems & Transforms[1]	3			ECE 3520	Programming Systems[1]	3		
ECE 3710	Microcontroller Interfacing[1]	3			MATH 4190	Discrete Mathematical Structures I	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra[1]	3							
		17					15		

SENIOR YEAR

First Semester		Cr	Term Completed		Second Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems[1]	3			ECE 4960	Integrated System Design II	2		
ECE 4950/4951	Integrated System Design I[1]	2				Arts & Humanities/Social Science Req.[4]	3		
PCID 3140	Technical Communication[6]	3				CpE Technical Requirement[7]	3		
	CpE Technical Requirement[7]	3				CpE Technical Requirement[7]	3		
	CpE Probability & Statistics Req.[8]	3				GLCH/Special Requirement[9]	3		
	Oral Communication Requirement[4]	3							
		17					14		

[1] This course must be passed with a grade of C or better to transfer into Computer Engineering from General Engineering or another major or to satisfy later course requirements.

[2] The combination of ENGR 1050 and ENGR 1060 or the combination of ENGR 1510 and 1520 may be substituted for ENGR 1020. Normally satisfies three credits of the Global Challenges requirement. Check DegreeWorks for your situation. (Otherwise, three credits of the Global Challenges requirement must be met with three additional credits.)

[3] Depending on a student's math placement based on the Clemson Mathematics Placement Test score, ACT mathematics score, or SAT mathematics score, MATH 1040 and MATH 1070 may be substituted for MATH 1060; or the student may be required to take MATH 1030 or MATH 1050 before enrolling in MATH 1060.

[4] See General Education Requirements. Three General Education credits must also satisfy the South Carolina REACH Act Requirement. See the South Carolina REACH Act Requirement in Academic Regulations. Some students meet this requirement upon admission to Clemson. Check DegreeWorks for your situation. For the Oral Communication Requirement, most students take COMM 1500/1501 or COMM 2500/2501.

[5] ENGR 1640 or the combination ENGR 1070, ENGR 1080, and ENGR 1090 may be substituted for ENGR 1410.

[6] ENGL 3140 or the combination AS 3090, AS 3100, and AS 4090 may be substituted for PCID 3140.

[7] Nine credits selected from BIOE 3700*, BIOE4310*, BIOE 4350*, BIOE 4710*, ECE 3210*, ECE 4050^{+}, ECE 4100, ECE 4160*, ECE 4270, ECE 4290, ECE 4300, ECE 4310, ECE 4380, ECE 4400, ECE 4420, ECE 4490, ECE 4550, ECE 4590*, ECE 4600, ECE 4670, ECE 4680, ECE 4730, ECE 4740, ECE 4910^{+}, ECE 4920^{+}, ECE 4930^{+}, ECE 4980^{+}, and ECE 4990^{+}. A maximum of six credits of courses marked with an asterisk and a maximum of three credits of courses marked with a plus may be used to satisfy this requirement.

[8] ECE 4270 or ECE 4300 or ECE 4400. The course selected cannot also be used to meet the CpE Technical Requirement.

[9] Select a 3000- or 4000-level Global Challenges course with a prefix other than ENGR. If the six credits of the Global Challenges requirement are satisfied by other requirements such as the Electrical or Computer Engineering Technical requirement, select any of the following: Three additional credits from Humanities and Social Sciences for Engineering Curricula; or any additional three-credit, 4000-level course from the list of courses in footnote 7 above; or a course selected from the following list: ECE 4040, ECE 4060, ECE 4080, ECE 4180, ECE 4190, ECE 4200, ECE 4220, ECE 4320, ECE 4330, ECE 4340, ECE 4360, ECE 4370, ECE 4460, ECE 4570, ECE 4580, ECE 4610, ECE 4700, ECE 4710, or ME 3100; or one additional course selected from MATH 4120, MATH 4340, MATH 4350, MATH 4400, MATH 4410, or MATH 4530.

(more on next page)

NOTES:

1. If a student has completed all of the courses listed in the General Engineering core, in order to register for a complete schedule, they may need to consider registering for courses required in the engineering degree program they intend to pursue. Students should see the list of possible courses in the Major Specific Coursework section of the General Engineering Program entry. Major specific coursework is coursework outside the General Engineering coure that will count towards an engineering major once a student has officially changed their major. Note that not all courses will count towards every engineering major. The courses listed in the Major Specific Coursework should not be considered alternatives or substitutes for the courses listed in the General Engineering core. If a student takes one of these other courses in place of the courses specifically listed in the General Engineering core, they could delay their eligibility to transfer from General Engineering into one of the degree-granting programs in engineering.
2. To transfer from General Engineering or other majors into the Computer Engineering program, students must have a cumulative grade-point average of 2.00 in courses taken at Clemson and must have earned a C or better in each course of the General Engineering Core.
3. A student is allowed to enroll in ECE courses (excluding ECE 2070, ECE 2080, ECE 3080) only when all prerequisites have been passed with a grade of C or better.
4. All Computer Engineering students must have a cumulative grade-point average of 2.00 to enroll in any 3000- or 4000-level ECE course. If this condition is not met each term, enrollment in these upper-level courses may be restricted. Students must fill out a Variance Request form which will be reviewed by the Departmental Variance Committee. Strict adherence to the committee decision is required.
5. No student may exceed a maximum of two attempts, excluding a W, to complete successfully any ECE course. A third and final attempt will only be considered by a written Variance Request to be reviewed by the Departmental Variance Committee before the deadline to add a course in a subsequent term. Students who do not complete a Variance or who have a Variance denied are not eligible to continue in the Electrical Engineering major. Strict adherence to the committee decision is required.
6. Depending on a student's math placement, they may be invited to take part in the General Engineering Learning Community where they complete the following courses: ENGR 1000, ENGR 1010, ENGR 1100, ENGR 1110, ENGR 1510, ENGR 1520, and ENGR 1640. The combination of ENGR 1510 and ENGR 1520 may be substituted for ENGR 1020. ENGR 1640 may be substituted for ENGR 1410.

Updated 10 June 2024

Computer Engineering

Bachelor of Science

Curriculum Year 2023-2024

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	3			ENGR 1410/1411	Programming and Problem Solving[4]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030/1031	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I[2]	4				Arts & Humanities/Social Science Req.[3]	3		
	Arts & Humanities/Social Science Req.[3]	3				Arts & Humanities/Social Science Req.[3]	3		
		17					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	3			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		18					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Arts & Humanities/Social Science Req.[3]	3		
ENGL 3140	Technical Writing[5]	3				CpE Technical Elective[6]	3		
	CpE Technical Elective[6]	3				CpE Technical Elective[6]	3		
	CpE Probability & Statistics Req.[7]	3				Special Requirement[9]	3		
	Communications Requirement[8]	3							
		17					14		

Total credit hours = 129

[1] Or ENGR 1050/1060 or ENGR 1510/1520. Satisfies three credits of the Global Challenges requirement if met by ENGR 1020 and taken at Clemson. (Otherwise, three credits of the Global Challenges requirement must be met with three additional credits.)
[2] Or MATH 1040/1070.
[3] See General Education section of the *Undergraduate Announcements*. Three of these credits must also satisfy the South Carolina REACH Act Requirement (if the requirement is not already satisfied upon admission to Clemson).
[4] Or ENGR 1070/1080/1090 or ENGR 1640.
[5] Or the cluster of AS 3090, AS 3100 and AS 4090 may be substituted.

[6] Select from approved Technical Elective listing found on ECE website https://www.clemson.edu/cecas/departments/ece/resources/undergrad_resources/curriculum.html.
[7] ECE 4270, ECE 4300, or ECE 4400.
[8] COMM 1500/1501 or COMM 2500/2501 or HON 1950 or HON 2230 or AS 3090/3100/4090/4100 or ML 1010/1020.
[9] Three additional Global Challenges credits at the 3000 or 4000 level with a course prefix other than ENGR; or, if the six Global Challenges credits are satisfied by other requirements such as ENGR 1020 and a qualifying CpE Technical Elective, any of the following: (1) A 3-credit approved Humanities/Social Sciences course (see listing in the current Undergraduate Catalog: http://catalog.clemson.edu/); (2) An additional 3-credit, 4000-level course from the EE Technical Elective List or the CpE Technical Elective List; (3) MATH 4120 or MATH 4340 or MATH 4350 or MATH 4400 or MATH 4410 or MATH 4530.

Updated 16 June 2023

Computer Engineering

Bachelor of Science

Curriculum Year 2022-2023

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	3			ENGR 1410/1411	Programming and Problem Solving[4]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030/1031	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I[2]	4				Arts & Humanities/Social Science Req.[3]	3		
	Arts & Humanities/Social Science Req.[3]	3				Arts & Humanities/Social Science Req.[3]	3		
		17					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	3			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		18					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Arts & Humanities/Social Science Req.[3]	3		
ENGL 3140	Technical Writing[5]	3				CpE Technical Elective[6]	3		
	CpE Technical Elective[6]	3				CpE Technical Elective[6]	3		
	CpE Probability & Statistics Req.[7]	3				Special Requirement[9]	3		
	Communications Requirement[8]	3							
		17					14		

Total credit hours = 129

[1] Or ENGR 1050/1060 or ENGR 1510/1520. Satisfies three credits of the Global Challenges requirement if met by ENGR 1020 and taken at Clemson. (Otherwise, three credits of the Global Challenges requirement must be met with three additional credits.)

[2] Or MATH 1040/1070.

[3] See General Education section of the *Undergraduate Announcements*. Three of these credits must also satisfy the South Carolina REACH Act Requirement (if the requirement is not already satisfied upon admission to Clemson).

[4] Or ENGR 1070/1080/1090 or ENGR 1640.

[5] Or AS 4090.

[6] Select from approved Technical Elective listing found on ECE website https://www.clemson.edu/cecas/departments/ece/resources/undergrad_resources/curriculum.html.

[7] ECE 4270, ECE 4300, or ECE 4400.

[8] COMM 1500/1501 or COMM 2500/2501 or HON 1950 or HON 2230 or AS 3090/3100/4090/4100 or ML 1010/1020.

[9] Three additional Global Challenges credits at the 3000 or 4000 level with a course prefix other than ENGR; or, if the six Global Challenges credits are satisfied by other requirements such as ENGR 1020 and a qualifying CpE Technical Elective, any of the following: (1) A 3-credit approved Humanities/Social Sciences course (see listing in the current Undergraduate Catalog: http://catalog.clemson.edu/); (2) An additional 3-credit, 4000-level course from the EE Technical Elective List or the CpE Technical Elective List; (3) MATH 4120 or MATH 4340 or MATH 4350 or MATH 4400 or MATH 4410 or MATH 4530.

Updated 23 May 2022

Computer Engineering
Bachelor of Science Degree

Curriculum Year 2021-2022

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	3			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		18					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.

[2] See General Education section of the *Undergraduate Announcements*. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements. To comply with the South Carolina REACH ACT, all undergraduate students who enter the university during summer 2021 or afterward must pass one of HIST 1010, POSC 1010, and POSC 1030. Additional courses may be approved which can satisfy this requirement. Successful completion of coursework in compliance with the REACH ACT is required for graduation.

[3] Or ENGR 1070/1080/1090.

[4] Select from approved Technical Elective listing found on ECE website https://www.clemson.edu/cecas/departments/ece/resources/undergrad_resources/curriculum.html.

[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).

[6] COMM 1500/1501 *or* COMM 2500/2501.

[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course
(see listing in the current Undergraduate Catalog: http://catalog.clemson.edu/); or

b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List;or

c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus).

Updated 14 June 2021

Computer Engineering
Bachelor of Science Degree

Curriculum Year 2020-2021

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	3			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		18					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.

[2] See General Education section of the *Undergraduate Announcements*. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.

[3] Or ENGR 1070/1080/1090.

[4] Select from approved Technical Elective listing found on ECE website https://www.clemson.edu/cecas/departments/ece/resources/undergrad_resources/curriculum.html.

[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).

[6] COMM 1500/1501 *or* COMM 2500/2501.

[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course (see listing here: www.clemson.edu/cecas/current-students/humanities_policy.html); or

b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List; or

c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus).

Updated 10 March 2020

Computer Engineering
Bachelor of Science Degree
Curriculum Year 2019-2020

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	3			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		18					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.
[2] See General Education section of the *Undergraduate Announcements.* Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
[3] Or ENGR 1070/1080/1090.
[4] Select from the list on page 2 of this document.
[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).
[6] COMM 1500/1501 *or* COMM 2500/2501.
[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course (see listing here: www.clemson.edu/cecas/current-students/humanities_policy.html); or
b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List; or
c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus); or
d. ELE 3010 Executive Leadership and Entrepreneurship I (prerequisite MGT 2010).

Updated 21 February 2019

Computer Engineering
Bachelor of Science Degree
Curriculum Year 2018-2019

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	2			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		17					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.
[2] See General Education section of the *Undergraduate Announcements.* Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
[3] Or ENGR 1070/1080/1090.
[4] Select from the list on page 2 of this document.
[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).
[6] COMM 1500/1501 *or* COMM 2500/2501.
[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course (see listing here: www.clemson.edu/cecas/current-students/humanities_policy.html); or
b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List; or
c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus); or
d. ELE 3010 Executive Leadership and Entrepreneurship I (prerequisite MGT 2010).

Updated 12 June 2017

Computer Engineering
Bachelor of Science Degree
Curriculum Year 2017-2018

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	2			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		17					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.
[2] See General Education section of the *Undergraduate Announcements.* Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
[3] Or ENGR 1070/1080/1090.
[4] Select from the list on page 2 of this document.
[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).
[6] COMM 1500/1501 *or* COMM 2500/2501.
[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course (see listing here: www.clemson.edu/cecas/current-students/humanities_policy.html); or
b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List; or
c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus); or
d. ELE 3010 Executive Leadership and Entrepreneurship I (prerequisite MGT 2010).

Updated 12 June 2017

Computer Engineering
Bachelor of Science Degree
Curriculum Year 2016-2017

FRESHMAN YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ENGR 1020/1021	Engineering Disciplines and Skills[1]	2			ENGR 1410/1411	Programming and Problem Solving[3]	3		
CH 1010/1011	General Chemistry	4			MATH 1080	Calculus II	4		
ENGL 1030	Composition and Rhetoric	3			PHYS 1220	Physics with Calculus I	3		
MATH 1060	Calculus I	4				Humanities/Social Science Req.[2]	3		
	Humanities/Social Science Req.[2]	3				Humanities/Social Science Req.[2]	3		
		16					16		

SOPHOMORE YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
CPSC 1110/1111	Intro to Programming in C	3			ECE 2120	Electrical Engineering Lab II	1		
ECE 2010	Logic and Computing Devices	2			ECE 2220	Systems Programming	3		
ECE 2020	Electric Circuits I	3			ECE 2620	Electric Circuits II	3		
ECE 2090	Logic Lab	1			ECE 2720	Computer Organization	3		
ECE 2110	Electrical Engineering Lab I	1			ECE 2730	Computer Organization Lab	1		
MATH 2060	Calculus III	4			MATH 2080	Differential Equations	4		
PHYS 2210	Physics with Calculus II	3							
		17					15		

JUNIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 2230	Computer Systems Engineering	3			ECE 3170	Random Signal Analysis	3		
ECE 3110	Electrical Engineering Lab III	1			ECE 3220	Introduction to Operating Systems	3		
ECE 3200	Electronics I	3			ECE 3270	Digital Computer Design	3		
ECE 3300	Signals, Systems & Transforms	3			ECE 3520	Programming Systems	3		
ECE 3710	Microcontroller Interfacing	3			MATH 4190	Discrete Mathematics	3		
ECE 3720	Microcontroller Interfacing Lab	1							
MATH 3110	Linear Algebra	3							
		17					15		

SENIOR YEAR

Fall Semester		Cr	Term Completed		Spring Semester		Cr	Term Completed	
ECE 4090	Intro to Linear Control Systems	3			ECE 4960	Integrated Systems Design II	2		
ECE 4950/4951	Integrated Systems Design I	2				Humanities/Social Science Req.[2]	3		
ENGL 3140	Technical Writing	3				CpE Technical Elective[4]	3		
	CpE Technical Elective[4]	3				CpE Technical Elective[4]	3		
	CpE Probability & Statistics Req.[5]	3				Special Requirement[7]	3		
	Communications Requirement[6]	3							
		17					14		

[1] Or ENGR 1050/1060.
[2] See General Education section of the *Undergraduate Announcements.* Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
[3] Or ENGR 1070/1080/1090.
[4] Select from the list on page 2 of this document.
[5] ECE 4270 (Communications Systems), ECE 4300 (Digital Communications) or ECE 4400 (Performance Analysis of Local Computer Networks).
[6] COMM 1500/1501 *or* COMM 2500/2501.
[7] Special Requirement Options:

a. A 3-credit approved Humanities/Social Sciences course (see listing here: www.clemson.edu/cecas/current-students/humanities_policy.html); or
b. An additional 3-credit, 4000-level course from the EE Technical Elective List *or* the CpE Technical Elective List; or
c. An additional 3-credit MATH course from the following list: MATH 4120 (Intro to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), *or* MATH 4530 (Advanced Calculus); or
d. ELE 3010 Executive Leadership and Entrepreneurship I (prerequisite MGT 2010).

Updated 12 June 2017

Computer Engineering
Bachelor of Science Degree
Curriculum year 2014-2016

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1050 Engr Discipline & Skills I	1		ENGR 1070 Program & Prob Slvng I	1	
ENGR 1060 Engr Discipline & Skills II	1		ENGR 1080 Program & Prob Slvng II	1	
CH 1010 & 1011 General Chemistry	4		ENGR 1090 Program & Prob Slvng III	1	
ENGL 1030 Accelerated Composition	3		Hum/Soc Sci req	3	
MATH 1060 Calculus I	4		Hum/Soc Sci req	3	
Hum/Soc Sci req	3		MATH 1080 Calculus II	4	
			PHYS 1220 Physics with Calculus I	3	
	16			16	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Electrical Engr Lab II	1	
ECE 2010 Logic & Computing Devices	2		ECE 2220 Systems Programming	3	
ECE 2020 Electric Circuits I	3		ECE 2620 Electric Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Computer Organization	3	
ECE 2110 Electrical Engineering Lab I	1		ECE 2730 Computer Org Lab	1	
MATH 2060 Calculus III	4		MATH 2080 Differential Equations	4	
PHYS 2210 Physics with Calculus II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2230 Computer Systems Engr	3		ECE 3170 Random Signal Analysis	3	
ECE 3110 Electrical Engineering Lab III	1		ECE [CPSC] 3220 Introduction to	3	
ECE 3200 Electronics I	3		Operating Systems		
ECE 3300 Signals, Sys, & Transforms	3		ECE 3270 Digital Computer Design	3	
ECE 3710 Microcontroller Interfacing	3		ECE 3520 Programming Systems	3	
ECE 3720 Microcontroller Lab	1		MATH 4190 Discrete Mathematics	3	
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 &1501 or COMM 2500 & 2501	3		ECE 4960 Systems Design II	2	
			Hum/Soc Sci req	3	
ECE 4090 Cont &Discrete Sys Design	3		CpE Technical Elective	3	
ECE 4950 & 4951 Systems Design I	2		CpE Technical Elective	3	
ENGL 3140 Technical Writing	3		Special Elective [1]	3	
CpE Technical Elective	3				
CpE Technical Elective	3				
	17			14	

NOTES:

1. Special Elective Options:
    a. 3 additional credits of approved Humanities/Social Science courses; or
    b. ELE 3010 - Executive Leadership and Entrepreneurship I or ELE 4010 - Executive Leadership and Entrepreneurship II; or
    c. An additional 3-credit, 400-level course from the EE Technical Elective List or the CpE Technical Elective List; or
    d. An additional 3-credit MATH course from the following list: MATH 4120 (Intro. to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), and MATH 4530 (Advanced Calculus).

Computer Engineering
Bachelor of Science Degree
Curriculum year 2013-2014

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1020 Intro Engr	2		ENGR 1410 & 1411 Problm solvng	3	
CH 1010 & 1011 General Chemistry	4		Hum/Soc Sci req	3	
ENGL 1030 Comp I	3		Hum/Soc Sci req	3	
MATH 1060 Calc I	4		MATH 1080 Calc II	4	
Hum/Soc Sci req	3		PHYS 1220 Phys I	3	
	16			16	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Circuits Lab II	1	
ECE 2010 Logic	2		ECE 2220 Sys Progrmng	3	
ECE 2020 Circuits I	3		ECE 2620 Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Comp Org	3	
ECE 2110 Circuits Lab I	1		ECE 2730 Comp Org Lab	1	
MATH 2060 Calc III	4		MATH 2080 Diff Eq	4	
PHYS 2210 Physics II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2230 Com Sys Eng	3		ECE 3170 Random Signal	3	
ECE 3110 Lab III	1		ECE [CPSC] 3220 Intro to Operating	3	
ECE 3200 Electronics I	3		Structures		
ECE 3300 Signals/Sys	3		ECE 3270 Dig Design	3	
ECE 3710 Micro Inter	3		ECE 3520 Prog Systems	3	
ECE 3720 Micro Inter Lab	1		MATH 4190 Discr Math	3	
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 &1501 or COMM 2500 & 2501	3		ECE 4960 Integr Sys Des II	2	
			Hum/Soc Sci req	3	
ECE 4090 Systems Design	3		CpE Tech Elec	3	
ECE 4950 & 4951 Integr Sys Des I	2		CpE Tech Depth Elec	3	
ENGL 3140 Tech Writing	3		Special Elective [1]	3	
CpE Tech Elec	3				
CpE Tech Elec	3				
	17			14	

NOTES:

1. Special Elective Options:
    a. 3 additional credits of approved Humanities/Social Science courses; or
    b. ELE 3010 - Executive Leadership and Entrepreneurship I or ELE 4010 - Executive Leadership and Entrepreneurship II; or
    c. An additional 3-credit, 400-level course from the EE Technical Elective List or the CpE Technical Elective List; or
    d. An additional 3-credit MATH course from the following list: MATH 4120 (Intro. to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), and MATH 4530 (Advanced Calculus).

Computer Engineering
Bachelor of Science Degree
Curricula years 2011-2012, 2012-2013

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1020 Intro Engr	2		ENGR 1410 & 1411 Problm solvng	3	
CH 1010 & 1011 General Chemistry	4		Hum/Soc Sci req	3	
ENGL 1030 Comp 1	3		Hum/Soc Sci req	3	
MATH 1060 Calc I	4		MATH 1080 Calc II	4	
Hum/Soc Sci req	3		PHYS 1220 Phys I	3	
	16			16	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Circuits Lab II	1	
ECE 2010 Logic	2		ECE 2220 Sys Progrmng	3	
ECE 2020 Circuits I	3		ECE 2620 Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Comp Org	3	
ECE 2110 Circuits Lab I	1		ECE 2730 Comp Org Lab	1	
MATH 2060 Calc III	4		MATH 2080 Diff Eq	4	
PHYS 2210 Physics II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2230 Com Sys Eng	3		ECE 3170 Random Signal	3	
ECE 3110 Lab III	1		ECE [CPSC] 3220 Intro to Operating	3	
ECE 3200 Electronics I	3		Structures		
ECE 3300 Signals/Sys	3		ECE 3270 Dig Design	3	
ECE 3710 Micro Inter	3		ECE 3520 Prog Systems	3	
ECE 3720 Micro Inter Lab	1		MATH 4190 Discr Math	3	
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 &1501 or COMM 2500 & 2501	3		ECE 4960 Integr Sys Des II	2	
			Hum/Soc Sci req	3	
ECE 4090 Systems Design	3		CpE Tech Elec	3	
ECE 4950 Integr Sys Des I	2		CpE Tech Depth Elec	3	
CpE Tech Elec	3		Special Elective [1]	3	
CpE Tech Elec	3				
ENGL 3140 Tech Writing	3				
	17			14	

NOTES:

1. Special Elective Options:
    a. 3 additional credits of approved Humanities/Social Science courses; or
    b. ELE 3010 - Executive Leadership and Entrepreneurship I or ELE 4010 - Executive Leadership and Entrepreneurship II; or
    c. An additional 3-credit, 4000-level course from the EE Technical Elective List or the CpE Technical Elective List; or
    d. An additional 3-credit MATH course from the following list: MATH 4120 (Intro. to Modern Algebra), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), and MATH 4530 (Advanced Calculus).

Computer Engineering
Bachelor of Science Degree
Curriculum year 2010-2011

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1020 Intro Engr	2		ENGR 1410 & 1411 Problm solvng	3	
CH 1010 & 1011 General Chemistry	4		Hum/Soc Sci req	3	
ENGL 1030 Comp 1	3		Hum/Soc Sci req	3	
MATH 1060 Calc I	4		MATH 1080 Calc II	4	
Hum/Soc Sci req	3		PHYS 1220 Phys I	3	
	16			16	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Circuits Lab II	1	
ECE 2010 Logic	2		ECE 2220 Sys Progrmng	3	
ECE 2020 Circuits I	3		ECE 2620 Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Comp Org	3	
ECE 2110 Circuits Lab I	1		ECE 2730 Comp Org Lab	1	
MATH 2060 Calc III	4		MATH 2080 Diff Eq	4	
PHYS 2210 Physics II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2230 Com Sys Eng	3		ECE 3170 Random Signal	3	
ECE 3110 Lab III	1		ECE [CPSC] 3220 Intro to Operating	3	
ECE 3200 Electronics I	3		Structures		
ECE 3300 Signals/Sys	3		ECE 3270 Dig Design	3	
ECE 3710 Micro Inter	3		ECE 3520 Prog Systems	3	
ECE 3720 Micro Inter Lab	1		MATH 4190 Discr Math	3	
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 &1501 or COMM 2500 & 2501	3		ECE 4960 Integr Sys Des II	2	
			Literature requirement	3	
ECE 4090 Systems Design	3		CpE Tech Elec	3	
ECE 4950 Integr Sys Des I	2		CpE Tech Depth Elec	3	
CpE Tech Elec	3		Special Elective [1]	3	
CpE Tech Elec	3				
ENGL 3140 Tech Writing	3				
	17			14	

NOTES:

- No student may enroll in ECE courses until all pre-requisites have been passed with a grade of C or higher.
- All CpE majors must have a cumulative and Engineering GPR of 2.0 to enroll in any 300- or 400-level ECE course.
- No student may exceed a maximum of two attempts, excluding a W, to successfully complete any ECE course.

Computer Engineering
Bachelor of Science Degree
Curricula years 2008-2009, 2009-2010

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1020 Intro Engr	2		ENGR 1410 & 1411 Problm solvng	3	
CH 1010 & 1011 General Chemistry	4		Hum/Soc Sci req	3	
ENGL 1030 Comp 1	3		Hum/Soc Sci req	3	
MATH 1060 Calc I	4		MATH 1080 Calc II	4	
Hum/Soc Sci req	3		PHYS 1220 Phys I	3	
	16			16	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Circuits Lab II	1	
ECE 2010 Logic	2		ECE 2220 Sys Progrmng	3	
ECE 2020 Circuits I	3		ECE 2620 Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Comp Org	3	
ECE 2110 Circuits Lab I	1		ECE 2730 Comp Org Lab	1	
MATH 2060 Calc III	4		MATH 2080 Diff Eq	4	
PHYS 2210 Physics II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2230 Com Sys Eng	3		ECE 3170 Random Signal	3	
ECE 3110 Lab III	1		ECE [CPSC] 3220 Intro to Operating	3	
ECE 3200 Electronics I	3		Structures		
ECE 3300 Signals/Sys	3		ECE 3270 Dig Design	3	
ECE 3710 Micro Inter	3		ECE 3520 Prog Systems	3	
ECE 3720 Micro Inter Lab	1		MATH 4190 Discr Math	3	
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 &1501 or COMM 2500	3		Literature requirement	3	
&2501			CpE Tech Elec	3	
CpE Tech Elec	3		CpE Tech Depth Elec	3	
CpE Tech Elec	3		ECE 4530 Soft Pract	3	
CpE Tech Elec	3		Hum/Soc Sci req	3	
ENGL 3140 Tech Writing	3				
	15			15	

NOTES:

- No student may enroll in ECE courses until all pre-requisites have been passed with a grade of C or higher.
- All CpE majors must have a cumulative and Engineering GPR of 2.0 to enroll in any 300- or 400-level ECE course.
- No student may exceed a maximum of two attempts, excluding a W, to successfully complete any ECE course.

2008-2009, 2009-2010 academic year

Updated 16 March 2014

Computer Engineering
Bachelor of Science Degree
Curricula years 2005-2006, 2006-2007, 2007-2008

FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1020 Intro Engr	2		CH 1020 & 1021 General Chemistry	4	
CH 1010 & 1011 General Chemistry	4		CPSC 1110 & 1111 C/C++	3	
ENGL 1030 Comp 1	3		Hum/Soc Sci req	3	
MATH 1080 Calc I	4		MATH 1080 Calc II	4	
Hum/Soc Sci req	3		PHYS 1220 Phys I	3	
	16			17	

SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 2220 Sys Progrmng	3		ECE 2230 Com Sys Eng	3	
ECE 2010 Logic	2		ECE 2120 Circuits Lab II	1	
ECE 2020 Circuits I	3		ECE 2620 Circuits II	3	
ECE 2090 Logic Lab	1		ECE 2720 Comp Org	3	
ECE 2110 Circuits Lab I	1		ECE 2730 Comp Org Lab	1	
MATH 2060 Calc III	4		MATH 2080 Diff Eq	4	
PHYS 2210 Physics II	3				
	17			15	

JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 3110 Lab III	1		ECE 3170 Random Signal	3	
ECE 3200 Electronics I	3		ECE 3270 Dig Design	3	
ECE 3220 Intro to Operating Structures	3		ECE 3520 Prog Systems	3	
ECE 3300 Signals/Sys	3		ENGL 3140 Tech Writing	3	
ECE 3710 Micro Inter	3		MATH 4190 Discr Math	3	
ECE 3720 Micro Inter Lab	1				
MATH 3110 Linear Algebra	3				
	17			15	

SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
Hum/Soc Sci req	3		ECE 4530 Soft Pract	3	
CpE Tech Elec	3		Hum/Soc Sci req	3	
CpE Tech Elec	3		Hum/Soc Sci req	3	
CpE Tech Elec	3		CpE Tech Elec	3	
COMM 1500 &1501 or COMM 2500 & 2501	3		CpE Tech Depth Elec	3	
	15			15	

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2005-2006, 2006-2007, 2007-2008 academic year

Updated 11 June 2013