Archives:

AY 2017-2018 AY 2018-2019

CSCU Computer Science Transfer Pathway 2019-2020

Not all community colleges offer any or all of the courses that are required in the pathway. This pathway document lists existing courses at the community colleges. The computer science work group approved the current pathway with the understanding that community college computer science faculty will modify or create courses where necessary. The Framework and Implementation Review Committee recommends that the pathway be moved forward for endorsement votes on the campuses with the understanding that periodic updates will be made and that, before the pathway becomes available for students for the fall of 2017, community college faculty will work to develop or modify courses as necessary. For the 2017/18 academic year, the following 9 community colleges will offer the computer Science pathway: CCC, GCC, HCC, MCC, MXCC, NCCC, NVCC, QVCC, TRCC

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Changes

The CSCU Pathway Transfer A.A. Degree: Computer Science Studies was approved by the BOR during AY 2016-17 and first made available to students for AY 2017-18.

 08/29/2017: Added course numbers to MCC transfer degree requirements: CSC 127, CSC 128, EET 252, CSC 121, and CSC 114).

Changes 10/24/2017:

- Updated ECSU program to reflect changes made beginning Fall 2017. These changes to the ECSU program do not affect the community college portion of the pathway.
- Added full lists of community college courses to all CSU templates no change in program requirements.

Changes 12/11/2017

- SCSU: page 21, line 31 course changed from CSC 153 to CSC 229 Object-oriented Programming; page 22, line 38, course changed from CSC 335 to CSC 235 Web and Database Development
- GCC: CSC 223 name corrected to Java Programming I throughout
- HCC: Updated course offerings

Changes 04/23/2018

WCSU updated general education requirements

Changes made 5/31/2018

- CCSU updated both honors and alternative programs; changed ENG 110 to WRT 110
- WCSU updated program

Changes made 9/13/2018

• Updated SCSU program

AY 2019-2020

CSCU Pathway Transfer A.A. Degree: Computer Science Studies

1	FRAMEWORK30		
2	Section A: Common Designated		
	Competencies		
3	Written Communication I	ENG 101 Composition	3 credits
4	Written Communication II	General Education Elective	3 credits
5	Scientific Reasoning	One sequence intended for majors	8 credits
6	Scientific Knowledge & Understanding	of that discipline. Must include labs.	
		BIO 121 General Biology I and BIO	
		122 General Biology II	
		OR	
		CHE 121 General Chemistry I and	
		CHE 122 General Chemistry II	
		OR	
		PHY 221 Calculus-based Physics I	
		and PHY 222 Calculus-based Physics	
		II	
7	Quantitative Reasoning	MAT 186 Pre-Calculus	4 credits
8	Historical Knowledge & Understanding	General Education Elective	3 credits
9	Social Phenomena	General Education Elective	3 credits
10	Aesthetic Dimensions	General Education Elective	3 credits
11	Section B: Campus Designated	12	
	Competencies	2	
12	Competency 1	General Education Elective	3 credits
13	Competency 2	General Education Elective	3 credits
14	Framework30 Total		33 credits

15	PATHWAY30		
16	Major Program Requirements		
17	Calculus I C or above	MAT 254	4 credits
18	Calculus II C- or above	MAT 256	4 credits
19	Computer Science/Programming I Cor	CSC 124 Programming Logic and	3 credits
	above	Design with Python (GCC)	
		CSC 223 Java Programming I (4	
		credits, HCC)	
		CSC 127 Java I (MCC)	
		CSC 105 Programming Logic (MXCC)	
		CSC 220 Java I (NCCC)	
		CSC 113 Programming I (NVCC)	

		T	
		CSC 106 Structured Programming I (QVCC)	
		CSC 108 Introduction to Programming (4 credits, NCC, TRCC)	
20	Computer Science/Programming II C or above	CSC 223 Java Programming I (4 credits, GCC, TRCC)	3 credits
		CSC 224 Java Programming II (4 credits, HCC)	
		CSC 128 Java II (MCC)	
		CSC 220 Object-Oriented Programming Using Java (MXCC)	
		CSC 221 Java II (NCCC)	
		CSC 229 Programming II (NVCC)	
		CSC 226 Object-Oriented Programming in Java (QVCC, 4 credits NCC)	
21	Digital Systems C- or above	EET 252 Digital Electronics (4 credits, GCC, MCC, NVCC [pre- / co-requisites required])	4 credits
		CST 145 Digital Circuits and Logic (4 credits, HCC, NCC, TRCC)	
		OR CSC 283 Introduction to Assembler (4 credits, NCC)	
22	Discrete Math C or above	MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC)	3-4 credits
23	Introduction to Database Design C or above	CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC)	3 credits
		CSC 121 Introduction to Database Design (MCC)	
		CSC 231 Database Design I (MXCC, NCCC, NVCC)	
		CSA 145 Database Management (QVCC)	
		i	

		CSC 233 Database Development I (4	
		•	
		credits, HCC, NCC, TRCC)	2 10
24	Client-side Web Design	CSC 257 Web Development with	3 credits
		PHP (4 credits, GCC)	
		CST 114 Client-Side Web	
		Development (MCC)	
		CST 150 Web Design and	
		Development I (NCCC, QVCC)	
		CST 153 Web Development and	
		Design I (4 credits, HCC, NCC, TRCC)	
		CSC 227 Web Programming with	
		Java (NVCC)	
25			
26	Unrestricted Electives		0 credits
27	Students who begin the Math sequence		
	above MAT 186 will have unrestricted		
	electives and should consider beginning		
	or completing work on foreign language	20	
	requirements not already met in high	20/10	
	school and beginning work on minor	79.7020	
	requirements of some CSUs. They may	0,7	
	also complete other General Education 🔧		
	requirements, but only up to six (6)		
	credits for ECSU.		
28	Pathway30 Total		27 credits

29 Computer Science Pathway Total		60 credits
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Students who are required to complete developmental coursework or who place below the required entry level of math for their program may not be able to complete their pathway degree in 60-61 credits/contact hours.

Transfer Pathway and Degree Program Central Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree

Computer Science B.S. – Alternative Program

Students must have a C- or above in all courses required for the major

1	Co	ommunity Colleges*:		CCSU		
2			Credits		Credits	
3		Fra	meworl	<30**		
4	General Education Requirements					
5	Competency:					
6	Section A					
7	Written I	English 101	3	WRT 110	3	
8	Written II	Gen Ed	3	Skill Area I – Communication	3	
9	Scientific Reasoning	One sequence	8	BIO 121 General Biology I and BIO	8	
10	Scientific Knowledge	intended for majors of that discipline. Must include labs. BIO 121 General Biology I and BIO 122 General Biology II OR CHE 121 General Chemistry I and CHE 122 General Chemistry II OR PHY 121 General Physics I and PHY 122 General Physics II OR PHY 221 Calculusbased Physics I and PHY 222 Calculusbased Physics II	2019-2016	122 General Biology II OR CHEM 161 General Chemistry with CHEM 162 General Chemistry Laboratory and CHEM 200 Foundations of Inorganic Chemistry with CHEM 201 Foundations of Analytical Chemistry Laboratory OR PHYS 125 University Physics I and PHYS 126 University Physics II		
11	Quantitative	MAT 186 Pre-Calculus	4	MATH 119 Pre-Calculus with Trigonometry	4	
12	Historical Knowledge	Gen Ed*	3	Study Area II – History	3	
13	Social Phenomena	Gen Ed	3	Study Area II – Social Science	3	
14	Aesthetic Dimensions	Gen Ed	3	Study Area I – Arts and Humanities	3	
15	Section B					
16	Competency:	Gen Ed	3	Skill Area IV – University Requirement	3	

17	Competency:	Gen Ed	3	Study Area III – Behavioral	3
10	- 100	li: (20.04)		Sciences	
18	Framework30 (
19			Pathway	/30	
20		Additional Ge	neral Ed	lucation Courses	
21				Study Area I – Literature	3
22				Study Area I – Arts and	3
				Humanities	
23				Study Area II – Social Sciences	3
24				Study Area III – Behavioral Sciences	3
25	credits, GCC) CST 114 Client-	evelopment with PHP (4 Side Web Development	3	Skill Area II – Math/Stat/ Comp Sci	3
	(NCCC, QVCC)	esign and Development I evelopment and Design I NCC, TRCC)	201		
	CSC 227 Web P (NVCC)	rogramming with Java	1079-701		
26		<i>A</i> .		Skill Area III – Foreign Language Proficiency: See requirements <u>here</u> . If the requirement has been met in whole or in part, general education and open elective credits will adjust accordingly.	6
27	General Educat	ion Credits:	36	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	54
28				n Courses	
29	C or above		3	CS 151 Computer Science I	3
	CSC 124 Progra with Python (G	mming Logic and Design CC)			
	CSC 223 Java Pr HCC)	ogramming I (4 credits,			
	CSC 127 Java I (MCC)			
	CSC 105 Progra	mming Logic (MXCC)			
L			l		

	CSC 220 Java I (NCCC)			
	CSC 113 Programming I (NVCC)			
	656 115 / 70g. a.m.m.g / (177 66)			
	CSC 106 Structured Programming I			
	(QVCC)			
	CSC 108 Introduction to Programming (4			
20	credits, NCC, TRCC) C or above	3	CC 152 Communitor Science II	3
30	C or above	3	CS 152 Computer Science II	3
	CSC 223 Java Programming I (4 credits,			
	GCC, TRCC)			
	CSC 224 Java Programming II (4 credits,			
	HCC)			
	CSC 128 Java II (MCC)			
	ese 120 sava ii (iviee)			
	CSC 220 Object-Oriented Programming			
	Using Java (MXCC)			
	CSC 221 Java II (NCCC)	2019-2016		
	CCC 220 Drag grap program in a 11 (NIV/CC)	20,1		
	CSC 229 Programming II (NVCC)	\mathcal{D}_{λ}		
	CSC 226 Object-Oriented Programming			
24	in Java (QVCC, 4 credits, NCC)		00.450.0	2
31			CS 153 Computer Science III CS 253 Data and File Structures	3
33			CS 254 Assembly Language	3
34	C- or above	4	Select 5 courses from the	15
			following:	
	EET 252 Digital Electronics (4 credits,		CS 354 Digital Systems Design	
	GCC, MCC, NVCC [pre- / co-requisites		CS 290 Topics	
	required])		The two courses above will be	
			completed at the community	
	CST 145 Digital Circuits and Logic (4		college leaving the student to	
	credits, HCC, NCC, TRCC)		choose an additional 3 courses from the following:	
	OR CSC 283 Introduction to Assembler (4		nom the following.	
	credits, NCC)		CS 355 Systems Programming	
	-,,		CS 385 Computer Architecture	
	AND	3-4	CS 407 Advanced Topics	
			CS 410 Software Engineering	
	C or above		CS 415 Game Development	
			CS 416 Web Programming	

1	CSC 150 Data Base Applications and		CS 417 Design Patterns	
	Design – Using SQL (4 credits, GCC)		CS 423 Graphics	
			CS 425 Image Processing	
	CSC 121 Introduction to Database		CS 460 Database Concepts	
	Design (MCC)		CS 462 Artificial Intelligence	
			CS 463 Algorithms	
	CSC 231 Database Design I (MXCC,		CS 464 Programming Languages	
	NCCC, NVCC		CS 465 Compiler Design	
			CS 473 Simulation Techniques	
	CSA 145 Database Management (QVCC)		CS 481 Operating Systems	
			CS 483 Theory of Computation	
	CSC 233 Database Development I (4		CS 490 Networking	
	credits, HCC, NCC, TRCC)		CS 491 Wireless	
			CS 492 Computer Security	
			CS 493 Software Security Systems	
			CS 495 Legal, Social, Ethical Issues	
			CS 300 Work Experience I	
			CS 398 Independent Study	
			CS 499 Seminar	
35				
36				
37	C or above	4	MATH 152 Calculus I	4
	MAT 254 Calculus I	10,50.		
38	C or above	Q 4	MATH 218 Discrete Math	4
	MAT 210 Discrete Math (NVCC, TRCC)	•		
	MAT 287 Discrete Math (4 credits, MCC)			
39				
40	Program Course Credits:	20		38
41	Minor Course Credits:			18-24
41		oen Elec	tives	
-		oen Elec	tives MATH 221 Calculus II	
42	C- or above MAT 256 Calculus II			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives.			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language and/or minor requirements			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language and/or minor requirements will end up with more open elective			18-24
42	C- or above MAT 256 Calculus II Students who begin the Math sequence above MAT 186 will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language and/or minor requirements			18-24

46	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

AY 2019-2020

Transfer Pathway and Degree Program Central Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree

Computer Science B.S. – Honors

Students must have a C- or above in all courses required for the major Students are required to take a proficiency test specified by the department during their senior year.

1	Co	ommunity Colleges*:		CCSU	
2			Credits		Credits
3		Fra	mework	<30**	
4		General Edu	ucation	Requirements	
5	Competency:				
6	Section A				
7	Written I	English 101	3	WRT 110	3
8	Written II	Gen Ed	3	Skill Area I – Communication	3
9	Scientific Reasoning	One sequence	8	BIO 121 General Biology I and BIO	8
10	Scientific Knowledge	intended for majors of that discipline. Must include labs. BIO 121 General Biology I and BIO 122 General Biology II OR CHE 121 General Chemistry I and CHE 122 General Chemistry II OR PHY 121 General Physics I and PHY 122 General Physics II OR PHY 221 Calculusbased Physics I and PHY 222 Calculusbased Physics I and PH	2019-2026	122 General Biology II OR CHEM 161 General Chemistry with CHEM 162 General Chemistry Laboratory and CHEM 200 Foundations of Inorganic Chemistry with CHEM 201 Foundations of Analytical Chemistry Laboratory OR PHYS 125 University Physics I and PHYS 126 University Physics II	
11	Quantitative	based Physics II MAT 186 Pre-Calculus	4	MATH 119 Pre-Calculus with	3
				Trigonometry	
12	Historical Knowledge	Gen Ed*	3	Study Area II – History	3
13	Social Phenomena	Gen Ed	3	Study Area II – Social Science	3
14	Aesthetic Dimensions	Gen Ed	3	Study Area I – Arts and Humanities	3
15	Section B				

16	Competency:	Gen Ed	3	Skill Area IV – University	3
				Requirement	
17	Competency:	Gen Ed	3	Study Area III – Behavioral Sciences	3
18	Framework30 C	redits (30-31):			33
19			Pathway	/30	
20				lucation Courses	
21				Study Area I – Literature	3
22				Study Area I – Arts and	3
				Humanities	
23				Study Area II – Social Sciences	3
24				Study Area III – Behavioral Sciences	3
25	credits, GCC)	evelopment with PHP (4	3	Skill Area II – Math/Stat/ Comp Sci	3
	(MCC)	cign and Davelonment			
	(NCCC, QVCC)	esign and Development I	202	>	
	CST 153 Web De (4 credits, HCC,	evelopment and Design I NCC, TRCC)	2019-2016		
	CSC 227 Web Pr (NVCC)	ogramming with Java 🔊			
26				Skill Area III – Foreign Language Proficiency:	6
				See requirements <u>here</u> . If the requirement has been met in	
				whole or in part, general	
				education and open elective	
				credits will adjust accordingly.	
27	General Educati	ion Credits:	36	, , , ,	54
28		Major	Progran	n Courses	
29	C or above	•	3	CS 151 Computer Science I	3
	CSC 124 Prograr with Python (GC	mming Logic and Design			
	CSC 223 Java Pro HCC)	ogramming I (4 credits,			
	CSC 127 Java I (N	MCC)			

	CSC 105 Programming Logic (MXCC)			
	CSC 220 Java I (NCCC)			
	CSC 113 Programming I (NVCC)			
	CSC 106 Structured Programming I (QVCC)			
	CSC 108 Introduction to Programming (4 credits, NCC, TRCC)			
30	C or above	3	CS 152 Computer Science II	3
	CSC 223 Java Programming I (4 credits, GCC, TRCC)			
	CSC 224 Java Programming II (4 credits, HCC)			
	CSC 128 Java II (MCC)			
	CSC 220 Object-Oriented Programming Using Java (MXCC)	2019-2026		
	CSC 221 Java II (NCCC)	1013		
	CSC 229 Programming II (NVCC)			
	CSC 226 Object-Oriented Programming in Java (QVCC, 4 credits, NCC)			
31			CS 253 Data and File Structures	3
32			CS 254 Computer Organization	3
			and Assembly Language	
33	C- or above	3	Programming CS 354 Digital Systems Design	3
	EET 252 Digital Electronics (4 credits, GCC, MCC, NVCC [pre- / co-requisites required])			
	CST 145 Digital Circuits and Logic (4 credits, HCC, NCC, TRCC)			
	OR CSC 283 Introduction to Assembler (4 credits, NCC)			
34	-,,		CS 355 Systems Programming	3
35			CS 385 Computer Architecture	3

36			CS 463 Algorithms	3
37			CS 464 Programming Languages	3
38			CS 483 Theory of Computation	3
39			CS 492 Computer Security	3
40	C or above	3	CS 290 Topics in Computer Science	3
	CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC)			
	CSC 121 Introduction to Database Design (MCC)			
	CSC 231 Database Design I (MXCC, NCCC, NVCC)			
	CSA 145 Database Management (QVCC)			
	CSC 233 Database Development I (4 credits, HCC, NCC, TRCC)			
42	W. W	2019-2016	Select 9 hours from the following advanced electives: CS 407 Advanced Topics CS 415 Game Development CS 416 Web Programming CS 423 Graphics CS 425 Image Processing CS 460 Database Concepts CS 462 Artificial Intelligence CS 465 Compiler Design CS 473 Simulation Techniques CS 481 Operating Systems CS 490 Networking CS 495 Legal, Social, Ethical Issues Capstone Requirement: CS 410 Introduction to Software	9
			Engineering CS 498 Senior Project	
43				
44	Carabaya	4	MATIL 152 Coloubra	Δ.
45	C or above	4	MATH 152 Calculus I	4
	MAT 254 Calculus I			
46	C- or above	4	MATH 221 Calculus II	4
	MAT 256 Calculus II			
47	C or above	4	MATH 218 Discrete Math	4

	MAT 210 Discrete Math (NVCC, TRCC)			
	MAT 287 Discrete Math (4 credits, MCC)			
48			MATH 226 Linear Algebra and Probability for Engineers	4
49			An additional 7 credits in science, STAT, or MATH above MATH 119 (not counting those in the Math category)	7
50	Program Course Credits:	24		74
51	Minor Course Credits:		Minor not required	0
52	O _l	pen Elec	tives	
53				
54	Students who begin the Math sequence above MAT 186 (MATH 119) will have additional unrestricted electives. Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language and/or minor requirements will end up with more open elective credits at the CCSU	202		
55	Open Elective credits:	10.		0
56	Total Credits at the Community College	60-61	Total Credits for the 4-Year Degree	128

Transfer Pathway and Degree Program Eastern Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree **Computer Science B.S.**

There are no additional requirements for admission to this program.

1	C	ommunity Colleges*:		ECSU		
2			Credits		Credits	
3		Frar	nework	30**		
4		General Edu	cation R	Requirements		
5	Competency:					
6	Section A					
7	Written I	English 101	3	T1 College Writing	3	
8	Written II	Gen Ed	3	T1 Literature and Thought	3	
9	Scientific Reasoning	One sequence intended	8	T1 – Natural Sciences (with Lab)	8	
10	Scientific Knowledge	for majors of that discipline. Must include labs. BIO 121 General Biology I and BIO 122 General Biology II OR CHE 121 General Chemistry I and CHE 122 General Chemistry II OR PHY 221 Calculus-based Physics I and PHY 222	019-2020	T2 – Natural Sciences BIO 120 Organismal Biology w/Lab and BIO 130 Ecology w/Lab OR CHE 210 General Chemistry I with CHE 212 General Chemistry Laboratory I and CHE 211 General Chemistry II with CHE 213 General Chemistry Laboratory II OR PHY 208 Physics w/Calculus I w/Lab and PHY 209 Physics		
11	Quantitative	Calculus-based Physics II MAT 186 Pre-Calculus	4	w/Calculus II w/Lab T1 Math MATH 155 Pre-Calculus	4	
12	Historical	Gen Ed*	3	Mathematics T1 Historical Paranestives	3	
12	Knowledge	Gen Eu	3	T1 Historical Perspectives	3	
13	Social Phenomena	Gen Ed	3	T1 Social Sciences	3	
14	Aesthetic Dimensions	Gen Ed	3	T1 Arts in Context	3	
15	Section B					
16	Competency:	Gen Ed	3	T1 FYI 100	3	
17	Competency:	Gen Ed	3	T1 Health and Wellness	3	
18	Framework30 C	redits (30-31):	<u>l</u>			
19		•	athway	30	1	
_	Pathway30					

20	Additional Ger	neral Edu	ucation Courses	
21			T2 Cultural Perspectives	3
22			T2 Individuals and Societies	3
23			T2 Creative Expressions	3
24	CSC 257 Web Development with PHP (4 credits, GCC) CST 114 Client-Side Web Development (MCC)	3	T2 Applied Information Technologies CSC 215 Introduction to Web Development	3
	CST 150 Web Design and Development I (NCCC, QVCC)			
	CST 153 Web Development and Design I (4 credits, HCC, NCC, TRCC)			
	CSC 227 Web Programming with Java (NVCC)			
25			Tier 3 Independent Inquiry (Must be taken at ECSU)	3
26		019.2020	Foreign Language Proficiency: See requirements here . If the requirement has been met in whole or in part, general education and open elective credits will adjust accordingly.	6
27	General Education Credits:	36	credits will adjust accordingly.	54
28				
29	C- or above	4	CSC 180 Fundamentals of	4
29	EET 252 Digital Electronics (4 credits, GCC, MCC, NVCC [pre- / co-requisites required]) CST 145 Digital Circuits and Logic (4 credits, HCC, NCC, TRCC)	4	Computing	4
	OR CSC 283 Introduction to Assembler (4 credits, NCC)			
30	C or above CSC 124 Programming Logic and Design with Python (GCC) CSC 223 Java Programming I (4 credits, HCC)	3	CSC 210 CS & Programming I	3

	CSC 127 Java I (MCC)			
	CSC 127 Java i (IVICC)			
	CSC 105 Programming Logic (MXCC)			
	CSC 220 Java I (NCCC)			
	CCC 442 Day and 14 (41) (CC)			
	CSC 113 Programming I (NVCC)			
	CSC 106 Structured Programming I			
	(QVCC)			
	CSC 108 Introduction to Programming (4			
24	credits, NCC, TRCC)	-	000 004 00 0 0	
31	C or above	3	CSC 231 CS & Programming II	3
	CSC 223 Java Programming I (4 credits,			
	GCC, TRCC)			
	CSC 224 Java Programming II (4 credits,			
	HCC)			
	CSC 128 Java II (MCC)			
	CSC 128 Java II (WICC)	019-2020		
	CSC 220 Object-Oriented Programming	10 J		
	Using Java (MXCC)	05		
	CSC 221 Java II (NCCC)			
	CSC 229 Programming II (NVCC)			
	CSC 226 Object-Oriented Programming in			
	Java (QVCC, 4 credits, NCC)			
32			CSC 270 Data Structures	3
33			CSC 320 Computer Architecture	3
34			CSC 335 Algorithm Design and	3
35			Analysis CSC 341 Database and	3
			Information Management	
36			CSC 401 Networking and	3
			Distributed Computing	
37			CSC 440 Operating Systems	3
38			CSC 445 Software Engineering	3
39			CSC 3XX/4XX CS Elective	3
40			CSC 3XX/4XX CS Elective	3
41			CSC 3XX/4XX CS Elective	3
43				
+3		l		<u> </u>

44 A			1		
MAT 254 Calculus I 6 C- or above MAT 256 Calculus II 4 MAT 256 Calculus II 4 Cor above MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (A credits, MCC) 5 Program Course Credits: Cor above CSC 2150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSC 233 Database Development I (4 credits, HCC, NCC, TRCC) 5 Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 5 Open Elective credits: 0 Ital Credits for the 4-Year 1 20	44				
46 C- or above MAT 256 Calculus II 47 Cor above MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21 51 49 Open Electives CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSC 233 Database Development I (4 credits, HCC, NCCC) CSC 233 Database Development I (4 credits, HCC, NCCC, NVCC) Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 15 Total Credits at the Community College 60-61 Total Credits for the 4-Year	45	C or above	4	MAT 243 Calculus I	4
46 C- or above MAT 256 Calculus II 47 Cor above MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21 51 49 Open Electives CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSC 233 Database Development I (4 credits, HCC, NCCC) CSC 233 Database Development I (4 credits, HCC, NCCC, NVCC) Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 15 Total Credits at the Community College 60-61 Total Credits for the 4-Year					
MAT 256 Calculus II 47 Cor above MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 49 Cor above Cor above Cor above CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSA 145 Database Management (QVCC) CSC 231 Database Development I (4 credits, HCC, NCC, RVCC) Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 53 Total Credits at the Community College 60-61 Total Credits for the 4-Year		MAT 254 Calculus I			
MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21	46	C- or above	4	MAT 244 Calculus II	4
MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21					
MAT 210 Discrete Math (NVCC, TRCC) MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21 Solution Open Electives 50 Cor above CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSA 145 Database Management (QVCQ) CSC 233 Database Development I (4 credits, HCC, NCC, TRCC) 51 Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 Italian (NAT 287 Discrete Math (4 credits, MCC) 51 Students who have fulfilled foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 Italian (NAT 287 Discrete Math (4 credits, MCC) 53 Total Credits at the Community College 60-61 Total Credits for the 4-Year		MAT 256 Calculus II			
MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21 51 49 Open Electives 50 Cor above CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSA 145 Database Management (QVCC) CSC 233 Database Development I (4 credits, HCC, NCC, TRCC) 51 Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 15 Total Credits at the 4-Year 120	47	C or above	3	MAT 230 Discrete Structures	3
MAT 287 Discrete Math (4 credits, MCC) 48 Program Course Credits: 21 51 49 Open Electives 50 Cor above CSC 150 Data Base Applications and Design – Using SQL (4 credits, GCC) CSC 121 Introduction to Database Design (MCC) CSC 231 Database Design I (MXCC, NCCC, NVCC) CSA 145 Database Management (QVCC) CSC 233 Database Development I (4 credits, HCC, NCC, TRCC) 51 Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at the ECSU. 52 Open Elective credits: 0 15 Total Credits at the 4-Year 120					
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52Open Elective credits:01553Total Credits at the Community College60-61Total Credits for the 4-Year120		more open elective credits at the ECSU.			
53 Total Credits at the Community College 60-61 Total Credits for the 4-Year 120	52		0		15
Degree	53		60-61	Total Credits for the 4-Year	120
	L			Degree	

Transfer Pathway and Degree Program Southern Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree

Computer Science B.S. General Program

There are no additional requirements for admission to this program.

1	С	ommunity Colleges*:		SCSU	
2			Credits		Credits
3		Fran	nework	30**	
4		General Educ	cation R	Requirements	
5	Competency:				
6	Section A				
7	Written I	English 101	3	FYE	3
8	Written II	Gen Ed	3	Written Communication	3
9	Scientific Reasoning	One sequence intended	8	BIO 102 General Biology I and	8
10	Scientific Knowledge	for majors of that discipline. Must include labs. BIO 121 General Biology I and BIO 122 General Biology II OR CHE 121 General Chemistry I and CHE 122 General Chemistry II OR PHY 221 Calculus-based Physics I and PHY 222 Calculus-based Physics II	29.2020	BIO 103 General Biology II OR CHE 120 General Chemistry I and CHE 121 General Chemistry II OR PHY 230 Physics for Scientists and Engineers I and PHY 231 Physics for Scientists and Engineers II	
11	Quantitative	MAT 186 Pre-Calculus	4	MAT 122 Pre-Calculus	4
12	Historical Knowledge	Gen Ed	3	Time and Place	3
13	Social Phenomena	Gen Ed	3	Social structure, Conflict, Consensus	3
14	Aesthetic Dimensions	Gen Ed	3	Cultural Expressions	3
15	Section B				
16	Competency:	Gen Ed	3	Critical Thinking	3
17	Competency:	Gen Ed	3	Tech Fluency	3
18	Framework30 C	redits (33):			
19		Pa	athway	30	
20		Additional Gen	eral Edi	ucation Courses	
21	CSC 257 Web Decredits, GCC)	evelopment with PHP (4	3	Creative Drive	3

	CST 114 Client-Side Web Development (MCC)				
	CST 150 Web Design and Development I (NCCC, QVCC)				
	CST 153 Web Development and Design I (4 credits, HCC, NCC, TRCC)				
	CSC 227 Web Programming with Java (NVCC)				
22	Select two out of three from the following t	hree area	s:		
23			Global Awareness	0-3	
24			Mind and Body	0-3	
25			American Experience	0-3	
26			Must be taken at SCSU:		
27			Tier 3 Connections Capstone: CSC 400 Computer Science Project Seminar	3	
28	General Education Credits:		-	45	
29	Major Program Courses				
30	C or above CSC 124 Programming Logic and Design	79.30	CSC 152 Computer Programming	3	
	with Python (GCC) CSC 223 Java Programming I (4 credits, HCC)				
	CSC 127 Java I (MCC)				
	CSC 105 Programming Logic (MXCC)				
	CSC 220 Java I (NCCC)				
	CSC 113 Programming I (NVCC)				
	CSC 106 Structured Programming I (QVCC)				
	CSC 108 Introduction to Programming (4 credits, NCC, TRCC)				
31	C or above	3	CSC 229 Object-oriented	3	
	CSC 223 Java Programming I (4 credits, GCC, TRCC)		Programming		

	CSC 224 Java Programming II (4 credits, HCC)			
	CSC 128 Java II (MCC)			
	, ,			
	CSC 220 Object-Oriented Programming Using Java (MXCC)			
	CSC 221 Java II (NCCC)			
	CSC 229 Programming II (NVCC)			
	CSC 226 Object-Oriented Programming in Java (QVCC, 4 credits, NCC)			
32	C- or above	4	CSC 207 Digital Systems	4
	EET 252 Digital Electronics (4 credits, GCC, MCC, NVCC [pre- / co-requisites required])			
	CST 145 Digital Circuits and Logic (4 credits, HCC, NCC, TRCC)			
	OR CSC 283 Introduction to Assembler (4 credits, NCC)	2.2020		
33	<u> </u>	25,	CSC 212 Data Structures	3
34	4		CSC 305 Computer Organization	3
35	Υ		CSC 321 Algorithms	3
36			CSC 324 Computer Ethics	3
37			CSC 330 Software Design and	3
20	Canahana	2	Development	2
38	C or above	3	CSC 235 Web and Database Development	3
	CSC 150 Data Base Applications and		Development	
	Design – Using SQL (4 credits, GCC)			
	CSC 121 Introduction to Database Design (MCC)			
	CSC 231 Database Design I (MXCC, NCCC,			
	NVCC)			
	NVCC) CSA 145 Database Management (QVCC)			
	NVCC)			

40			CSC 265 Computer Networks &	3
44			Security I	0
41			Select 3 from the following:	9
			CSC 334 Human Computer	
			Interactions	
			CSC 335 Database Management	
			CSC 341 Digital Imaging	
			CSC 431 Fundamentals of	
			Computer Graphics	
			CSC 443 Fundamentals of	
			Internet Programming	
			CSC 453 Information Security	
			CSC 463 Development of E-	
			Commerce Applications	
			CSC 465 Computer Network &	
			Security II	
			CSC 476 Fundamentals of Data	
			Warehousing	
			CSC 477 Fundamentals of Data	
			Mining	
			CSC 481 Artificial Intelligence	
42	C or above	4	MAT 150 Calculus I	4
		JO1		
42	MAT 254 Calculus I	10,1	144T454 C	
43	C- or above	5× 4	MAT 151 Calculus II	4
	MAT 25C Called a H			
	MAT 256 Calculus II	4	NAAT 470 Disease NASH	2
44	C or above	4	MAT 178 Discrete Math	3
	NAAT 210 Discrets Math (NIVCC TDCC)			
	MAT 210 Discrete Math (NVCC, TRCC)			
	MAT 287 Discrete Math (4 credits, MCC)			
45	207 2100/010		MAT 221 Intermediate Statistics	4
46			Select 1 from the following:	4
			MAT 252 Calculus III	
			MAT 322 Numerical Analysis I	
			PHY 355 Electricity and	
			Electronics	
47	Program Course Credits:	25		63
48	Оре	en Elect	ives	
49				
50	Open Elective credits:	0		9
51	Total Credits at the Community College	61	Total Credits for the 4-Year	120
			Degree	

Transfer Pathway and Degree Program Western Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree **Computer Science B.S.**

A G.P.A. of 2.5 or better for all CS and MAT courses in the major is required.

1	С	ommunity Colleges*:		WCSU	
2			Credits		Credits
3		Fra	amework	30**	
4		General Ed	ucation R	Requirements	
5	Competency:				
6	Section A				
7	Written I	English 101	3	Writing I	3
8	Written II	Gen Ed	3	Writing II	3
9	Scientific Reasoning	One sequence	8	BIO 103 General Biology I and	8
10	Scientific Knowledge	intended for majors of that discipline. Must include labs. BIO 121 General Biology I and BIO 122 General Biology II OR CHE 121 General Chemistry I and CHE 122 General Chemistry II OR PHY 221 Calculusbased Physics I and PHY 222 Calculusbased Physics II	2019:2020	BIO 104 General Biology II OR CHE 110 General Chemistry I and CHE 111 General Chemistry II OR PHYS 110 General Physics I (Calculus) and PHY 111 General Physics II (Calculus) Counts as first and second exposure to Scientific Inquiry.	
11	Quantitative	MAT 186 Pre-Calculus	4 One credit goes to free elective at WCSU	Quantitative Reasoning: MAT 170 Calculus of Polynomials Will complete a Second Exposure to Quantitative Reasoning at the community college – see lines 41, 44, and 47.	3
12	Historical Knowledge	Gen Ed*	3	Critical Thinking	3
13	Social Phenomena	Gen Ed	3	Information Literacy	3
14	Aesthetic Dimensions	Gen Ed	3	Creative Process	3
15	Section B				
16	Competency:	Gen Ed	3	Oral Communication	3

17	Competency:	Gen Ed	3	General Education Elective /	3	
				•	1	
				Exploration	l	
		10. (00.04)	ı			
18	Framework30 C	redits (30-31):			32	
10			5	20		
19	Pathway30					
			•			
20	Additional General Education Courses					
	AUULUUIAI VEHELAI EUULALIUH CUULSES					

Students complete a two-part general education curriculum: Part I (Foundations) addresses lifelong learning in and through 10 competencies. Part II (Explorations) requires students to complete a minimum of 40 credits outside their major. Students must also repeat three different competencies, excluding writing and first-year navigation.

In the Framework30 portion of the transfer degree, students who complete a TAP degree will receive credit for having met 8 competencies in Foundations, including at least one repeat (Scientific Inquiry), and 30 of the 40 credits of Explorations.

For this program, the student will have completed at the community college two General Education Elective / Second Exposures, one in Scientific Inquiry and one in Quantitative Reasoning. One second exposure requirement remains at WCSU. The student will also have completed the Explorations requirement, see lines 41, 44, and 47.

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	CSC 223 Java Programming I (4 credits, HCC)			
	CSC 127 Java I (MCC)			
	CSC 105 Programming Logic (MXCC)			
	CSC 220 Java I (NCCC)			
	CSC 113 Programming I (NVCC)			
	CSC 106 Structured Programming I (QVCC)			
	CSC 108 Introduction to Programming (4 credits, NCC, TRCC)			
31	C or above	1	CS 140 Introduction to	1
	000 000 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	The	Programming with Java	
	CSC 223 Java Programming I (4 credits,	other		
	GCC, TRCC)	two		
	CCC 224 lava Dragramming II /4 gradits	credits		
	CSC 224 Java Programming II (4 credits,	will be		
	HCC)	received		
	CSC 128 Java II (MCC)	as free electives.		
	CSC 126 Java II (IVICC)	See line		
	CSC 220 Object-Oriented Programming	53		
	Using Java (MXCC)	33		
	osing sava (wince)			
	CSC 221 Java II (NCCC)			
	CSC 229 Programming II (NVCC)			
	CSC 226 Object-Oriented Programming			
	in Java (QVCC, 4 credits, NCC)			
32			CS 170 Language C++	4
33	C or above	3	CS 2xx Database Design I	3
	CSC 150 Data Base Applications and			
	Design – Using SQL (4 credits, GCC)			
	3 3 1 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	CSC 121 Introduction to Database			
	Design (MCC)			
	CSC 231 Database Design I (MXCC,			
	NCCC, NVCC)			
	CCA 445 Database 440 (20122)			
	CSA 145 Database Management (QVCC)			

	CSC 233 Database Development I (4			
	•			
24	credits, HCC, NCC, TRCC)	4	CC 215 Community Analytic struct	4
34	C- or above	4	CS 215 Computer Architecture	4
	FFT 2F2 Digital Floature vice // avaidite			
	EET 252 Digital Electronics (4 credits,			
	GCC, MCC, NVCC [pre- / co-requisites			
	required])			
	CCT 445 Digital Cinquita and Lagia /4			
	CST 145 Digital Circuits and Logic (4			
	credits, HCC, NCC, TRCC)			
	OR CCC 393 Introduction to Assembler			
	OR CSC 283 Introduction to Assembler			
25	(4 credits, NCC)		CC 221 Object Oriented	4
35			CS 221 Object Oriented	4
26			Programming	4
36			CS 240 Computer Organization	4
27			& Software	
37			Select 1 from the following:	4
			CS 305 Database Applications	
			Engineering	
		200	CS 350 Object Oriented	
		200	Software Engineering	
		2000	CS 360 Distributed	
		\mathcal{I}_{O}	Applications Engineering	
38	4		CS 315 Design and Analysis of	4
	•		Algorithms	
39			CS 355 Programming	4
			Languages	
40			CS 450 Operating Systems	4
41	CSC 257 Web Development with PHP (4	3	Computer Science Electives:	12
	credits, GCC)		Select 12 credits from the	
			following:	
	CST 114 Client-Side Web Development		CS 245 Web Applications	
	(MCC)	4	Development	
			MAT 182 Calculus II	
	CST 150 Web Design and Development I		The above two courses are	
	(NCCC, QVCC)		completed at the community	
			college for a total of 7 credits)	
	CST 153 Web Development and Design I			
	(4 credits, HCC, NCC, TRCC)		(Select 5 credits from the	
			following once matriculated to	
	CSC 227 Web Programming with Java		WCSU):	
	(NVCC)		CS 235 Digital Media	
			CS 250 Advanced Topics in	
	AND		Programming	

	C- or above		CS 297 Cooperative Education	
			(1-9 SH)	
	MAT 256 Calculus II		CS 298 Faculty Developed	
			Study (1-4 SH)	
			CS 299 Student Developed Study (1-4 SH)	
			CS 285 Artificial Intelligence	
			CS 305 Database Applications	
			Engineering.	
			CS 330 Computer Graphics	
			CS 340 Computer Animation	
			CS 350 Object Oriented	
			Software Engineering	
			CS 351 Independent Study (3	
			SH)	
			CS 360 Distributed	
			Applications Engineering	
			CS 399 Honors Project (3 SH)	
			CS 410 Compiler Construction	
			CS 444 Computer Networks	
			CS 484 Special Topics in	
		20	Computer Science	
		200	MAT 272 Introduction to	
42		70,,	Linear Algebra CS 3xx Database Design II	1
43	4	\mathcal{D} ,	MAT 222 Introductory	3
73	F		Statistics	3
44	C or above	3	MAT 141 Foundational	3
			Discrete Mathematics	
	MAT 210 Discrete Math (NVCC, TRCC)			
	MAT 287 Discrete Math (4 credits,			
	MCC)			
45			CS/MAT 3xx Discrete	2
			Mathematics for Computer	
4.0			Science	2
46			CS/MAT 359 Introduction to	3
47	C or above	4	Theory of Computation MAT 171 Calculus I with	4
4/		4	Review	4
	MAT 254 Calculus I		OR	
	23 . 34.54.43 .		MAT 181 Calculus I	
48				
49	Program Course Credits:			67
50	0	pen Elect	ives	
51	One credit from line 11	-		1

52	Computer Programming II	2	CS 102 Intermediate Java	2
	See line 33		Programming	
53	Students who have fulfilled foreign			
	language requirements in high school			
	or who use open elective credits at the			
	community college to fulfill foreign			
	language requirements will end up			
	with more open elective credits at			
	WCSU.			
54	Open Elective credits:			0-3
55	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

MY 2019-2020

Credits remaining in the four-year degree Computer Science B.S. – Alternative Program

Students must receive a C- or above in all courses required for the major

1	Central Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Study Area I – Literature	3
5	Study Area I – Arts and Humanities	3
6	Study Area II – Social Sciences	3
7	Study Area III – Behavioral Sciences	3
8		
9	Skill Area III – Skill Area III – Foreign Language Proficiency. Can be met through the	6
	following: See requirements <u>here</u> . If the requirement has been met in whole or in	
	part, general education and open elective credits will adjust accordingly.	
10	General Education Credits	18
11	Remaining Major Program Requirements	
12	Course	Credits
13	CS 153 Computer Science III	3
14	CS 253 Data and File Structures	3
15	CS 254 Assembly Language	3
16	Select 5 courses from the following:	15
	CS 354 Digital Systems Design	
	CS 290 Topics	
	The two courses above will be completed at the community college leaving the student	
	to choose an additional 3 courses from the following:	
	CS 355 Systems Programming	
	CS 385 Computer Architecture	
	CS 407 Advanced Topics	
	CS 410 Software Engineering	
	CS 415 Game Development	
	CS 416 Web Programming	
	CS 417 Design Patterns	
	CS 423 Graphics	
	CS 425 Image Processing	
	CS 460 Database Concepts	
	CS 462 Artificial Intelligence	
	CS 463 Algorithms	
	CS 464 Programming Languages	
	CS 465 Compiler Design	
	CS 473 Simulation Techniques	
	CS 481 Operating Systems	
	CS 483 Theory of Computation	
	CS 490 Networking	

	CS 491 Wireless	
	CS 492 Computer Security	
	CS 493 Software Security Systems	
	CS 495 Legal, Social, Ethical Issues	
	CS 300 Work Experience I	
	CS 398 Independent Study	
	CS 499 Seminar	
17	Program course credits	18
18	Minor – Students should consider beginning work on a minor at the community	18-24
	college.	
19	Remaining Open Electives	
20	Courses	Credits
21	Open Elective credits	0-6
22	Students who have fulfilled the foreign language requirement in high school or who	
	use open elective credits at the community college to fulfill foreign language and/or	
	minor requirements will end up with more open elective credits at CCSU.	
23	Total Credits Remaining for the 4-Year Degree	60

MY 2019:2020

Credits remaining in the four-year degree Computer Science B.S. – Honors

Students must have a C- or above in all courses required for the major Students are required to take a proficiency test specified by the department during their senior year.

1	Central Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Study Area I – Literature	3
5	Study Area I – Arts and Humanities	3
6	Study Area II – Social Sciences	3
7	Study Area III – Behavioral Sciences	3
8		
9	Skill Area III – Skill Area III – Foreign Language Proficiency. Can be met through the	6
	following: See requirements <u>here</u> . If the requirement has been met in whole or in	
	part, general education and open elective credits will adjust accordingly.	
10	General Education Credits	18
11	Remaining Major Program Requirements	•
12	Course	Credits
14	CS 253 Data and File Structures	3
15	CS 254 Computer Organization and Assembly Language Programming	3
16	CS 355 Systems Programming	3
17	CS 385 Computer Architecture	3
18	CS 463 Algorithms	3
19	CS 464 Programming Languages	3
20	CS 483 Theory of Computation	3
21	CS 492 Computer Security	3
22	Select 9 hours from the following advanced electives:	9
	CS 407 Advanced Topics	
	CS 415 Game Development	
	CS 416 Web Programming	
	CS 423 Graphics	
	CS 425 Image Processing	
	CS 460 Database Concepts	
	CS 462 Artificial Intelligence	
	CS 465 Compiler Design	
	CS 473 Simulation Techniques	
	CS 481 Operating Systems	
	CS 490 Networking	
<u> </u>	CS 495 Legal, Social, Ethical Issues	
23	Capstone Requirement:	6
	CS 410 Introduction to Software Engineering	
	CS 498 Senior Project	
24	MATH 226 Linear Algebra and Probability for Engineers	4

25	An additional 7 credits in science, STAT, or above MATH 119 (not counting those in the	7
	Math category)	
26	Major Course credits	50
27	Minor – A minor is not required for this major.	0
28	Remaining Open Electives	
29	Courses	Credits
30	Open Elective credits	0
31	Students who have fulfilled the foreign language requirement in high school or who	
	use open elective credits at the community college to fulfill foreign language and/or	
	minor requirements will end up with more open elective credits at the CCSU.	
32	Total Credits Remaining for the 4-Year Degree	68

AY 2019-2020

Credits remaining in the four-year degree Computer Science B.S.

1	Eastern Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Two of the T2 courses must be completed at ECSU.	
5	T2 Cultural Perspectives	3
6	T2 Individuals and Societies	3
7	T2 Creative Expressions	3
8	T3 Independent Inquiry (Capstone – CSC 450 Senior Research)	3
9	Foreign Language Proficiency: See requirements <u>here</u> . If the requirement has been	6
	met in whole or in part, general education and open elective credits will adjust	
	accordingly.	
10	General Education Credits	18
11	Remaining Major Program Requirements	
12	Course	Credits
13	CSC 270 Data Structures	3
14	CSC 320 Computer Architecture	3
15	CSC 335 Algorithm Design and Analysis	3
16	CSC 341 Database and Information Management	3
17	CSC 401 Networking and Distributed Computing	3
18	CSC 440 Operating Systems	3
19	CSC 445 Software Engineering	3
20	CSC 3XX/4XX CS Elective	3
21	CSC 3XX/4XX CS Elective	3
22	CSC 3XX/4XX CS Elective	3
23	Major Course credits	30
24	Remaining Open Electives	
25	Courses	Credits
26	Open Elective credits	12
27	Students who have fulfilled foreign language requirements in high school or who use	
	open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at ECSU.	
28	Total Credits Remaining for the 4-Year Degree	60

Credits remaining in the four-year degree Computer Science B.S. – General Program

Students must complete 2 "W" courses at SCSU.

1	Southern Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Select two out of three from the following three areas:	
5	American Experience	0-3
6	Global Awareness	0-3
7	Mind and Body	0-3
8	Tier 3 Connections Capstone: CSC 400 Computer Science Project Seminar	3
9		
10	General Education Credits	9
11	Remaining Major Program Requirements	
12	Course	Credits
13	CSC 212 Data Structures	3
14	CSC 265 Computer Network & Security I	3
15	CSC 305 Computer Organization	3
16	CSC 321 Algorithms	3
17	CSC 324 Computer Ethics	3
18	CSC 330 Software Design and Development	3
19	CSC 425 Operating Systems	3
20	Select 3 from the following:	9
	CSC 334 Human Computer Interactions	
	CSC 335 Database Management	
	CSC 341 Digital Imaging	
	CSC 431 Fundamentals of Computer Graphics	
	CSC 443 Fundamentals of Internet Programming	
	CSC 453 Information Security	
	CSC 463 Development of E-Commerce Applications	
	CSC 465 Computer Network & Security II	
	CSC 476 Fundamentals of Data Warehousing	
	CSC 477 Fundamentals of Data Mining	
24	CSC 481 Artificial Intelligence	4
21	MAT 221 Intermediate Statistics	4
22	Select 1 from the following: MAT 252 Calculus III	4
	MAT 322 Numerical Analysis I	
	PHY 355 Electricity and Electronics	
23	Science Cognate	4
24	Major Course Credits	42
25	Remaining Open Electives	74
26	Courses	Credits
27	Open Elective credits	9
28	Total Credits Remaining for the 4-Year Degree	60
20	10 tal. 5. Carto hermanning for the T feat Degree	00

Credits remaining in the four-year degree Computer Science B.S.

A G.P.A. of 2.5 or better for all CS and MAT courses in the major is required.

1	Western Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
	For this program, the student will have completed at the community college two	
	General Education Elective / Second Exposures, one in Scientific Inquiry and one in	
	Quantitative Reasoning. One second exposure requirement remains at WCSU.	
4	Health and Wellness	3
5	Intercultural Competency	3
6	General Ed Elective other than Quantitative Reasoning and Scientific Inquiry.	3
7	A foreign language is required for this major. Follow this <u>link</u> and click on the program	3
	sheet for requirements. Three credits will count as a second exposure to Intercultural	
	Competence.	
8	The following must be taken at WCSU:	
10	Written Comm III – embedded in a major course	0
11	Culminating Gen Ed Experience – may be satisfied by a major capstone	3
12		
13	General Education Credits	15
14	Remaining Major Program Requirements	
15	Course	Credits
16	CS 170 Language C++	4
17	CS 221 Object Oriented Programming	4
18	CS 240 Computer Organization & Software	4
19	CS 3XX Database Design II	1
20	Select 1 from the following:	4
	CS 305 Database Applications Engineering	
	CS 350 Object Oriented Software Engineering	
	CS 360 Distributed Applications Engineering	
21	CS 315 Design and Analysis of Algorithms	3
22	CS 355 Programming Languages	4
23	CS 450 Operating Systems	4
24	Computer Science Electives: Select 5 credits from the following:	5
	CS 235 Digital Media	
	CS 250 Advanced Topics in Programming	
	CS 297 Cooperative Education (1-9 SH)	
	CS 298 Faculty Developed Study (1-4 SH)	
	CS 299 Student Developed Study (1-4 SH)	
	CS 285 Artificial Intelligence	
	CS 305 Database Applications Engineering	
	CS 330 Computer Graphics	
	CS 340 Computer Animation	
	CS 350 Object Oriented Software Engineering	

	CS 351 Independent Study (3 SH)	
	CS 360 Distributed Applications Engineering	
	CS 399 Honors Project (3 SH)	
	CS 410 Compiler Construction	
	CS 444 Computer Networks	
	CS 484 Special Topics in Computer Science	
	MAT 272 Introduction to Linear Algebra	
25		
26	MAT 222 Introductory Statistics	3
27	CS 3xx Discrete Mathematics for Computer Science	2
28	CS/MAT 359 Theory of Computation	4
29		
30	Major Course credits	42
31	Remaining Open Electives	
32	Courses	Credits
33	Open Elective credits	3
34	Students who have fulfilled foreign language requirements in high school or who use	
	open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at WCSU.	
35	Total Credits Remaining for the 4-Year Degree	60

