UNIVERSITY OF South Carolina

MIDLANDS TECHNICAL COLLEGE

Direct Transfer Track: Associate in Applied Science in Engineering Fundamentals with Concentration in Computer Engineering to Bachelor of Science in Computer Science
Bulletin Year: 2025-2026

This course plan provides a recommended sequence for this major. For detailed degree requirements, please refer to the University of South Carolina Bulletin. Additionally, reach out to your academic advisor at Midlands Technical College for assistance in navigating coursework in your MTC program of study. Your University of South Carolina advisor will help with course selection and planning for upcoming semesters after transfer.

Course Subject and Title	Credit Hours	Min. Grade	USC Equivalent Course	USC Degree Applicability
Semester One (17 Credit Hours)				
ENG 101 English Composition I	3	C	ENGL 101 Critical Reading & Composition	CC-CMW
CHM 110 College Chemistry	4	C	CHEM 111/111L General Chemistry I & Lab	CC-SCI
MAT 112 Precalculus	5	C	MATH 115 Precalculus	Pre-req/ Elective
COL 101 College orientation	1		Non-Transferable	Not Degree Applicable
EGR 281 Intro to Algorithmic Design	4	C	CSCE 145 Algorithmic Design I	PR
Semester Two (17 Credit Hours)				
MAT 140 Analytical Geometry & Calculus I	4	C	MATH 141 Calculus I	CC-ARP
ENG 102 English Composition II	3	C	ENGL 102 Rhetoric & Composition	CC-CMW/INF
CPT 247 UNIX Operating System	3	C	CSCE 215 UNIX/Linux Fundamentals	PR
HIS 101 Western Civilization to 1689	3	C	HIST 101 Eur Civ: Ancient-Mid 17th Cent.	CC-GHS
EGR 283 Intro to Algorithmic Design II	4	C	CSCE 146 Algorithmic Design II	PR
Summer Semester (13 Credit Hours)				
MAT 141 Analytical Geometry & Calculus II	4	C	MATH 142 Calculus II	CC-ARP
MUS 105 Music Appreciation or ART 101 Art History & Appreciation or THE 101 Introduction to Theatre	3	C	MUSC 110 Introduction to Music or ARTE 101 Introduction to Art or THEA 200 Understanding & Appreciating Theatre	CC-AIU
SPC 205 Public Speaking	3	C	SPCH 140 Public Communications	CC-CMS
PSC 201 American Government	3	C	POLI 201 American National Government	CC-GSS/FD
Semester Three (17 Credit Hours)				
ECE 102 Instrument Control	3	C	ELCT 102 Electrical Science	PR-Elective
MAT 240 Analytical Geometry & Calculus III	4	C	MATH 241 Vector Calculus	PR
ECE 211 Intro to Computer Engineering	3	C	CSCE 211 Digital Logic Design	PR
PHY 221 University Physics I	4	C	PHYS 211 Essential of Physics I & PHYS 211L Essentials of Physics Lab	CC-SCI
ECE 245 Object-Oriented Program Technology	3	C	CSCE 240 Advanced Programming Techniques	PR
Semester Four (16 Credit Hours)				
ECE 221 Intro to Electrical Engineering I	3	C	ELCT 221 Circuits	PR-Elective
MAT 242 Differential Equations	3	C	MATH 242 Elem. Differential Equations	PR-Elective
EGR 209 Statistics for Engineers	3	C	STAT 509 Statistics for Engineers	PR
PHY 222 University Physics II	4	C	PHYS 212 Essential of Physics II & PHYS 212L Essentials of Physics Lab	PR-Lab Science Elective
ECE 212 Intro to Computer Engineering	3	C	CSCE 212 Intro to Computer Architecture	PR
Semester Five (12 Credit Hours) Fall				
CSCE 311 Operating Systems	3	C		MR
MATH 374 Discrete Structures	3	C		PR
CSCE 247 Software Engineering	3	C		PR
CSCE Major Elective	3	C		MR
Semester Six (14 Credit Hours) Spring				
CSCE 416 Intro to Computer networks	3	C		MR
CSCE 350 Data Structures & Algorithms	3	C		MR
CSCE 390 Prof. Issues in Computer Science Engr.	1	C		CC-VSR
CSCE Major Elective	3	C		MR
ENGL 462 Technical Writing or ENGL 463 Business Writing	3	C		PR
CSCE 190 Computing in the Modern World	1	C		PR
Semester Seven (12-15 Credit Hours) Fall				
CSCE 355 Foundations of Computation	3	C		MR
CSCE 490 Capstone Computing Project I (fall only)	3	C		MR/ CC-INT
CSCE 330 Programming Lang. Structures (fall only)	3	C		MR
CSCE Major Elective	3	C		MR
Carolina Core GFL	0-3			CC-GFL

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Semester Eight (13-16 Credit Hours) Spring				
CSCE 492 Capstone Computing Project II (spring only)	3	C		MR
Elective	3	C		PR
Elective	3	C		PR
Math 344 Applied Linear Algebra	3	C		PR
MATH 344L Applied Linear Algebra Lab	1	C		PR
Carolina Core GFL	0-3	C		CC-GFL

* Credit hours received for MAT 112 may reduce additional elective hours needed and Students may place into and begin with MAT 140.

The Computer Science curriculum includes 4-13 hours of electives, depending on how students fulfill the Carolina Core requirements. Any course not being used for degree applicability can be used to satisfy the elective requirement.

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the Carolina Core page on the University website.

Codes:			
CC	Carolina Core	**CC-INF**	Carolina Core – Information Literacy
CC-AIU	Carolina Core-Aesthetic and Interpretive Understanding	**CC-INT**	Carolina Core – Integrative Course
CC-ARP	Carolina Core-Analytical Reasoning and Problem-Solving	**CC-SCI**	Carolina Core – Scientific Literacy
CC-CMS	Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component	**CC-VSR**	Carolina Core – Values, Ethics, and Social Responsibility
CC-CMW	Effective, Engaged, and Persuasive Communication: Written Component	**CR**	College Requirement
CC-GFL	Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language	**MR**	Major Requirement
CC-GHS	Carolina Core – Historical Thinking	**PR**	Program Requirement
CC-GSS	Carolina Core – Social Sciences	**FD**	Founding Documents