

VCCS Equivalencies for EE/CPE Curriculum

The Virginia Community College System has developed common EGR courses across all VCCS sites that will equate to VT ECE courses. Each site will teach the same material under the same course numbers and VT will award the same VT credit across each site. All VCCS sites will be teaching under the new curriculum beginning in Fall 2023. Some sites began teaching the new curriculum in Fall 2022. The below information provides an overview for how the transfer credit will be awarded based on the term and site completed.

Completed the course in Fall 2023, Spring 2024, or Summer 2024

- See [Table 1. Fall 2023 or Later Equivalencies \(ALL Sites\)](#)

Completed the course in Fall 2022, Spring 2023, or Summer 2023

- **Completed the course at one of the following institutions:** Blue Ridge Community College (BRCC), Brightpoint Community College (BPCC), Northern Virginia Community College (NVCC), Southwest Community College (SWCC), Tidewater Community College (TCC), Virginia Highlands Community College (VHCC)
 - See [Table 2. Fall 2022 or Later Equivalencies \(Specific Sites\)](#)
- **Completed the course at one of the following institutions:** Germanna Community College (GCC), Reynolds Community College (RCC), Thomas Nelson Community College (TNCC), Virginia Western Community College (VWCC)
 - See Tables 2 – 6
 - [Table 3. ECE 1004 Equivalences \(ALL sites\)](#)
 - [Table 4. Germanna Community College](#)
 - [Table 5. J. Sargeant Reynolds Community College](#)
 - [Table 6. Thomas Nelson Community College](#)
 - [Table 7. Virginia Western Community College](#)

Completed the course prior to Fall 2022

- See Tables 2 – 9
 - [Table 3. ECE 1004 Equivalences \(ALL Sites\)](#)
 - [Table 4. Germanna Community College](#)
 - [Table 5. J. Sargeant Reynolds Community College](#)
 - [Table 6. Thomas Nelson Community College](#)
 - [Table 7. Virginia Western Community College](#)
 - [Table 8. Brightpoint Community College](#)
 - [Table 9. Northern Virginia Community College](#)
 - [Table 10. Tidewater Community College](#)

Table 1. Fall 2023 or Later Equivalencies (ALL Sites)

All Sites	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated courses must be completed to receive the indicated VT credits)	
EGR 125 Intro to Eng Methods EGR 271 Circuit Theory I	ECE 1004 Intro to ECE Concepts ECE 2514 Computational Engineering
Single Equivalencies	
EGR 270 Fundamentals of Computer Engineering	ECE 2544 Fundamentals of Digital Systems
EGR 271 Circuit Theory I	ECE 2054 Applied Electrical Theory does not count for ECE majors
EGR 272 Circuit Theory II	ECE 2024 Circuits and Devices

Table 2. Fall 2022 or Later Equivalencies (Specific Sites)

BRCC, BPCC, NVCC, SWCC, TCC, VHCC	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated courses must be completed to receive the indicated VT credits)	
EGR 125 Intro to Eng Methods EGR 271 Circuit Theory I	ECE 1004 Intro to ECE Concepts ECE 2514 Computational Engineering
Single Equivalencies	
EGR 270 Fundamentals of Computer Engineering	ECE 2544 Fundamentals of Digital Systems
EGR 271 Circuit Theory I	ECE 2054 Applied Electrical Theory does not count for ECE majors
EGR 272 Circuit Theory II	ECE 2024 Circuits and Devices

Table 3. ECE 1004 Equivalencies (ALL sites)

Course Type: Programming*	Course Type: Circuit Analysis*
CSC 210 Programming with C++	EGR 251 Basic Electric Circuits
EGR 125 Intro to Eng Methods	EGR 260 Circuit Analysis
EGR 126 Computer Programming for Engineers	EGR 271 Circuit Theory I

* Students should choose one course from each course type (depending on their VCCS site offerings) which will then equate to ECE 1004 plus three credits of free elective. For example, a student could take CSC 210 and EGR 260 and would receive VT credit for ECE 1004 + ECE 1XXX.

Table 4. Germanna Community College

GCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated GCC courses must be completed at GCC to receive the indicated VT credits)	
EGR 126 Computer Programming for Engineers EGR 251 Basic Electric Circuits EGR 252 Basic Electric Circuits II EGR 255 Electrical Circuits Lab	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices

Table 5. J. Sargeant Reynolds Community College

Reynolds Courses	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated JSRCC courses must be completed at JSRCC to receive the indicated VT credits)	
CSC 210 Programming with C++ EGR 251 Basic Electric Circuits EGR 255 Electric Circuits Laboratory	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices

Table 6. Thomas Nelson Community College

TNCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies** (all indicated TNCC courses must be completed at TNCC to receive the indicated VT credits)	
EGR 126 Computer Programming for Engineers EGR 260 Circuit Analysis EGR 261 Signals and Systems	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices
EGR 277 Digital Logic EGR 278 Digital Logic Laboratory	ECE 2544 Fundamentals of Digital Systems

Table 7. Virginia Western Community College

VWCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated VWCC courses must be completed at VWCC to receive the indicated VT credits)	
EGR 126 Computer Programming for Engineers EGR 251 Basic Electric Circuits EGR 255 Electric Circuits Lab	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices

Table 8. Brightpoint Community College

BPCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies** (all indicated BPCC courses must be completed at BPCC to receive the indicated VT credits)	
EGR 126 Computer Programming for Engineers EGR 251 Basic Electric Circuits EGR 255 Electrical Circuits Lab EGR 270 Fundamentals of Computer Engineering	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices ECE 2514 Computational Engineering ECE 2544 Fundamentals of Digital Systems
EGR 261 Signals & Systems EGR 263 Signals & Systems Lab	ECE 2714 Signals and Systems
Single Equivalencies	
EGR 270 Fundamentals of Computer Engineering	ECE 2544 Fundamentals of Digital Systems

Table 9. Northern Virginia Community College

NVCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated NVCC courses must be completed at NVCC to receive the indicated VT credits)	
[EGR 125 Intro to Engineering Methods OR EGR 126 Computer Programming for Engineers] EGR 251 Basic Electric Circuits EGR 252 Basic Electric Circuits II EGR 255 Electrical Circuits Lab	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices
Single Equivalencies	
EGR 125 Intro to Engineering Methods	ECE 2514 Computational Engineering

Table 10. Tidewater Community College

TCC Courses	VT Equivalent Transfer Credit
Grouped Equivalencies (all indicated TCC courses must be completed at TCC to receive the indicated VT credits)	
With Circuits Lab EGR 125 Introduction to Engineering Methods EGR 262 Fundamental Circuits Lab EGR 270 Fundamentals of Computer Engineering EGR 271 Circuit Theory I EGR 272 Circuit Theory II	ECE 1004 Intro to ECE Concepts ECE 2024 Circuits and Devices ECE 2514 Computational Engineering ECE 2544 Fundamentals of Digital Systems
Without Circuits Lab EGR 125 Introduction to Engineering Methods EGR 270 Fundamentals of Computer Engineering EGR 271 Circuit Theory I EGR 272 Circuit Theory II	ECE 1004 Intro to ECE Concepts ECE 2514 Computational Engineering ECE 2544 Fundamentals of Digital Systems
Single Equivalencies	
EGR 270 Fundamentals of Computer Engineering	ECE 2544 Fundamentals of Digital Systems