

# Computer, Information Sciences, and Support Services

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## Overview

The Fast Forward Computer, Information Sciences, and Support Services (CIP 11) pathway has twelve Associate Degree opportunities through Bossier Parish Community College, Baton Rouge Community College, Central Louisiana Technical Community College, Delgado Community College, Louisiana State University at Eunice, River Parish Community College, South Louisiana Community College, and Southern University.

This pathway prepares students in computer and information sciences for a range of careers in information technology and computer operations sectors.

## Guidance Overview

This guidance is meant to help school systems and parents navigate the opportunities to complete an Associate Degree in high school. School systems should verify information with the post-secondary institution to ensure students are enrolled in the appropriate college classes to earn the associates degree.

This guidance includes:

- [Post-Secondary Degree Paths](#) details all courses required for the Applied Associate Degree. The Applied Associate Degree has limited general education courses and is primarily designed to prepare students for immediate employment or career entry.
- [Secondary Courses not included in the Post-Secondary Program of Study](#) detail all courses the student must take prior to or in tandem with the college courses to meet secondary graduation requirements. Typically, these are courses students are scheduled to take in grades 9 and 10.
- [Capstone Credentials](#) details all Industry Based Certifications a student can receive to complete the Applied Associate Degree. Students working towards a Jump Start Diploma must complete at least one capstone credential to graduate.
- [High School Transcription](#) details the LDOE course code a counselor should use to transcribe the college courses that do not have a dedicated LDOE course code.

## Post-Secondary Degree Paths Approved by BESE for Fast Forward

- **Bossier Parish Community College:**  
[Associate of Applied Science: Computing Information Systems](#)  
[Associate of Applied Science: Cyber Security](#)  
[Associate of Applied Science: Systems Administration DevOps](#)  
[Associate of Applied Science: Systems Administration Cloud Computing](#)
- **Baton Rouge Community College**  
[Associate of Applied Science: Computing and Information Systems Concentration Cloud Computing](#)
- **Central Louisiana Community College**  
[Associate of Applied Science: Cloud Computing](#)
- **Delgado Community College:**  
[Associate of Applied Science: Computer Information Technology Concentration in Game Development](#)  
[Associate of Applied Science: Cloud Computing](#)
- **Louisiana State University at Eunice:**  
[Associate of Applied Science: Computing Information Technology](#)
- **River Parish Community College:**  
[Associate of Applied Science: System Administration Concentration Cloud Computing](#)
- **South Louisiana Community College:**  
[Associate of Applied Science: Information Technology](#)
- **Southern University Shreveport:**  
[Associate of Science: Computer Science \(Scientific Option\)](#)



# Post-Secondary Degree Paths

## Bossier Parish Community College: Associate of Applied Science: Computing Information Systems

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Composition and Rhetoric	ENGL 101	English III: DE - CENL 1013 English Composition I	120601
College Algebra or Applied Algebra for College Students	MATH 102 or 101	Algebra III: DE - CMAT 1213 College Algebra	160500
Social/Behavioral Science Elective: Principles of Macroeconomics	BADM 201	Economics: DE - CECN 2213 Macroeconomics	220608
Natural Science Elective: Elements of Biology I	BLGY 105	Biology II: DE - CBIO 1013 General Biology I	150323
Humanities Elective: Elementary Spanish I	SPAN 101	Spanish: DE - CSPN 1013/1014 Elementary Spanish I	122511
World Civilization I or Western Civilization II	HIST 101 or 102	World History: DE - CHIS 1113 World Civilization I or World History: DE - CHIS 1123 World Civilization II	220450 or 220451
Information Technology Principles Cert: CompTIA ITF+	CTEC 101		
Skills for Information Technology (IT) Success	CTEC 107		
Problem-Solving and Programming Techniques	CTEC 102		
Introduction to Management Information Systems	CTEC 108		
IT Hardware Support Cert: CompTIA A+	CTEC 112		
IT Software Support Cert: CompTIA A+	CTEC 114		
Help Desk Operations or HDI Support Center Analyst	CTEC 118 or 119		
Network Essentials Cert: CompTIA Network+	CTEC 155		
Data Analytics	CTEC 274		
Information Technology Project Management Cert: CompTIA Project+	CTEC 282		
Internet Protocol (IP) Telephony	CTEC 240		
Cloud+ Cert: CompTIA Cloud+	CTEC 263		
System Analysis and Design	CTEC 290		
Approved CTEC Elective	TBD by course selected		

# Post-Secondary Degree Paths

## Bossier Parish Community College: Associate of Applied Science: Cyber Security

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Composition and Rhetoric	ENGL 101	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 102	Algebra III: DE - CMAT 1213 College Algebra	160500
Elementary Spanish I	SPAN 101	Spanish: DE - CSPN 1013/1014 Elementary Spanish I	122511
Principles of Macroeconomics	BADM 201	Economics: DE - CECN 2213 Macroeconomics	220608
Elements of Biology I	BLGY 105	Biology II: DE - C BIO 1013 General Biology I	150323
Western Civilization I or Western Civilization II	HIST 101 or 102	World History: DE - CHIS 1113 World Civilization I or DE - CHIS 1123 World Civilization II	2220450 or 220451
Information Technology Principles Cert: CompTIA IFT+	CTEC 101		
Problem Solving and Programming Techniques	CTEC 102		
Skills for Information Technology (IT) Success	CTEC 107		
IT Hardware Support Cert: CompTIA A+ (Core 1)	CTEC 112		
IT Software Support Cert: CompTIA A+ (Core 2)	CTEC 114		
Linux Server	CTEC 172		
Introduction to Scripting	CTEC 104		
Network Essentials Cert: CompTIA Network+	CTEC 155		
CCNA I	CTEC 255		
Microsoft Windows Servers	CTEC 170		
Approved CTEC Elective	TBD by Course Selected		
Network Security Design Cert: CompTIA Security+	CTEC 287		
Computer Forensics	CTEC 280		
CTE Internship	CTEC 299		
Information Assurance	CTEC 279		

# Post-Secondary Degree Paths

## Bossier Parish Community College: Associate of Applied Science: System Administration DevOps

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Composition and Rhetoric	ENGL 101	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 102	Algebra III: DE - CMAT 1213 College Algebra	160500
Principles of Macroeconomics	BADM 201	Economics: DE - CECN 2213 Macroeconomics	220608
Elementary Spanish I	SPAN 101	Spanish: DE - CSPN 1013/1014 Elem Spanish I	225511
Western Civilization I or Western Civilization II	HIST 101 or HIST 102	World History: DE - CHIS 1113 World Civilization I or DE - CHIS 1123 World Civilization II	220450 or 220451
Elements of Biology I	BLGY 105	Biology II: DE - C BIO 1013 General Biology I	150323
Information Technology Principles Cert: CompTIA IFT+	CTEC 101		
Problem Solving and Programming Techniques	CTEC 102		
Introduction to Scripting	CTEC 104		
Network Essentials Cert: CompTIA Network+	CTEC 155		
HTML5/CSS3	CTEC 130		
Microsoft Windows Servers	CTEC 170		
Introduction to Programming with JAVA	CTEC 150		
Advanced JAVA Programming	CTEC 151		
Linux Server	CTEC 172		
Network Security Design Cert: CompTIA Security+	CTEC 287		
Relational Database Coding	CTEC 270		
Advanced Topics in Linux	CTEC 272		
CTE Internship	CTEC 299		
CTEC Elective	TBD by Course Selected		

# Post-Secondary Degree Paths

## Bossier Parish Community College: Associate of Applied Science: System Administration Cloud Computing

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Composition and Rhetoric	ENGL 101	English III: DE - CENL 1013 English Composition I	120601
College Algebra or Applied Algebra for College Students	MATH 102 or 102	Algebra III: DE - CMAT 1213 College Algebra	160500
Principles of Macroeconomics	BADM 201	Economics: DE - CECN 2213 Macroeconomics	220608
Elementary Spanish I	SPAN 101	Spanish: DE - CSPN 1013/1014 Elementary Spanish I	22511
Elements of Biology I	BLGY 105	Biology II: DE - CBIO 1013 General Biology I	150323
Western Civilization I	HIST 101	World History: DE - CHIS 1113 World Civilization I	220450
Western Civilization II	HIST 102	World History: DE - CHIS 1123 World Civilization II	220451
Information Technology Principals Cert: CompTIA ITF+	CTEC 101		
Problem-Solving and Programming Techniques	CTEC 102		
IT Software Support Cert: CompTIA A+ (Core 2)	CTEC 114		
Introduction to Scripting	CTEC 104		
Network Essentials Cert: CompTIA Network+	CTEC 155		
Introduction to Virtualization	CTEC 165		
Microsoft Windows Servers	CTEC 170		
Linux Server	CTEC 172		
Relational Database Coding	CTEC 270		
Network Security Design Cert: CompTIA Security+	CTEC 287		
Cloud+ Cert: CompTIA Cloud+	CTEC 263		
Advanced Cloud Computing Cert: Amazon Web Services Cloud Practitioner	CTEC 264		
Advanced Topics in Linux or Approved CTEC Elective	CTEC 272		
Big Data	CTEC 275		
CTEC Internship	CTEC 299		

# Post-Secondary Degree Paths

## Baton Rouge Community College: Associate of Applied Science: Computing and Information Systems Concentration Cloud Computing

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 1013	English III: DE - CENL 1013 English Composition I	120601
English Composition II	ENGL 1023	English IV: DE - CENL 1023 English Composition II	120607
College Algebra	MATH 1113 or 1213	Algebra III: DE - CMAT 1213 College Algebra	160500
Physical Science I	PHSC 1023	Physical Science: DE - CPHY 1023 Physical Science I	150915
World Geography	GEOG 2113	World Geography: DE CGRG 2113 World Regional Geography	220312
World Civilization I	HIST 1113	World History: DE - CHIS 1113 World Civilization I	220450
Psychology	PHSC 1023	Psychology: DE CPSY 2013 - Introduction to Psychology	225011
Introduction to Database Design 3	CSCI 1823		
Software Design and Programming I	CSCI 1933		
Cloud Computing Foundations	CSCI 2113		
Introduction to Networking	CNET 2103		
Install and Troubleshoot Part I	INTE 1103		
Advanced Database Storage	CSCI 1993		
Software & Design Programming II	CSCI 1943		
Linux/Unix	CSCI 2153		
Install & Troubleshooting II	INTE 1113		
PC/Network Security	CNET 2503		
System Analysis	CSCI 2783		
Virtual Infrastructure	CSCI 2653		
Window Server I	INTE 2013		

# Post-Secondary Degree Paths

## Central Louisiana Technical Community College: Associate of Applied Science: Cloud Computing

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 1010	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 1050	Algebra III: DE - CMAT 1213 College Algebra	160500
Social Science Elective	TBD by course selected		
Natural Science Elective	TBD by course selected		
Humanities Elective	TBD by course selected		
Introduction to Programming	COMP 1201		
Computer Maintenance I	COMP 1105		
Computer Maintenance II	COMP 1115		
Basic Networking	ETRN 2727		
Operating Systems	INCT 1202		
Server Technology	INCT 2822		
Introduction to Basic Routers	INCT 1122		
Database Management Systems	COMP 1301		
Cloud Foundations	COMP 1801		
Managing Network Security	INCT 2842		
LINUX Systems Administration	INCT 2601		
Cooperative Education	COMP 2999		
Job Seeking Skills	JOBS 2450		
Freshman Seminar	ORNT 1000		



# Post-Secondary Degree Paths

## Delgado Community College: Associate of Applied Science: Cloud Computing

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 1013	English III: DE - CENL 1013 English Composition I	120601
English Composition II	ENGL 1023	English IV: DE - CENL 1023 English Composition II	120607
College Algebra	MATH 1113 or 1213	Algebra III: DE - CMAT 1213 College Algebra	160500
Physical Science I	PHSC 1023	Physical Science: DE - CPHY 1023 Physical Science I	150915
World Geography	GEOG 2113	World Geography: DE CGRG 2113 World Regional Geography	220312
World Civilization I	HIST 1113	World History: DE - CHIS 1113 World Civilization I	220450
Psychology	PHSC 1023	Psychology: DE CPSY 2013 - Introduction to Psychology	225011
I.T. Hardware Support	ELST 262		
Logic and Design I	CMIN 203		
Fundamentals of Information Technologies and Systems	CMIN 204		
Cloud Foundations	CMIN 233		
Introduction to Information Security	CMIN 244		
I.T. Software Support	ELST 267		
Agile Project Management	CMIN 275		
Network Systems Basics	CNET 157		
Database Management Systems	CMIN 266		
Windows Server	CNET 178		
Linux Systems Fundamentals	CNET 197		
Principles of Management	MANG 201		
I.T. Hardware Support	ELST 262		

# Post-Secondary Degree Paths

## Delgado Community College: Associate of Applied Science: Computer Information Technology Concentration in Game Development

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 101/110 or ENRE 110	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 130	Algebra III: DE - CMAT 1213 College Algebra	160500
Macroeconomics	ECON 201	Economics: DE - CECN 2213 Macroeconomics	220608
Natural Science Elective	TBD by Course Selected	World History: DE - CHIS 1113 World Civilization I	220450
Western Civilization I	HIST 101		
Introduction to Game Design and Development	CMIN 217		
Logic & Design	CMIN 203		
Network System Basics	CNET 157		
Fund. of Info Tech. & Systems	CMIN 204		
Intro. to Info. Security	CMIN 244		
Game Structure and Character Development	CMIN 218		
Introduction to C++	CMIN 214		
Approved Elective	TBD by Course Selected		
User Experience and Prototyping	ADOT 209		
Web Foundations I	CMIN 216		
Fundamentals of Communication	CMST 130		
Agile Project Mgmt.	CMIN 275		
Java Programming I	CMIN 250		

# Post-Secondary Degree Paths

## Louisiana State University at Eunice: Associate of Applied Science: Computer Information Technology

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 1001	English III: DE - CENL 1013 English Composition I	120601
English Composition II	ENGL 1002	English IV: DE - CENL 1023 English Composition II	120607
College Algebra	MATH 1021	Algebra III: DE - CMAT 1213 College Algebra	160500
Introduction to Environmental Sciences	ENVS 1126	Environmental Science: DE - CEVS 1103 Environmental Science	150914
American Government	POLS 2051	US Government: DE - CPOL 2013 Intro to American Government	220514
Introduction to Computer Science	CSC 1011		
Fundamentals of Programming	CSC 1015		
Local Area Networks	CSC 2212		
Programming Visual Basic	CSC 2030		
PC Services and Network Support	CSC 2210		
Database Management Systems	CSC 2250		
Operating Systems	CSC 2212		
Systems Analysis and Design	CSC 2253		
Introduction to C/C++ Programming	CSC 2264		
Software Security	CSC 2260		
Object Oriented Systems Analysis and Design	CSC 2257		
Visual C++ Programming	CSC 2265		
Programming in JAVA	CSC 2280		
Project Management	CSC 2255		

# Post-Secondary Degree Paths

## River Parish Community College: Associate of Applied Science: System Administration Concentration Cloud Computing

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition	ENGL 1010	English IV: DE - CENL 1013 English Composition I	120606
College Algebra	MATH 1100	Algebra III: DE - CMAT 1213 College Algebra	160500
Social or Behavioral Science Elective: PSUC, SOCL, ECON, ANTH, GEOG, CRJU, POLI	TBD by Course Selected		
Natural Science Elective: BIOL, CHEM, PHSCI, or PHYS	TBD by Course Selected		
Humanities Elective: ENGL, HIST, SPAN, PHIL, RELS, WGNS, SPCH	TBD by Course Selected		
Techniques of Speech	SPCH 1200		
IT Hardware Support	CSCI 1210		
IT Software Support	CSCI 1300		
Network Essentials	CSCI 1400		
Introduction to Scripting	CSCI 1510		
Introduction to Virtualization	CSCI 1600		
Microsoft Window Services	CSCI 1700		
Relational Database Coding	CSCI 2100		
Introduction to Cloud Computing	CSCI 2200		
Linux Server	CSCI 2300		
Network Security Design	CSCI 2400		
CSCI Internship or Capstone	CSCI 2999 or 2998		
Advanced Topics in Linux	CSCI 2600		
Any 2000 Level CSCi Course	TBD by Course Selected		

# Post-Secondary Degree Paths

## South Louisiana Community College: Associate of Applied Science: Information Technology

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Rhetoric & Composition	ENGL 1010	English III: DE - CENL 1013 English Composition I	120601
Introduction to Fiction or British Literature	ENGL 2055 or ENGL 2020	English IV: DE - CENL 2303 Introduction to Fiction or CENL 2103 British Literature I	120614 or 120608
College Algebra	MATH 1105	Algebra III: DE - CMAT 1213 College Algebra	160500
American National Government	POLI 1100	US Government: DE - CPOL 2013 Intro to American Government	220514
Environmental Science	ENSC 1000	Environmental Science: DE - CEVS 1103 Environmental Science	150914
Installation & Troubleshooting II	INTE 1110		
Installation & Troubleshooting I	INTE 11000		
Operating Systems	INTE 1200		
Introduction to Programming	INTE 1210		
Introduction to Client/Server Network	INTE 2010		
Introduction to Routing & Switching	INTE 2111		
Approved Elective	TBD by Course Selected		
Networking Technologies	INTE 2110		
Configuring Advanced Server Services	INTE 2033		
Seminar in First-Year Student Experience	SFSE 1003		

# Post-Secondary Degree Paths

## Southern University Shreveport: Associate of Science: Computer Science (Scientific Option)

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Freshman English I	SENL 101S	English III: DE - CENL 1013 English Composition I	120601
Freshman English II	SENL 102S	English IV: DE - CENL 1023 English Composition II	120607
Pre-Calculus Algebra	SMAT 121S	Pre-Calculus: DE - CMAT 1233 or (CMAT 1213 & 1223) Alg & Trig	160502
Trigonometry	SMAT 122S	Advanced Mathematics - Pre-Calculus: DE - CMAT 1223 Trigonometry	160501
Analytic Geometry and Calculus I	SMAT 211S	Calculus: DE - CMAT 2113-5 Calculus I	160506
Understanding the Arts	FIAR 200S	Fine Arts Survey: DE - CART 1013 Exploring the Arts	030593
General Biology Lecture and Lab	SBIO 103S and SBIO 103LS	Biology II: DE - CBIO 1013 General Biology I	150323
Physical Science I	SPHY 102S	Physical Science: DE - CPHY 1023 Physical Science I	150915
Phyton	CMPS 150S		
Introduction to Programming in C++	CMPS 293S		
Structured Programming	CMPS 140S		
Business Applications	CMPS 225S		
Data Structures	CMPS 240S		
Public Speaking	SCOM 201S		
Object-Oriented Programming using Java	CMPS 296S		
Intro to Sociology	SSOC 201S		
Discrete Structures	CMPS 250S		
Computer Systems Maintenance	CNET 145S		
Support Client Operating System	CNET 156S		
College Success	FROR 120S		

## Secondary Courses - Grades 9-10

Completing the post-secondary sequence of courses will provide the student with most graduation requirements. The below set of courses would need to be completed on the high school campus.

TOPS University	
Core Academic Requirements	LDOE Course Code
English I	120331
English II	120332
English III	120333
Algebra I	160321
Algebra II	160322
Geometry	160323
Financial Literacy	160345
Biology	150301
Civics	220501/220504
U.S. History	220403
Physical Education I	190105
½ Physical Education II	190106
½ Health Education	190500
Art	TBD by course selected
Foreign Language I	TBD by course selected
Foreign Language II	TBD by course selected

Jump Start	
Core Academic Requirements	LDOE Course Code
English I	120331
English II	120332
Algebra I	160321
Financial Literacy	160345
Geometry	160323
Biology	150301
Civics	220501/220504
Physical Education I	190105
½ Physical Education II	190106
½ Health Education	190500

## Capstone Credentials

In order to graduate, Jump Start students must earn at least one credential from the options below.

Emerging	Basic	Advanced	Fast Forward
Career and Technical Certificate (LCTCS)	Certificate of Technical Studies (LCTCS)	Technical Diploma (LCTCS)	Associate of Applied Science
Amazon Web Service Cloud Practitioner	CompTIA IT Fundamentals+	CompTIA Network+	Associate of Science
CompTIA Linux+	Oracle Certified Professional (OCP) Java Programmer I	CompTIA Security+	
Microsoft Office Specialist: Access, Word, PowerPoint, and Excel	Unity Certified User	CompTIA A+	
Microsoft Certified Professional Installing and Configuring Windows Server		Unity Certified Associate: Programmer	
Microsoft Technology Associate (MTA)			
Microsoft Certified Solutions Associate (MCSA)			



## High School Transcript

The below courses should be used for college courses without a dedicated secondary course code.

Secondary Course Name	Secondary Course Code	Maximum Carnegie Units
Fast Forward Computer Information Systems 1	890308	4
Fast Forward Computer Information Systems 2	890309	4
Fast Forward Computer Information Systems 3	890310	4
Fast Forward Computer Information Systems 4	890311	4
Fast Forward Computer Information Systems 5	890312	4
Fast Forward Computer Information Systems 6	890313	4
Fast Forward Computer Information Systems 7	890314	4
Fast Forward Computer Information Systems 8	890315	4