

## MEMORANDUM OF UNDERSTANDING BETWEEN BOSSIER PARISH COMMUNITY COLLEGE AND NORTHWESTERN STATE UNIVERSITY Updated May 2020



#### INTENT

This Memorandum of Understanding between Bossier Parish Community College (BPCC) and Northwestern State University (NSU) is intended to provide expanded educational opportunities for seamless transfer of students between BPCC and NSU. The goal of this Memorandum of Understanding is to reduce duplication of instruction, reduce student time to completion, and minimize financial obligations while maximizing student learning.

#### **AGREEMENT**

The following associate and baccalaureate curricular areas are covered by this memorandum. These degrees will not be a pure 2+2 agreement but will facilitate the planning and transfer of hours between BPCC and NSU. Details of the agreement are found in the attached documents, "BPCC/NSU Computer Technology - Course Transfer Matrix," and example degree maps.

### BPCC (Associate)

- Computer Information Systems
- Cyber Technology with concentrations in Network Security and Programmer Analyst
- Systems Administration with concentrations in Cloud Computing and DevOps

### NSU (Baccalaureate)

Computer Information Systems with concentrations in Applications Development,
 Networking & System Management, Web Development, and Cyber Security

In addition, Bossier Parish Community College and Northwestern State University agree to work on enhancing the number of students who transfer to NSU after completing associate degrees in Computer Technology at BPCC.

Due to the continuously changing nature of computer technology, BPCC and NSU agree to review and revise updates to the curricular areas each Spring in order to publish updated information at the beginning of each school year within the guidelines approved by NSU.

The signature of each representative indicates that the institution acknowledges and agrees with the information set forth in the Memorandum of Understanding.

For Northwest State University

For Bossier Parish Community College

06/10/2020

Dr. Chris Maggio, President Date Dr. Rick Bateman, Jr., Chancellor Date

### **BPCC/NSU Computer Technology - Course Transfer Matrix**

Transfer students may earn credits for the following direct equivalencies.

BPCC Cou	irse	NSU Course	
CTEC 144	Advanced MS Word	BUAD 1800	Intro to Information Technology
CTEC 102	Problem Solving & Programming Techniques	CIS 1015	Intro to CIS
CTEC 150	Introduction to Programming with JAVA	CIS 1030	Intro to Software Dev (Java I)
CTEC 111	Internet Technology*	CIS 1060	Understanding the Internet**
CTEC 145	Advanced MS Excel	CIS 2000	Spreadsheet Apps
CTEC 113	Introduction to C++ Programming*	CIS 2020	Introduction to Programming**
CTEC 213	Advanced C++ Programming*	CIS 2020	Introduction to Programming**
CTEC 112	IT Hardware Support	CIS 2050	Network Design and Hardware
CTEC 250	Programming with C#	CIS 2100	Software Development**
CTEC 270	Relational Database Coding	CIS 2980	Database Systems

<sup>\*</sup>Courses phased out at BPCC

Transfer students may earn up to twelve hours of credits for the following equivalencies. These credits will not come in as direct equivalents, but advisors will be responsible for inputting the appropriate substitutions on the degree audit system based on the below equivalencies.

BPCC Course		NSU Cours	NSU Course		
CTEC 130	HTML5/CSS3	CIS 3020	Web Page Development		
CTEC 151	Advanced Java Programming	CIS 3300	Intermediate Object-Oriented Programming		
CTEC 155	Network Essentials	CIS 3400	Telecommunications and Networks		
CTEC 170	Microsoft Windows Servers	CIS 3700	Introduction to Servers		
CTEC 287	Network Security Design	CIS 3980	Intro to IT Security		

BPCC students cannot earn direct credit for classes taken at BPCC that are equivalent to 4000 level NSU classes. However, to support and measure prior learning, NSU will allow students from BPCC to take free assessment examinations for the following classes. If the student passes the assessment examinations, the advisor will assign credit by using the substitution capability of the degree audit system.

BPCC Course		NSU Course		
			Advanced Object-Oriented	
CTEC 243	Data Structures	CIS 4020	Programming	
			Web Applications: Client-Side	
CTEC 149	Web Scripting	CIS 4030	Development	
CTEC 280	Computer Forensics	CIS 4040	Cyber Forensics	
CTEC 235	Mobile Application Development	CIS 4060	Mobile App Dev	

A student will be awarded a grade of "CR" in certain classes if they can provide a copy of the certification being used by the school of Business or a past version of the certification being used by the School of Business with required continuing education credits to keep the certification valid. The student

<sup>\*\*</sup>Courses not required for NSU Degrees

will provide these certificates to the Coordinator of Computer Information Systems who will be responsible for maintaining those copies as well as letting the Registrar's Office know of the credit to be awarded. While a student may be awarded credit for the above classes, he or she must still complete at least 50% of his or her School of Business classes at Northwestern State University. If awarded "CR" for these classes, they will not count towards that 50%.

Certification	NSU Course	
Microsoft Office Specialist in Word	BUAD 1800	Intro to Information Technology
IC3 Living Online	CIS 1060	Understanding the Internet
Microsoft Office Specialist in Excel	CIS 2000	Spreadsheet Apps
CompTIA A+	CIS 2050	Network Design and Hardware
CompTIA Network+	CIS 3400	Telecommunications and Networks
CompTIA Server+	CIS 3700	Introduction to Servers
CompTIA Security+ or CISSP (Certified		
Information Systems Security Professional)	CIS 3980	Intro to IT Security
CompTIA Cloud Essentials, Cloud Essentials+,		
Cloud+	CIS 4080	Cloud Computing
Cisco CCENT or Cisco CCNA	CIS 4220	Network Impl. and Admin. (CISCO)
Cisco CCNA	CIS 4230	Advanced Network Implementation

#### **Other Notes**

- All electives and additional courses shall be accepted in accordance with the Board of Regents Statewide Matrix and the NSU Registrar.
- Any non-used 1+ hour course can be substituted for UNIV1000.
- Students must complete 40 hours of CIS/Business courses at NSU.

## BPCC AAS in Cyber Technology (Programmer Analyst) to NSU CIS BS (Application Development)

Freshman Year					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 101: Info. Technology Principles	3				
CTEC 102: Problem Solving & Prog Tech	3	CIS 1015: Intro to CIS	3		
CTEC 130: HTML5/CSS3	3	CIS 3020: Web Page Development	3		
MATH 102: College Algebra	3	MATH 1020: College Algebra	3		
ENGL 101: Composition & Rhetoric I	3	ENGL 1010: Composition and Rhetoric	3		
CTEC 149: Web Scripting I	3	CIS 4030: Web Applications: Client-Side Dev	3		
CTEC 150: Intro. to Programming - JAVA	3	CIS 1030: Intro to Software Dev (Java I)	3		
CTEC 151: Advanced Java Programming	3	CIS 3300: Intermediate Object-Oriented Prog,	3		
SPCH 110: Public Speaking	3				
Behavioral/Social Science Elective- BADM 201, BA	3	ECON 2000, ECON 2010, PSYC 1010	3		
Sophomore Year					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 235: Mobile App. Development	3	CIS 4060: Mobile App Development	3		
CTEC 243: Data Structures	3	CIS 4020: Advanced Object-Oriented Programmin	3		
CTEC 250: Programming with C#	3	CIS 2100: Software Development (CIS Elective)	3		
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3		
Physical Science Elective - SCI 101, BLGY 105	3	SCI 1010 Physical Sci I or SCI 1020 Bio Sci I	3		
CTEC Elective: Rec, CTEC 112	3	CIS 2050: Network Design (A+)	3		
CTEC Elective	3				
CTEC 260: Interactive Program Design	3				
CTEC 295: Software Development Process	3				
Humanities Elective - ENGL 201, ENGL 202, ENGL	3	ENGL 2210 or HIST 1010, 1020, 2010, 2020	3		
Total - 60 Hours		Total - 45 Hours			

## Other NSU BS CIS Application or Web Development Credit Options

BPCC	Hrs	NSU Equivalent	Hrs
CTEC 112: IT Hardware Support	3	CIS 2050: Network Design (A+)	3
CTEC 262: Intro to Cloud Computing with Certifica	3	CIS 4080: Cloud Computing	3
CTEC 155: Network Essentials	3	CIS 3400: Telecommunications and Networks	3
CTEC 287: Network Security Design	3	CIS 3980: Intro to Information Security	3
CTEC 144: Advanced MS Word	3	BUAD 1800: Intro to Information Technology	3
CTEC 145: Advanced MS Excel	3	CIS 2000: Spreadsheet Applications	3

## BPCC AAS in CIS to NSU BS Computer Information Systems, Networking and System Management Concentration

Freshman Year						
BPCC	Hrs	NSU Equivalent	Hrs			
CTEC 101: IT Principles	3					
CTEC 107: Skills for IT Success	3					
CTEC 111: Internet Technology I	3	CIS 1060: Understanding the Internet	3			
ENGL 101: Composition & Rhetoric I	3	ENGL 1010: Composition and Rhetoric	3			
MATH 102: College Algebra	3	MATH 1020: College Algebra	3			
CTEC 108: Intro to Management Info Systems	3					
CTEC 112: IT Hardware Support	3	CIS 2050: Network Design and Hardware	3			
CTEC 114: IT Software Support	3	CIS 1015: Intro to CIS	3			
CTEC 155: Network Essentials	3	CIS 3400: Telecommunications and Networks	3			
Physical Science Elective - SCI 101, BLGY 105	3	SCI 1010 Physical Sci I or SCI 1020 Bio Sci I	3			
Sophomore Year						
BPCC	Hrs	NSU Equivalent	Hrs			
CTEC 118: Help Desk Operations	3					
CTEC 262: Intro to Cloud Computing with Certification	3	CIS 4080: Cloud Computing	3			
CTEC 260: IP Telephony	3					
SPCH 110: Public Speaking	3					
Behavioral/Social Science Elective- BADM 201, BA	3	ECON 2000, ECON 2010, PSYC 1010	3			
CTEC 290: System Analysis and Design	3					
CTEC 282: IT Project Management	3					
CTEC Approved Elective: Rec. CTEC 150	3	CIS 1030: Intro to Software Dev (Java I)	3			
CTEC Approved Elective: Rec. CTEC 270	3	CIS 2980: Database Systems	3			
Humanities Elective - ENGL 201, ENGL 202, ENGL	3	ENGL 2210 or HIST 1010, 1020, 2010, 2020	3			
Total - 60 Hours		Total - 36 Hours				

Other NSU BS CIS Options				
ВРСС	Hrs	NSU Equivalent	Hrs	
CTEC 150: Intro to Programming with Java	3	CIS 1030: Intro to Software Dev (Java I)	3	
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3	
CTEC 130: HTML5/CSS3	3	CIS 3020: Web Page Development	3	
CTEC 170: Microsoft Windows Servers	3	CIS 3700: Intro to Servers	3	
CTEC 287: Network Security Design	3	CIS 3980 Intro to Information Security	3	
CTEC 144: Advanced MS Word	3	BUAD 1800: Intro to Information Technology	3	
CTEC 145: Advanced MS Excel	3	CIS 2000: Spreadsheet Applications	3	

# BPCC AAS Systems Administration, Cloud Computing Concentration, to NSU BS Computer Information Systems, Networking and System Management Concentration

Freshman Year					
ВРСС	Hrs	NSU Equivalent	Hrs		
CTEC 102: Problem Solving & Prog Tech	3	CIS 1015: Intro to CIS	3		
CTEC 112: IT Hardware Support	3	CIS 2050: Network Design and Hardware	3		
CTEC 114: IT Software Support	3				
MATH 102: College Algebra	3	MATH 1020: College Algebra	3		
ENGL 101: Composition & Rhetoric I	3	ENGL 1010: Composition and Rhetoric	3		
CTEC 155: Network Essentials	3	CIS 3400: Telecommunications and Networks	3		
CTEC 104: Introduction to Scripting	3				
CTEC 165: Introduction to Virtualization	3				
CTEC 170: MS Windows Server	3	CIS 3700: Intro to Servers	3		
Behavioral/Social Science Elective- BADM 201, BA	3	ECON 2000, ECON 2010, PSYC 1010	3		
Sophomore Year					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3		
CTEC 262: Intro to Cloud Computing	3	CIS 4080: Cloud Computing	3		
CTEC 172: Linux Server	3				
CTEC 287: Network Security Design	3	CIS 3980: Intro to Information Security	3		
Physical Science Elective - SCI 101, BLGY 105	3	SCI 1010 Physical Sci I or SCI 1020 Bio Sci I	3		
Humanities Elective - ENGL 201, ENGL 202, ENGL	3	ENGL 2210 or HIST 1010, 1020, 2010, 2020	3		
SPCH 110: Public Speaking	3				
CTEC 263: Cloud+ with Certification	3	CIS 4080: Cloud Computing	3		
CTEC Elective - Rec. CTEC 150	3	CIS 1030: Intro to Software Dev (Java I)	3		
CTEC Elective - Rec. CTEC 130	3	CIS 3020: Web Page Dev	3		
Total - 60 Hours		Total - 45 Hours			

Other NSU BS CIS Networking and System Mgmt Concentration Credit Options				
ВРСС	Hrs	NSU Equivalent	Hrs	
CTEC 150: Intro. to Programming - JAVA	3	CIS 1030: Intro to Software Dev (Java I)	3	
CTEC 130: HTML5/CSS3	3	CIS 3020: Web Page Dev	3	
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3	
CTEC 144: Advanced MS Word	3	BUAD 1800: Intro to Information Technology	3	
CTEC 145: Advanced MS Excel	3	CIS 2000: Spreadsheet Applications	3	
Certifications	Hrs	NSU Equivalent	Hrs	
Cisco CCENT or Cisco CCNA	NA	CIS 4220: Network Impl. and Admin. (CISCO)	3	
Cisco CCNA	NA	CIS 4230: Advanced Network Implementation	3	

## **BPCC AAS Systems Administration**, DevOps Concentration, to **NSU BS Computer Information Systems**, Networking and System Management Concentration

Freshman Year					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 102: Problem Solving & Prog Tech	3	CIS 1015: Intro to CIS	3		
CTEC 112: IT Hardware Support	3	CIS 2050: Network Design and Hardware	3		
CTEC 114: IT Software Support	3				
MATH 102: College Algebra	3	MATH 1020: College Algebra	3		
ENGL 101: Composition & Rhetoric I	3	ENGL 1010: Composition and Rhetoric	3		
CTEC 155: Network Essentials	3	CIS 3400 Telecommunications and Networks	3		
CTEC 104: Introduction to Scripting	3				
CTEC 130: HTML5/CSS3	3	CIS 3020: Web Page Development	3		
CTEC 170: MS Windows Server	3	CIS 3700: Intro to Servers	3		
Behavioral/Social Science Elective- BADM 201, BA	3	ECON 2000, ECON 2010, PSYC 1010	3		
Sophomore Year					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 150: Intro. to Programming - JAVA	3	CIS 1030: Intro to Software Development	3		
CTEC 151: Advanced Java Programming	3	CIS 3300 Intermediate Obj-Or. Prog.	NA		
CTEC 287: Network Security Design	3	CIS 3980 Intro to Information Security	3		
CTEC 172: Linux Server	3				
Physical Science Elective - SCI 101, BLGY 105	3	SCI 1010 Physical Sci I or SCI 1020 Bio Sci I	3		
Humanities Elective - ENGL 201, ENGL 202, ENGL 2	3	ENGL 2210 or HIST 1010, 1020, 2010, 2020	3		
SPCH 110: Public Speaking	3				
CTEC 272: Advanced Topics in Linux	3				
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3		
CTEC Elective: Rec. CTEC 262 Cloud with Certificat	3	CIS 4080: Cloud Computing	3		
Total - 60 Hours		Total - 42 Hours			

Other NSU BS CIS Networking and System Mgmt Concentration Credit Options					
BPCC	Hrs	NSU Equivalent	Hrs		
CTEC 262: Cloud Essentials with Certification	3	CIS 4080: Cloud Computing	3		
CTEC 263: Cloud+ with Certification	3	CIS 4080: Cloud Computing	3		
CTEC 144: Advanced MS Word	3	BUAD 1800: Intro to Information Technology	3		
CTEC 145: Advanced MS Excel	3	CIS 2000: Spreadsheet Applications	3		
Certifications	Hrs	NSU Equivalent	Hrs		
Cisco CCENT or Cisco CCNA	NA	CIS 4220: Network Impl. and Admin. (CISCO)	3		
Cisco CCNA	NA	CIS 4230: Advanced Network Implementation	3		

## BPCC AAS in Cyber Technology(Network Security) to NSU BS CIS (Cyber Security)

Freshman Year				
BPCC	Hrs	NSU Equivalent	Hrs	
CTEC 101: IT Principles or Elective (Rec. CTEC 130	3			
CTEC 102: Problem Solving and Prog Tech	3	CIS 1015: Intro to CIS	3	
ENGL 101: Composition & Rhetoric I	3	ENGL 1010: Composition and Rhetoric	3	
MATH 102: College Algebra	3	MATH 1020: College Algebra	3	
Humanities Elective - ENGL 201, ENGL 202, ENGL	3	ENGL 2210 or HIST 1010, 1020, 2010, 2020	3	
CTEC 112: IT Hardware Support	3	CIS 2050: Network Design and Hardware	3	
CTEC 114: IT Software Support	3			
CTEC 172: Linux Server	3			
CTEC 104: Introduction to Scripting	3			
Physical Science Elective - SCI 101, BLGY 105	3	SCI 1010 Physical Sci I or SCI 1020 Bio Sci I	3	
Sophomore Year			_	
BPCC	Hrs	NSU Equivalent	Hrs	
CTEC 155: Network Essentials	3	CIS 3400: Telecommunications and Networks	3	
CTEC 170: Microsoft Windows Servers	3	CIS 3700: Intro to Servers	3	
CTEC 255: CCNA I or CTEC 210: Advanced Network	3			
SPCH 110: Public Speaking	3			
CTEC Elective: Rec. CTEC 270	3	CIS 2980: Database Systems	3	
CTEC 279: Information Assurance	3			
CTEC 287: Network Security Design	3	CIS 3980: Intro to Information Security	3	
CTEC 280: Computer Forensics	3	CIS 4040: Cyber Forensics	3	
CTEC Internship/Elective: Rec. CTEC 150	3	CIS 1030: Intro to Software Dev (Java I)		
Behavioral/Social Science Elective- BADM 201, BA	3	ECON 2000, ECON 2010, PSYC 1010	3	
Total - 60 Hours		Total - 36 Hours		

Other NSU BS CIS Cyber Security Credit Options				
BPCC	Hrs	NSU Equivalent	Hrs	
CTEC 150: Intro to Programming with Java	3	CIS 1030: Intro to Software Dev (Java I)	3	
CTEC 270: Relational Database Coding	3	CIS 2980: Database Systems	3	
CTEC 130: HTML5/CSS3	3	CIS 3020: Web Page Development	3	
CTEC 144: Advanced MS Word	3	BUAD 1800: Intro to Information Technology	3	
CTEC 145: Advanced MS Excel	3	CIS 2000: Spreadsheet Applications	3	
Certifications	Hrs	NSU Equivalent	Hrs	
Cisco CCENT or Cisco CCNA	NA	CIS 4220: Network Impl. and Admin. (CISCO)	3	