

2020-21 Sequence of Courses for BUSINESS MANAGEMENT AND ADMINISTRATION CLUSTER

PATHWAY: ADMINISTRATIVE SUPPORT

		1	2	3	4	5	6	7	8	9	Additional Course Options:
State Program Area: Administrative Support (900 hours)	Administrative Assistant OCAS Codes 9202 & 9226 SOC 43-6014; CIP 52.0401 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Administrative Technologies II or Advanced Database Concepts Using Access 120 hours	Office Administration and Management 120 hours	Career Capstone 120 hours					Bilingual Interpersonal Communications Computerized Accounting Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
	Executive Administrative Assistant OCAS Codes 9202 & 9226 SOC 43-6011; CIP 52.0402 1,080 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Administrative Technologies II or Advanced Database Concepts Using Access 120 hours	Office Administration and Management 120 hours	Advanced Spreadsheet Applications 120 hours	Customer Assistance 120 hours	Accounting I 120 hours	Digital Marketing 120 hours	Career Capstone 120 hours	
	Office Information Specialist OCAS Codes 9202 & 9226 SOC 43-6011 or 43-6014; CIP 52.0402 or 52.0401 1,080 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Administrative Technologies II or Advanced Database Concepts Using Access 120 hours	Office Administration and Management 120 hours	Desktop Publishing and Graphic Design 120 hours	Multimedia and Image Management Techniques 120 hours	Fundamentals of Web Design 120 hours	Digital Marketing 120 hours	Career Capstone 120 hours	
State Program Area: Administrative Support - Legal (900 hours)	Legal Receptionist OCAS Codes 9210 & 9217 SOC 43-6012; CIP 22.0301 600 hours	Fundamentals of Technology 120 hours	Foundations for the Legal Office 120 hours	Legal Office Procedures 180 hours	Career Capstone 120 hours						Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
	Legal Office Assistant OCAS Codes 9210 & 9217 SOC 43-6012; CIP 22.0301 1,140 hours	Fundamentals of Technology 120 hours	Foundations for the Legal Office 180 hours	Legal Office Procedures 180 hours	Advanced Computer Applications for the Law Office 180 hours	Advanced Legal Communications 180 hours	Legal Specialties 180 hours	Career Capstone 120 hours			
State Program Area: Administrative Support - Medical (900 hours)	Patient Service Representative OCAS Codes 9213 & 9218 SOC 43-6013; CIP 51.0710 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Foundations of Medical Office 120 hours	Medical Terminology 120 hours	Career Capstone 120 hours					Bilingual Interpersonal Communications Patient Billing/Medical Insurance Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
State Program Area: Court Reporter (1,800 hours)	Court Reporter OCAS Codes 9204 & 9223 SOC 23-2091; CIP 22.0303 1,020 hours	Fundamentals of Technology 120 hours	Court Reporting Theory 120 hours	Simultaneously with Court Reporting Court Reporting Lab 60 hours	Beginning Speed Building 120 hours	Intermediate Speed Building 120 hours	Advanced Speed Building 120 hours	Realtime Applications 120 hours	Legal/Medical Terminology 120 hours	Career Capstone 120 hours	Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
State Program Area: Customer Service (900 hours)	Customer Service Representative OCAS Code 9205 SOC 43-4051; CIP 52.0411 480 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Customer Assistance 120 hours	Career Capstone 120 hours						Administrative Technologies II or Advanced Database Concepts using Access Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
	Bilingual Customer Service Representative OCAS Codes 9205 & 9234 SOC 43-4051; CIP 52.0411 840 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Customer Assistance 120 hours	Bilingual Interpersonal Communications 120 hours	Administrative Technologies II or Advanced Database Concepts Using Access 120 hours	Office Administration and Management 120 hours	Career Capstone 120 hours			

PATHWAY: HUMAN RESOURCES MANAGEMENT

		1	2	3	4	5	6	7	8	9	Additional Course Options:
State Program Area: Human Resources Management (900 hours)	Human Resources Assistant OCAS Codes 9208 & 9209 SOC 13-1071; CIP 52.1001 or 52.1099 960 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Office Administration and Management 120 hours	Human Resources Concepts 120 hours	Human Resources Information Systems 120 hours	Employee and Labor Relations 120 hours	Benefits and Compensation Management 120 hours	Career Capstone 120 hours		Advanced Spreadsheet Applications Bilingual Interpersonal Communications Digital Marketing Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep

PATHWAY: GENERAL MANAGEMENT

		1	2	3	4	5	6	7	8	Additional Course Options:	
State Program Area: Entrepreneur - BA (900 hours)	Entrepreneur OCAS Codes 9206 & 9207 SOC 11-1021; CIP 52.0701 960 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Accounting I or Personal Finance 120 hours	Introduction to Entrepreneurship 120 hours	Entrepreneurship: Business Development 120 hours	Entrepreneurship: Business Management 120 hours	Digital Marketing 120 hours	Career Capstone 120 hours		Advanced Spreadsheet Applications Bilingual Interpersonal Communications Business Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
	Meeting, Convention, and Event Manager OCAS Codes 9428 & 9444 SOC 13-1121; CIP 52.0907 840 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Introduction to Hospitality and Tourism 60 hours	Business Management for Travel and Tourism 60 hours	Event and Project Planning Management 120 hours	Resort and Tourism Management 60 hours	Convention Planning 60 hours	Digital Marketing 120 hours	Career Capstone 120 hours	Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
State Program Area: Hospitality Management (900 hours)	Lodging Manager OCAS Codes 9430 & 9431 SOC 11-9081; CIP 52.0901 900 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Introduction to Hospitality and Tourism 60 hours	Lodging Management I 120 hours	Lodging Management II 120 hours	Office Administration and Management 120 hours	Human Resources Concepts 120 hours	Career Capstone 120 hours		Advanced Spreadsheet Applications Bilingual Interpersonal Communications Digital Marketing Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep

PATHWAY: BUSINESS INFORMATION MANAGEMENT

		1	2	3	4	5	6	7	8	Additional Course Options:	
State Program Area: Business Information Management (900 hours)	Project Manager OCAS Codes 9232 & 9233 SOC 11-9199; CIP 52.0211 720 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Fundamentals of Project Management 120 hours	Business Communications 120 hours	Advanced Project Management 120 hours	Career Capstone 120 hours				Bilingual Interpersonal Communications Collaboration in Problem Based Learning Digital Marketing Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
	Medical Coding Specialist OCAS Codes 9230 & 9231 SOC 29-2071; CIP 51.0713 1,140 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Foundations of Medical Office 120 hours	Medical Terminology 120 hours	Diagnostic Coding 180 hours	Procedural Coding 180 hours	Patient Billing/Medical Insurance 180 hours	Career Capstone 120 hours		Basic Anatomy/Physiology Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep
State Program Area: Business Information Management - Medical (1,080 hours)	Healthcare IT Technician OCAS Codes 9230 & 9231 SOC 15-1131; CIP 51.0709 780 hours	<i>Students must have A+ Certification prior to enrolling in this program</i>	Healthcare IT Technology 180 hours	Healthcare IT Electronic Health Records I 120 hours	Healthcare IT Electronic Health Records II 120 hours	Healthcare IT Electronic Health Records III 120 hours	Healthcare IT Electronic Health Records IV 120 hours	Career Capstone 120 hours			Bilingual Interpersonal Communications Microsoft Office Specialist - Outlook/Word Study Prep Microsoft Office Specialist - Access Prep Microsoft Office Specialist - Excel/PPT Prep

2020-21 Sequence of Courses for FINANCE CLUSTER

PATHWAY: ACCOUNTING

		1	2	3	4	5	6	7	8	Additional Course Options
State Program Area: Accounting (900 hours)	Accounting Clerk OCAS Codes 9258 & 9266 SOC 43-3031; CIP 52.0302 480 hours	Fundamentals of Technology 120 hours	Accounting I 120 hours	Fundamentals of Administrative Technologies 120 hours	Program Capstone 120 hours					Math of Finance Computerized Accounting
	Accounting Associate OCAS Codes 9258 & 9266 SOC 43-3031 & 43-3051; CIP 52.0302 960 hours	Fundamentals of Technology 120 hours	Accounting I 120 hours	Computerized Accounting 120 hours	Payroll Accounting 120 hours	Accounting II 120 hours	Fundamentals of Administrative Technologies 120 hours	Administrative Technologies II or Advanced Database Concepts Using Access 120 hours	Program Capstone 120 hours	Math of Finance

PATHWAY: BUSINESS FINANCE

		1	2	3	4	5	6	7	8	Additional Course Options:
State Program Area: Financial Services (900 hours)	Financial Planning Assistant OCAS Codes 9254 & 9268 SOC 13-2052; CIP 52.0804 960 hours	Fundamentals of Technology 120 hours	Business & Personal Finance 120 hours	Financial Analysis 120 hours	Fundamentals of Administrative Technologies 120 hours	Administrative Technologies II 120 hours	Financial Customer Relations 120 hours	Accounting I 120 hours	Program Capstone 120 hours	Math of Finance

PATHWAY: BANKING SERVICES

		1	2	3	4	5	6	7	8	Additional Course Options:
State Program Area: Banking Services (900 hours)	Banking Services Representative OCAS Codes 9255 & 9267 SOC 43-4041 & 43-3071; CIP 52.0803 600 hours	Fundamentals of Technology 120 hours	Banking & Financial Services 120 hours	Financial Customer Relations 120 hours	Fundamentals of Administrative Technologies 120 hours	Program Capstone 120 hours				Math of Finance Accounting I

PATHWAY: INSURANCE

		1	2	3	4	5	6	7	8	Additional Course Options:
State Program Area: Insurance Services (900 hours)	Insurance Customer Service Representative OCAS Codes 9259 & 9260 SOC 41-3021; CIP 52.1701 840 hours	Fundamentals of Technology 120 hours	Fundamentals of Administrative Technologies 120 hours	Life Insurance Concepts 60 hours	Accident and Health Insurance 60 hours	Property & Casualty Personal Lines 120 hours	Property & Casualty Commercial Lines 120 hours	Title Insurance 120 hours	Program Capstone 120 hours	Math of Finance

2020-21 Sequence of Courses for INFORMATION TECHNOLOGY CLUSTER

PATHWAY: NETWORKING

		1	2	3	4	5	6	7	8			Additional Course Options:	
State Program Area: Network Support (900 hours)	Home Technology Integrator OCAS Codes 9542 & 9543 SOC 49-2097; CIP 47.0103 990 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II 120 hours	Routing and Switching I 150 hours	Audio-Visual Systems 120 hours	Residential and Commercial Wiring Systems 120 hours	Auxiliary Home Technology Systems 120 hours	Career Capstone 120 hours			Networking Fundamentals	
													Additional Course Options:
State Program Area: Cybersecurity (1,200 hours)	Cybersecurity Specialist OCAS Codes 9530 & 9564 SOC 15-1122; CIP 11.1003 600 hours	Fundamentals of Technology 120 hours	Principles of Information Assurance 90 hours	Network Security 90 hours	Enterprise Security Management 90 hours	Secure Electronic Commerce 90 hours	Career Capstone 120 hours					Security Fundamentals Regulatory Compliance and Auditing Cyber Forensics	
		Cybersecurity Network Specialist OCAS Codes 9530 & 9564 SOC 15-1122; CIP 11.1003 1,080 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II or Fundamentals of Unix/Linux 120 hours	Routing and Switching I 150 hours	Principles of Information Assurance 90 hours	Network Security 90 hours	Enterprise Security Management 90 hours	Secure Electronic Commerce 90 hours	Cyber Forensics 90 hours	Career Capstone 120 hours	Networking Fundamentals Security Fundamentals Regulatory Compliance and Auditing CCNA Security
State Program Area: Network Systems (1,200 hours)	Network Technician Assistant OCAS Codes 9547 & 9548 SOC 15-1122; CIP 11.0901 630 hours	Fundamentals of Technology 120 hours	Network/Client Operating Systems or Computer Repair and Troubleshooting I 120 hours	Server Operating Systems or Computer Repair and Troubleshooting II 120 hours	Routing and Switching I 150 hours	Career Capstone 120 hours						Networking Fundamentals Windows Operating Systems Windows Server Admin Fundamentals Cybersecurity Basics or Security Fundamentals Multi-Layer Switching & Internetwork Support Server Operator Systems Fundamentals of Unix/Linux	
		Network Security Professional OCAS Codes 9547 & 9548 SOC 15-1122; CIP 11.1003 930 hours	Fundamentals of Technology 120 hours	Routing and Switching I 150 hours	Network/Client Operating Systems 120 hours	Server Operating Systems 120 hours	Network Management 120 hours	Principles of Information Assurance 90 hours	Network Security 90 hours	Career Capstone 120 hours			Networking Fundamentals Web Development Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals
		Network Systems and Data Communications Analyst OCAS Codes 9547 & 9548 SOC 15-1122; CIP 11.0901 930 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Network/Client Operating Systems 120 hours	Server Operating Systems 120 hours	Web Authoring Languages 120 hours	Database Design and Programming 120 hours	Principles of Information Assurance 90 hours	Career Capstone 120 hours			Security Fundamentals Networking Fundamentals Web Development Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals
		Network Systems Engineer OCAS Codes 9547 & 9548 SOC 15-1142; CIP 11.1002 960 hours	Fundamentals of Technology 120 hours	Routing and Switching I 150 hours	Network/Client Operating Systems 120 hours	Server Operating Systems 120 hours	Network Management 120 hours	Active Directory Infrastructure 120 hours	Server Infrastructure Design 90 hours	Career Capstone 120 hours			Networking Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals
		Network Server Technician OCAS Codes 9547 & 9548 SOC 15-1142; CIP 11.1001 990 hours	Fundamentals of Technology 120 hours	Routing and Switching I 150 hours	Server Operating Systems 120 hours	Server Infrastructure Design 90 hours	Routing and Switching II 150 hours	Active Directory Infrastructure 120 hours	Network Security Awareness 120 hours	Career Capstone 120 hours			Security Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals
		Enterprise Network Professional OCAS Codes 9547 & 9548 SOC 15-1142; CIP 11.1003 1,060 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II 120 hours	Routing and Switching I 150 hours	Routing and Switching II 150 hours	Advanced Routing and Remote Access Networks 150 hours	Cyber Ops 130 hours	Career Capstone 120 hours			Networking Fundamentals Web Development Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals Cybersecurity Basics Multi-Layer Switching and Internetwork Support Security Fundamentals Server Operating Systems
		Network Server Administrator OCAS Codes 9547 & 9548 SOC 15-1142; CIP 11.1001 1,230 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II 120 hours	Routing and Switching I 150 hours	Network/Client Operating Systems 120 hours	Installing and Maintaining Desktop Applications 120 hours	Network Management 120 hours	Active Directory Infrastructure 120 hours	Server Operating Systems 120 hours	Career Capstone 120 hours	Security Fundamentals Windows Operating Systems Fundamentals Windows Server Administration Fundamentals

PATHWAY: INFORMATION SUPPORT AND SERVICES

		1	2	3	4	5	6						Additional Course Options:
State Program Area: ArcGIS Support (900 hours)	ArcGIS Desktop Support Associate OCAS Codes 9559 & 9560 SOC 15-1199; CIP 11.0101 720 hours	Fundamentals of Technology 120 hours	Awareness of GPS/GIS 120 hours	Essential Skills for ArcGIS 120 hours	Managing and Analyzing Data Using ArgGIS 120 hours	Editing, Visualizing & Sharing Data in ArcGIS Software 120 hours	Career Capstone 120 hours						
State Program Area: Computer/Network Support (900 hours)	PC Support Technician OCAS Code 9542 SOC 49-2011; CIP 47.0104 480 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II 120 hours	Career Capstone 120 hours								
	Network PC Support Technician OCAS Codes 9542 & 9543 SOC 15-1152; CIP 11.0901 630 hours	Fundamentals of Technology 120 hours	Computer Repair and Troubleshooting I 120 hours	Computer Repair and Troubleshooting II 120 hours	Routing and Switching I 150 hours	Career Capstone 120 hours							Networking Fundamentals
State Program Area: Database Administration/Development (900 hours)	Database Associate OCAS Codes 9531 & 9532 SOC 15-1141; CIP 11.0803 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Database Development 120 hours	Database Design and Programming 120 hours	Programming Fundamentals or Visual Basic .NET Programming 120 hours	Career Capstone 120 hours							
	Database Developer OCAS Codes 9531 & 9532 SOC 15-1141; CIP 11.0802 1,080 hours	Fundamentals of Technology 120 hours	Programming Fundamentals 120 hours	Fundamentals of Database Development 120 hours	Modeling Languages 120 hours	Database Design and Programming 120 hours	SQL and PL/SQL Database Applications Development 120 hours	Database Administration 120 hours	Database Administration II 120 hours	Career Capstone 120 hours			Database Administration Fundamentals Advanced Programming
	Database Administrator OCAS Codes 9531 & 9532 SOC 15-1141; CIP 11.1003 1,320 hours	Fundamentals of Technology 120 hours	Database Concepts Using ACCESS 120 hours	Visual Basic .NET Programming 120 hours	Fundamentals of Database Development 120 hours	Database Design and Programming 120 hours	SQL and PL/SQL Database Applications Development 120 hours	Security Fundamentals 120 hours	Database Administration 120 hours	Database Administration II 120 hours	Career Capstone 120 hours		Database Administration Fundamentals Fundamentals of UNIX/Linux

PATHWAY: WEB AND DIGITAL COMMUNICATIONS

		1	2	3	4	5	6	7	8	9		Additional Course Options:
State Program Area: Animation Technology (900 hours)	Special Effects Technician OCAS Codes 9526 & 9527 SOC 27-1014; CIP 10.0304 600 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Principles of Animation 120 hours	3D Animation or Design Tools and Electronic Marketing Strategies 120 hours	Career Capstone 120 hours						
	Motion Graphics Artist OCAS Codes 9526 & 9527 SOC 27-1014; CIP 10.0304 1,080 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Principles of Animation 120 hours	2D Animation Techniques 120 hours	3D Animation or Design Tools and Electronic Marketing Strategies 120 hours	Fundamentals of 3D Motion Graphics 120 hours	3D Modeling and Rigging 120 hours	Advanced Effects for Motion Graphics 120 hours	Career Capstone 120 hours		
State Program Area: Audio and Video Technology - IT (900 hours)	Video Production Assistant OCAS Codes 9554 & 9555 SOC 27-4032; CIP 10.0201 600 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Digital Media Production 120 hours	Non-Linear Digital Editing 120 hours	Career Capstone 120 hours						
	Audio Technician OCAS Codes 9554 & 9555 SOC 27-4032; CIP 10.0203 840 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Interactive Marketing Techniques 120 hours	Audio Production 120 hours	Broadcast Production 120 hours	Audio Production for Radio and Video 120 hours	Career Capstone 120 hours				
	Video Technician OCAS Codes 9554 & 9555 SOC 27-4032; CIP 10.0299 1,080 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Digital Media Production 120 hours	Non-Linear Digital Editing 120 hours	Advanced Digital Video Tools and Techniques 120 hours	Broadcast Production 120 hours	Audio Production 120 hours	Non-Linear Digital Production 120 hours	Career Capstone 120 hours		

PATHWAY: WEB AND DIGITAL COMMUNICATIONS (continued)

		1	2	3	4	5	6	7				Additional Course Options:	
State Program Area: Digital Design and Publishing (900 hours)	Desktop Publisher / Graphic Designer OCAS Codes 9537 & 9538 SOC 27-1024; CIP 50.0409 600 hours	Fundamentals of Technology 120 hours	Desktop Publishing and Graphic Design 120 hours	Multimedia and Image Management Techniques 120 hours	Digital Editing and Production Photography or Interactive Marketing Techniques 120 hours	Career Capstone 120 hours							
	Graphic Design Specialist OCAS Codes 9537 & 9538 SOC 27-1024; CIP 50.0409 840 hours	Fundamentals of Technology 120 hours	Desktop Publishing and Graphic Design 120 hours	Multimedia and Image Management Techniques 120 hours	Digital Editing and Production Photography or Interactive Marketing Techniques 120 hours	Design Tools and Electronic Marketing Strategies 120 hours	Advanced Design Techniques or Principles of Animation 120 hours	Career Capstone 120 hours					Fundamentals of Web Design Layout Design Techniques
State Program Area: Game Design/Development (900 hours)	Web Game Developer OCAS Codes 9552 & 9553 SOC 15-1134; CIP 10.0801 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Web Design or Web Authoring Languages 120 hours	Gaming Development Fundamentals 120 hours	Web Scripting Foundations or Layout Design Techniques 120 hours	Career Capstone 120 hours							
	Video Game Designer OCAS Codes 9552 & 9553 SOC 27-1014; CIP 50.0411 960 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Design Tools and Electronic Marketing Strategies 120 hours	Fundamentals of Video Game Design 120 hours	2D Animation Techniques 120 hours	Fundamentals of 3D Motion Graphics 120 hours	3D Modeling and Rigging 120 hours	Career Capstone 120 hours				Fundamentals of Web Design Layout Design Techniques Advanced Design Techniques Principle of Animation
State Program Area: Multimedia Technology (900 hours)	Interactive Media Specialist OCAS Codes 9540 & 9541 SOC 27-1014; CIP 10.0501 600 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Fundamentals of Web Design or Web Authoring Languages 120 hours	Digital Media Production 120 hours	Career Capstone 120 hours							
	Multimedia Assistant OCAS Codes 9540 & 9541 SOC 27-1014; CIP 11.0801 960 hours	Fundamentals of Technology 120 hours	Multimedia and Image Management Techniques 120 hours	Fundamentals of Web Design or Web Authoring Languages 120 hours	Design Tool and Electronic Marketing Strategies or Layout Design Techniques 120 hours	Digital Media Production 120 hours	Digital Editing and Production Photography or Interactive Marketing Techniques 120 hours	Broadcast Production 120 hours	Career Capstone 120 hours				
	Multimedia Specialist OCAS Codes 9540 & 9541 SOC 27-1014; CIP 11.0304 960 hours	Fundamentals of Technology 120 hours	Desktop Publishing and Graphic Design 120 hours	Multimedia and Image Management Techniques 120 hours	Non-Linear Digital Editing 120 hours	Digital Editing and Production Photography or Interactive Marketing Techniques 120 hours	Advanced Digital Video Tools and Techniques 120 hours	Non-Linear Digital Production 120 hours	Career Capstone 120 hours				
State Program Area: Web Design and Development - IT (900 hours)	E-Business Specialist OCAS Codes 9557 & 9558 SOC 15-1134; CIP 10.0801 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Web Design 120 hours	Design Tools and Electronic Marketing Strategies 120 hours	Web Scripting Foundations 120 hours	Career Capstone 120 hours						Web Development Fundamentals Advanced Design Tools Database Design and Programming	
	Web Designer OCAS Codes 9557 & 9558 SOC 15-1134; CIP 11.0801 600 hours	Fundamentals of Technology 120 hours	Fundamentals of Web Design 120 hours	Multimedia and Image Management Techniques 120 hours	Design Tools and Electronic Marketing Strategies 120 hours	Career Capstone 120 hours							Web Development Fundamentals Digital Media Production Layout Design Techniques
	Web Applications Developer OCAS Codes 9557 & 9558 SOC 15-1134; CIP 11.1004 840 hours	Fundamentals of Technology 120 hours	Fundamentals of Web Design 120 hours	Web Scripting Foundations 120 hour	C# Programming 120 hours	SQL and PL/SQL Database Applications Development 120 hours	Network/Client Operating Systems 120 hours	Career Capstone 120 hours					
	Front End Developer OCAS Codes 9557 & 9558 SOC 15-1134; CIP 11.1004 960 hours	Fundamentals of Technology 120 hours	Fundamentals of Web Design or Web Authoring Languages 120 hours	Web Authoring Tools 120 hours	Multimedia and Image Management Techniques 120 hours	Web Scripting Foundations 120 hours	Layout Design Techniques 120 hours	Interactive Marketing Techniques 120 hours	Career Capstone 120 hours				Web Development Fundamentals Digital Editing and Production Photography
	Back End Developer OCAS Codes 9557 & 9558 SOC 15-1134; CIP 11.0801 960 hours	Fundamentals of Technology 120 hours	Web Authoring Languages or Fundamentals of Web Design 120 hours	Web Scripting Foundations 120 hour	Web Application Technologies 120 hours	Interactive Marketing Techniques 120 hours	Database Design and Programming 120 hours	Web Application Development or Server-Side Scripting 120 hours	Career Capstone 120 hours				Web Development Fundamentals

PATHWAY: PROGRAMMING AND SOFTWARE DEVELOPMENT

		1	2	3	4	5	6	7	8	Additional Course Options:		
State Program Area: Programming (900 hours)	App Program Developer OCAS Codes 9550 & 9551 SOC 15-1132; CIP 11.0201 600 hours	Fundamentals of Technology 120 hours	Java Programming 120 hours	Beginning Android Development 120 hours	Intermediate Android Development 120 hours	Career Capstone 120 hours					Gaming Development Fundamentals Mobile Development Fundamentals Software Development Fundamentals	
	Programming Tech OCAS Codes 9550 & 9551 SOC 15-1131; CIP 11.0201 600 hours	Fundamentals of Technology 120 hours	Programming Fundamentals or Basic 120 hours	C# Programming or Java or C++ or Visual Basic 120 hours	Advanced Programming 120 hours	Career Capstone 120 hours					Gaming Development Fundamentals Mobile Development Fundamentals Software Development Fundamentals HTML5 Application Developer Fundamentals Web Development Fundamentals Systems, Analysis, Design and Testing	
	Enterprise Developer OCAS Codes 9550 & 9551 SOC 15-1131; CIP 11.0201 720 hours	Fundamentals of Technology 120 hours	Basic Programming 120 hours	Advanced Programming 120 hours	Database Design and Programming 120 hours	Advanced Scripting Languages 120 hours	Career Capstone 120 hours					
	Game Programmer OCAS Codes 9550 & 9551 SOC 15-1132; CIP 11.0804 840 hours	Fundamentals of Technology 120 hours	Advanced Programming 120 hours	Systems Analysis, Design and Testing 120 hours	Software Configuration Management 120 hours	Cross Platform Game Programming 120 hours	Fundamentals of Video Game Design 120 hours	Career Capstone 120 hours				NET Fundamentals Gaming Development Fundamentals HTML5 Application Developer Fundamentals Mobile Development Fundamentals Software Development Fundamentals Web Development Fundamentals C# Programming Visual Basic .NET Programming C++ Programming
	Computer Programmer (Multiple Languages) OCAS Codes 9550 & 9551 SOC 15-1131; CIP 11.0201 960 hours	Fundamentals of Technology 120 hours	Basic Programming 120 hours	JAVA Programming 120 hours	Scripting Language Fundamentals 120 hours	Advanced Programming 120 hours	C++ Programming or C# Programming 120 hours	Systems Analysis, Design and Testing 120 hours	Career Capstone 120 hours			
		1	2	3	4	5	6	7	8	Additional Course Options:		
State Program Area: Computer Science Prep (900 hours)	Computer Science Engineering Prep OCAS Codes 9550 & 9551 SOC 15-1132; CIP 11.0201 840 hours	Fundamentals of Technology 120 hours	Computer Science Discoveries 120 hours	Computer Science Essentials 120 hours	Computer Science Principles or Computer Science Principles AP 120 hours	Computer Science A 120 hours	Career Capstone 120 hours				Python	

2020-21 Sequence of Courses for MARKETING CLUSTER

PATHWAY: MARKETING MANAGEMENT

		1	2	3	4	5	6	7	8	9	10	Additional Course Options:
State Program Area: Entrepreneurship MK (900 hours)	Marketing Entrepreneur OCAS Codes 9795 & 9802 SOC 11-1021; CIP 52.0701 600 hours	Marketing Fundamentals 120 hours	Advertising Strategies or Digital Marketing 120 hours	Entrepreneurship Awareness 120 hours	Entrepreneurship 120 hours	Program Capstone 120 hours						Fundamentals of Technology
	Small Business Entrepreneur OCAS Codes 9795 & 9802 SOC 11-1021; CIP 52.0701 1,080 hours	Marketing Fundamentals 120 hours	Advertising Strategies or Digital Marketing 120 hours	Entrepreneurship Awareness 120 hours	Entrepreneurship 120 hours	Business and Marketing Communications 60 hours	Buying and Merchandising 60 hours	Accounting 1 120 hours	Business Management and Supervision 120 hours	Advanced Entrepreneurship 120 hours	Program Capstone 120 hours	
State Program Area: Management (600 hours)	Retail Manager OCAS Codes 9789 & 9809 SOC 11-1021; CIP 52.0212 720 hours	Marketing Fundamentals 120 hours	Digital Marketing 120 hours	Customer Service 60 hours	Buying and Merchandising 120 hours	Product & Service Sales 60 hours	Business and Marketing Communications 60 hours	Business Management and Supervision 120 hours	Program Capstone 120 hours			Fundamentals of Technology
	Customer Experience Manager OCAS Codes 9787 & 9809 SOC 13-1161; CIP 52.1401 1,080 hours	Marketing Fundamentals 120 hours	Digital Marketing 120 hours	Customer Service 60 hours	Public Relations Marketing 120 hours	Awareness of GPS/GIS 120 hours	Interactive Marketing Techniques 120 hours	Global Markets & Trade or E-Commerce Marketing 120 hours	Ethical Leadership 60 hours	Business Management & Supervision 120 hours	Program Capstone 120 hours	

PATHWAY: PROFESSIONAL SALES

		1	2	3	4	5	6	7	8	9	10	Additional Course Options:
State Program Area: Professional Sales (900 hours)	Sales Associate OCAS Codes 9787 & 9804 SOC 41-4012; CIP 52.1801 480 hours	Marketing Fundamentals 120 hours	Digital Marketing 120 hours	Customer Service 60 hours	Sales and Sales Promotion or Product & Service Sales 60 hours	Program Capstone 120 hours						Fundamentals of Technology
	Professional Sales Representative OCAS Codes 9787 & 9804 SOC 41-4012; CIP 52.1801 780 hours	Marketing Fundamentals 120 hours	Digital Marketing 120 hours	Customer Service 60 hours	Sales and Sales Promotion 60 hours	Product & Service Sales 60 hours	Business and Marketing Communications 60 hours	Employment Essentials 60 hours	Professional Sales 120 hours	Program Capstone 120 hours		

PATHWAY: MARKETING COMMUNICATIONS

		1	2	3	4	5	6	7	8	9	10	Additional Course Options:	
State Program Area: Marketing Communications (900 hours)	E-Marketing Associate OCAS Codes 9783 & 9784 SOC 27-3099; CIP 09.0702 600 hours	Marketing Fundamentals 120 hours	Advertising Strategies or Digital Marketing 120 hours	E-Commerce Marketing 120 hours	International Business and Marketing 120 hours	Program Capstone 120 hours						Fundamentals of Web Design Fundamentals of Technology	
	Marketing Assistant OCAS Codes 9783 & 9784 SOC 27-3099; CIP 09.0702 540 hours	Marketing Fundamentals 120 hours	Advertising Strategies or Digital Marketing 120 hours	Sales and Sales Promotion 60 hours	Customer Service 60 hours	Business and Marketing Communications 60 hours	Program Capstone 120 hours						Fundamentals of Technology
	Marketing / PR Specialist OCAS Codes 9783 & 9784 SOC 27-3031; CIP 09.0902 960 hours	Marketing Fundamentals 120 hours	Advertising Strategies or Digital Marketing 120 hours	Employment Essentials 60 hours	Customer Service 60 hours	Business and Marketing Communications 60 hours	Product & Service Sales 60 hours	Public Relations Marketing 120 hours	Marketing Research 120 hours	Business Management & Supervision 120 hours	Program Capstone 120 hours		Fundamentals of Technology
	Digital Marketing Specialist OCAS Codes 9783 & 9784 SOC 27-3099; CIP 09.0702 720 hours	Marketing Fundamentals 120 hours	Digital Marketing 120 hours	Advertising Strategies 120 hours	Marketing Research 120 hours	International Business and Marketing 120 hours	Program Capstone 120 hours						Fundamentals of Web Design Multimedia and Image Management