

DISTANCE EDUCATION AT FXUA

CATALOG ADDENDUM

Fairfax University of America (FXUA) is dedicated to providing quality education that is built around the university's values and beliefs. At FXUA, we understand the importance of education and continually strive toward excellence by incorporating our working philosophies into everything we produce. Distance learning at Fairfax University of America was created with the goal of serving students in a community with the highest educational standards in mind. These goals, alongside the FXUA Academic Handbook outlining the guidelines, requirements, and code of conduct for online learning at the institution.

Distance Education and FXUA's Mission

Aligned with its mission, FXUA provides an accessible, quality education that brings its programs and course offerings to individuals regardless of their physical locations. We believe that our distance learning offerings provide the ability to break down barriers and expand opportunity to a global community that needs the kind of programs that FXUA offers. This distance education model allows FXUA to reach learner populations that the traditional, brick and mortar only education model does not.

FXUA employs a hybrid program model in which some courses can be taken online while others on campus. The flexibility this method offers provides students with a better control over their learning environment: they can enjoy on-campus activities or stay in the safety and convenience of their home.

Online Delivery Education and FXUA's Mission

A course's modality is indicated on the syllabus for the course. All courses are offered in a synchronous format. All distance education courses take place via FXUA's learning management system, Canvas. In this platform, students submit assignments, access course materials, and participate in discussion forms, communicate with their instructors and classmates.

Online courses do not differ in content, expectations, or requirements from those delivered in a residential format. The learning objectives are the same for online and on-campus classes. The methods that are used to deliver the online courses typically consist of synchronous lectures, synchronous or asynchronous discussion forums, research, case studies, and group work. These are supported by selected tools and resources that include, but are not limited to printed materials and resources, video, audio, nonlinear media, interactive media, reviews, exams, email communication, threaded discussions, blogs, chat, and teleconferencing. Every online course has multiple forms of assessment throughout the week (formal and informal) to ascertain if students are learning the expected content. The course instructors provide support to their students via virtual office hours.

Hybrid Programs Offered

The university offers opportunities for students to study in a hybrid format, which allows them to come to campus for some courses, while completing other coursework at a distance. A hybrid modality means that some courses are offered in an online format, while others require attendance on campus.

The following programs are offered in a hybrid format:

Hybrid Program	Program Code	CIP Code [^]	Total Credit Hours	Program Length*	Credential Awarded	Distance Education Program Format
Bachelor of Science in Computer Science	BSCS	11.0701	120 credits	48 months	Bachelor's degree	HYBRID
Bachelor of Science in Business Administration	BSBA	30.7102	120 credits	48 months	Bachelor's degree	HYBRID
Bachelor of Science in Management Information Systems	BSMIS	30.7102	120 credits	48 months	Bachelor's degree	HYBRID
Master of Business Administration	MBA	52.0201	60 credits	24 months	Master's degree	HYBRID
Master of Science in Accounting	MSAC	52.0301	60 credits	24 months	Master's degree	HYBRID
Master of Science in Project Management	MSPM	52.0211	60 credits	24 months	Master's degree	HYBRID
Master of Science in Management Information Systems	MSMIS	30.7102	60 credits	24 months	Master's degree	HYBRID
Master of Science in Computer Science	MSCS	11.0701	60 credits	24 months	Master's degree	HYBRID
Master of Science in Artificial Intelligence and Machine Learning	MSAIML	30.7102	60 credits	24 months	Master's degree	HYBRID
Master of Science in Data Analytics	MSDA	11.0701	60 credits	24 months	Master's degree	HYBRID
Master of Science in Networking and Cybersecurity	MSNC	11.0701	60 credits	24 months	Master's degree	HYBRID
Master of Science in International Relations	MSIR	45.0901	60 credits	24 months	Master's degree	HYBRID
Master of Science in Public Administration	MSPA	44.0401	60 credits	24 months	Master's degree	HYBRID
Graduate Certificate in Project Management	GCPM	52.0211	30 credits	12 months	Graduate Certificate	HYBRID

*Assumes full-time course load

[^]Classification of Instructional Program (CIP) codes provide a cohesive way of classifying programs based upon fields of study. For information on CIP codes, see: <https://nces.ed.gov/ipeds/cipcode>

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION				
FUNDAMENTAL COURSES: 21				
SPECIALIZATION COURSES: 6				
GENERAL EDUCATION COURSES: 14				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
FUNDAMENTAL COURSES				
BUSS 490	Consulting Project and Seminar	On-ground	60	4
ACCT 101	Principles of Accounting	Online	45	3
ACCT 305	Accounting Information Systems	Online	45	3
BUSS 110	Introduction to Business	Online	45	3
BUSS 120	Principles of Management	Online	45	3

BUSS 130	Principles of Marketing	Online	45	3
BUSS 155	Seminar I	Online	15	1
BUSS 200	Legal Aspect of Business	Online	45	3
BUSS 220	Business Ethics and Corporate Social Responsibility	Online	45	3
BUSS 242	Principles of Finance	Online	45	3
BUSS 280	Introduction to Statistics	Online	45	3
BUSS 290	Introduction to Business Analytics	Online	45	3
BUSS 300	Organizational Theory & HR Management	Online	45	3
BUSS 328	Foundations of Data and Information Management	Online	45	3
BUSS 390	Seminar II	Online	15	1
BUSS 450	Research and Analytics Skills	Online	45	3
ECON 101	Principles of Microeconomics	Online	45	3
ECON 102	Principles of Macroeconomics	Online	45	3
TLLP 250	Designing Your Career	Online	45	3
TLLP 275	Practices of Social Impact	Online	45	3
TLLP 425	Practices of Career Planning and Leadership	Online	45	3
	Business Analytics Specialization			
BUSS 338	Business Data Visualization	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiation Essentials	Online	45	3
BUSS 400	Business Decisions and Modeling	Online	45	3
BUSS 440	Business Intelligence and Predictive Analysis	Online	45	3
BUSS 445	Human Resource Analytics	Online	45	3
BUSS 448	Marketing Analytics	Online	45	3
BUSS 478	Business Risk Analysis and Optimization	Online	45	3
BUSS 479	Data Prediction and Business Optimization	Online	45	3
BUSS 487	Contemporary Issues in Applying Business Analytics	Online	45	3
BUSS 488	Internship in Business Analytics	Online	45	3
	Social Innovation and Sustainable Businesses Specialization			
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiation Essentials	Online	45	3
BUSS 371	Sustainable Business Innovation and Management	Online	45	3
BUSS 376	Social Capital Innovations	Online	45	3
BUSS 380	Environmental Ethics and Compliance	Online	45	3
BUSS 381	Environmental Politics and Policy	Online	45	3
BUSS 387	Policy Making in a Global Context	Online	45	3
BUSS 388	International Economics and Politics	Online	45	3
BUSS 383	Sustainable Energy Systems	Online	45	3
BUSS 451	Development and Globalization	Online	45	3
BUSS 453	Economics of Development	Online	45	3
BUSS 457	International Perspectives in Sustainable Business	Online	45	3
BUSS 461	Sustainable Business Metrics and Reporting	Online	45	3
BUSS 463	Contemporary Issues in Sustainable Business	Online	45	3
BUSS 459	Internship in Sustainable Business	Online	45	3
	Organizational Development and Human Resources Specialization			
BUSS 306	Communities of Practice	Online	45	3
BUSS 333	Managing Behavior and Organizations	Online	45	3

BUSS 342	Human Resource Management	Online	45	3
BUSS 349	Internship in Organizational Development	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiations Essentials	Online	45	3
BUSS 373	Change Management and Leadership	Online	45	3
BUSS 379	Learning Organization	Online	45	3
BUSS 431	Leading Organizations with Positive Psychology	Online	45	3
BUSS 432	Organizational Performance Measure	Online	45	3
BUSS 435	Management and Ethical Leadership	Online	45	3
BUSS 437	Talend Acquisition and Development	Online	45	3
BUSS 439	Managing in a Digital World	Online	45	3
BUSS 449	Contemporary Issues in Organizational Development	Online	45	3
BUSS 447	Legal an Regulatory Environment of Business	Online	45	3
	Business Optimization Specialization			
BUSS 306	Communities of Practice	Online	45	3
BUSS 320	Introduction to Project Management	Online	45	3
BUSS 325	Project Management Systems	Online	45	3
BUSS 327	Leading Project Management Operations	Online	45	3
BUSS 329	Organizational Behavior	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiations Essentials	Online	45	3
BUSS 370	Business Change Management	Online	45	3
BUSS 378	Asset Management and Optimization	Online	45	3
BUSS 385	Seminar in Technological Change and Productivity	Online	45	3
BUSS 410	Contracts, Procurement and Supply Chain Management Systems	Online	45	3
BUSS 415	Risk Management in Project Management	Online	45	3
BUSS 418	Mergers and Acquisitions	Online	45	3
BUSS 428	Internship in Project Management	Online	45	3
BUSS 429	Contemporary Issues in Business Process Optimization	Online	45	3
BUSS 433	Emergent Roles of Project Management in Business	Online	45	3
BUSS 435	Management and Ethical Leadership	Online	45	3
BUSS 478	Business Risk Analysis and Optimization	Online	45	3
	General Education Courses			
HUMN 101	Introduction to the Arts and Humanities	Online	45	3
HUMN 105	Principles of Learning	Online	45	3
PHIL 102	Philosophy, Living and Being	Online	45	3
RLGN 111	World Religions	Online	45	3
COMM 111	Oral Communication	Online	45	3
ENGL 113	English Composition and Rhetoric	Online	45	3
ENGL 120	Academic Writing and Research	Online	45	3
ARAB 100	Elementary Arabic I	Online	45	3
ARAB 105	Elementary Arabic II	Online	45	3
CHIN 100	Elementary Chinese I	Online	45	3
CHIN 105	Elementary Chinese II	Online	45	3
FREN 100	Elementary French I	Online	45	3
FREN 105	Elementary French II	Online	45	3
SPAN 100	Elementary Spanish I	Online	45	3

SPAN 105	Elementary Spanish II	Online	45	3
MATH 160	Pre-Calculus	Online	45	3
MATH 165	Calculus I	Online	45	3
BIOL 102	Introduction to Biology	Online	45	3
CHEM 101	General Chemistry	Online	45	3
GEOL 101	Introduction to Geology	Online	45	3
PHYS 101	College Physics	Online	45	3
GOVT 121	World Governments	Online	45	3
GOVT 130	American Society and Politics	Online	45	3
GEOG 101	GEOG 101	Online	45	3
HIST 101	World History	Online	45	3
INCS 300	The Context of Global Citizenship	Online	45	3
SOCI 101	Sociology	Online	45	3
PSYC 101	Psychology	Online	45	3
TLLP 105	Foundations of Learning and Being	Online	45	3
HUMN 125	Foundations of Adult Development	Online	45	3
HUMN 150	Practices of Learning	Online	45	3
HUMN 200	Designing Your Life	Online	45	3
INCS 300	Principles of Global Citizenship	Online	45	3
INCS 325	Practices of Global Citizenship	Online	45	3
TLLP 400	Models of Thinking	Online	45	3

BACHELOR OF SCIENCE IN COMPUTER SCIENCE				
FUNDAMENTAL COURSES: 21				
SPECIALIZATION COURSES: 6				
GENERAL EDUCATION COURSES: 14				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Fundamental Courses			
COMP 499	Senior Project and Seminar	On-ground	60	4
COMP 109**	Computer Algorithm and Programming Logic Using Python	Online	45	3
COMP 121	Object Oriented Programming	Online	45	3
COMP 130	Ethical, Social, and Legal Aspects of Computing	Online	45	3
COMP 157	Seminar I	Online	15	1
COMP 231	Discrete Mathematical Methods for Computing	Online	45	3
COMP 250**	Computer Architecture	Online	45	3
COMP 260**	Introduction to Operating Systems	Online	45	3
COMP 270**	Essentials of Networking	Online	45	3
COMP 280	Comp TIA A+ and Test Preparation	Online	45	3
COMP 329**	Data Structures and Algorithm Analysis	Online	45	3
COMP 345	Introduction to Computer Security	Online	45	3
COMP 350**	Database Concepts	Online	45	3
COMP 360**	Introduction to Data Science	Online	45	3
COMP 375*	Human Computer Interaction	Online	45	3
COMP 380	Wireless and Mobile Security	Online	45	3

COMP 390	Seminar II	Online	15	1
COMP 450	Research and Analytic Skills	Online	45	3
TLLP 250	Designing Your Career	Online	45	3
TLLP 275	Practices of Social Impact	Online	45	3
TLLP 425	Practices of Career Planning and Leadership	Online	45	3
	Artificial Intelligence and Machine Learning Specialization			
COMP 340	Computer Graphics	Online	45	3
COMP 376	Artificial Intelligence Principles	Online	45	3
COMP 377	Machine Learning Principles	Online	45	3
COMP 378	Decision Making and Robotics Principles	Online	45	3
COMP 379	Human AI Interaction	Online	45	3
COMP 393	Internship in Artificial Intelligence	Online	45	3
COMP 394	Internship in Machine Learning	Online	45	3
COMP 413	Robotics Design and Programming	Online	45	3
COMP 414	Big Data Analytics	Online	45	3
COMP 415	Natural Language Processing	Online	45	3
COMP 416	Computer Vision and Image Processing	Online	45	3
COMP 417	Special Topics in Artificial Intelligence	Online	45	3
COMP 418	Special Topics in Machine Learning	Online	45	3
COMP 420	Creativity in Machine Learning	Online	45	3
COMP 421	Smart Devices Design and Applications	Online	45	3
COMP 422	Data Mining	Online	45	3
COMP 480	AWS Test Preparation for Cloud Practitioner Certificate	Online	45	3
COMP 483	IBM AI Engineering Professional Test Preparation	Online	45	3
	Networking and Cybersecurity Specialization			
COMP 360	Switching and Routing Protocols	Online	45	3
COMP 365	Cybersecurity and Information Assurance	Online	45	3
COMP 370	Essentials Digital Forensics	Online	45	3
COMP 391	Internship in Networking	Online	45	3
COMP 392	Internship in Cybersecurity	Online	45	3
COMP 410	Intrusion Detection and Prevention Systems	Online	45	3
COMP 411	Cloud Security	Online	45	3
COMP 412	Special Topics in Networking	Online	45	3
COMP 419	Special Topics in Cybersecurity	Online	45	3
COMP 430	Ethical Hacking	Online	45	3
COMP 431	Cryptography and Ciphering	Online	45	3
COMP 429	Operating Systems Security	Online	45	3
COMP 433	IoT and Smart Cities Security	Online	45	3
COMP 434	Information Risk Management	Online	45	3
COMP 436	Cybersecurity Governance and Compliance	Online	45	3
COMP 486	COMP TIA Network + and Test Preparation	Online	45	3
COMP 487	COMP TIA Security + and Test Preparation	Online	45	3
	Data Science Specialization			
COMP 362	Data Science Mathematical Foundations	Online	45	3
COMP 363	Data Science Algorithmic Foundations	Online	45	3
COMP 364	Statistics Essential for Data Science	Online	45	3
COMP 396	Internship in Data Science	Online	45	3
COMP 440	R Programming for Data Science	Online	45	3
COMP 441	Statistical and Computational Foundations of Machine Learning	Online	45	3

COMP 442	Numerical Analysis	Online	45	3
COMP 443	Data-Intensive Distributed Computing	Online	45	3
COMP 444	Special Topics in Data Science	Online	45	3
COMP 484	Microsoft Certified Azure Data Scientist Associate	Online	45	3
COMP 485	SAS Certified Data Scientist	Online	45	3
	General Education Courses			
HUMN 101	Introduction to the Arts and Humanities	Online	45	3
HUMN 105	Principles of Learning	Online	45	3
PHIL 102	Philosophy, Living and Being	Online	45	3
RLGN 111	World Religions	Online	45	3
COMM 111	Oral Communication	Online	45	3
ENGL 113	English Composition and Rhetoric	Online	45	3
ENGL 120	Academic Writing and Research	Online	45	3
ARAB 100	Elementary Arabic I	Online	45	3
ARAB 105	Elementary Arabic II	Online	45	3
CHIN 100	Elementary Chinese I	Online	45	3
CHIN 105	Elementary Chinese II	Online	45	3
FREN 100	Elementary French I	Online	45	3
FREN 105	Elementary French II	Online	45	3
SPAN 100	Elementary Spanish I	Online	45	3
SPAN 105	Elementary Spanish II	Online	45	3
MATH 160	Pre-Calculus	Online	45	3
MATH 165	Calculus I	Online	45	3
BIOL 102	Introduction to Biology	Online	45	3
CHEM 101	General Chemistry	Online	45	3
GEOL 101	Introduction to Geology	Online	45	3
PHYS 101	College Physics	Online	45	3
GOVT 121	World Governments	Online	45	3
GOVT 130	American Society and Politics	Online	45	3
GEOG 101	GEOG 101	Online	45	3
HIST 101	World History	Online	45	3
INCS 300	The Context of Global Citizenship	Online	45	3
SOCI 101	Sociology	Online	45	3
PSYC 101	Psychology	Online	45	3
TLLP 105	Foundations of Learning and Being	Online	45	3
HUMN 125	Foundations of Adult Development	Online	45	3
HUMN 150	Practices of Learning	Online	45	3
HUMN 200	Designing Your Life	Online	45	3
INCS 300	Principles of Global Citizenship	Online	45	3
INCS 325	Practices of Global Citizenship	Online	45	3
TLLP 400	Models of Thinking	Online	45	3

<p>BACHELOR OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS FUNDAMENTAL COURSES: 21 SPECIALIZATION COURSES: 6 GENERAL EDUCATION COURSES: 14</p>				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE	TOTAL ONLINE

			CONTACT HOURS	CREDIT HOURS
	Fundamental Courses			
BUSS 490	Consulting Project and Seminar	On-ground	60	4
ACCT 101	Principles of Accounting	Online	45	3
ACCT 305	Accounting Information Systems	Online	45	3
BUSS 110	Introduction to Business	Online	45	3
BUSS 120	Principles of Management	Online	45	3
BUSS 155	Seminar I	Online	15	1
BUSS 220	Business Ethics and Corporate Social Responsibility	Online	45	3
BUSS 280	Introduction to Statistics	Online	45	3
BUSS 290	Introduction to Business Analytics	Online	45	3
BUSS 300	Organizational Theory & HR Management	Online	45	3
BUSS 390	Seminar II	Online	15	1
COMP 109	Computer Algorithm and Programming Logic	Online	45	3
COMP135	Legal and Ethical Issues in Information System	Online	45	3
COMP 172	Information Technology Services Management	Online	45	3
COMP 173	Strategic Partnerships	Online	45	3
COMP 178	Information Assurance Management	Online	45	3
ECON 101	Principles of Microeconomics	Online	45	3
ECON 102	Principles of Macroeconomics	Online	45	3
TLLP 250	Designing Your Career	Online	45	3
TLLP 275	Practices of Social Impact	Online	45	3
TLLP 425	Practices of Career Planning and Leadership	Online	45	3
	Business Analytics Specialization			
BUSS 328	Foundations of Data and Information Management	Online	45	3
BUSS 338	Business Data Visualization	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiation Essentials	Online	45	3
BUSS 400	Business Decisions and Modeling	Online	45	3
BUSS 440	Business Intelligence and Predictive Analysis	Online	45	3
BUSS 445	Human Resource Analytics	Online	45	3
BUSS 448	Marketing Analytics	Online	45	3
BUSS 478	Business Risk Analysis and Optimization	Online	45	3
BUSS 479	Data Prediction and Business Optimization	Online	45	3
BUSS 487	Contemporary Issues in Applying Business Analytics	Online	45	3
BUSS 488	Internship in Business Analytics	Online	45	3
	Entrepreneurship Specialization			
BUSS 130	Principles of Marketing	Online	45	3
BUSS 320	Introduction to Project Management	Online	45	3
BUSS 329	Organizational Behavior	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiation Essentials	Online	45	3
BUSS 366	Entrepreneurship and Innovation	Online	45	3
BUSS 365	Entrepreneurial Ventures	Online	45	3
BUSS 373	Change Management and Leadership	Online	45	3
BUSS 374	Entrepreneurial Marketing	Online	45	3
BUSS 375	Corporate Entrepreneurship	Online	45	3

BUSS 377	Strategic Management	Online	45	3
BUSS 410	Contracts, Procurement and Supply Chain Management Systems	Online	45	3
BUSS 419	Venture Capital	Online	45	3
BUSS 426	Engaging Consumers in a Digital World	Online	45	3
BUSS 439	Managing in a Digital World	Online	45	3
BUSS 462	Product Design and Development	Online	45	3
BUSS 465	Social Media Marketing	Online	45	3
BUSS 485	International Strategy	Online	45	3
BUSS 489	Dilemmas and Debates in Entrepreneurship	Online	45	3
	Information Technology Management Specialization			
BUSS 130	Principles of Marketing	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiation Essentials	Online	45	3
BUSS 366	Entrepreneurship and Innovation	Online	45	3
BUSS 365	Entrepreneurial Ventures	Online	45	3
BUSS 374	Entrepreneurial Marketing	Online	45	3
COMP 240	Client/Server Management	Online	45	3
COMP 250	Computer Architecture	Online	45	3
COMP 260	Introduction to Operating Systems	Online	45	3
COMP 270	Essentials of Networking	Online	45	3
COMP 273	Information Technology Infrastructure Library	Online	45	3
COMP 281	COMP TIA Project +	Online	45	3
COMP 335	Cyber Law and Ethics	Online	45	3
COMP 345	Introduction to Computer Security	Online	45	3
COMP 350	Database Concepts	Online	45	3
COMP 445	Introduction to AI for Business	Online	45	3
COMP 449	Financial Analysis for Technology Manager	Online	45	3
COMP 455	Information Technologies for Mobile Commerce	Online	45	3
COMP 460	Web Application Development for Business	Online	45	3
COMP 463	Systems Analysis and Design for Business	Online	45	3
COMP 465	Contemporary Issues in IT Management	Online	45	3
	Business Optimization Specialization			
BUSS 306	Communities of Practice	Online	45	3
BUSS 320	Introduction to Project Management	Online	45	3
BUSS 325	Project Management Systems	Online	45	3
BUSS 327	Leading Project Management Operations	Online	45	3
BUSS 329	Organizational Behavior	Online	45	3
BUSS 351	Business Development	Online	45	3
BUSS 362	Business Consulting	Online	45	3
BUSS 364	Negotiations Essentials	Online	45	3
BUSS 370	Business Change Management	Online	45	3
BUSS 378	Asset Management and Optimization	Online	45	3
BUSS 385	Seminar in Technological Change and Productivity	Online	45	3
BUSS 410	Contracts, Procurement and Supply Chain Management Systems	Online	45	3
BUSS 415	Risk Management in Project Management	Online	45	3
BUSS 418	Mergers and Acquisitions	Online	45	3
BUSS 428	Internship in Project Management	Online	45	3
BUSS 429	Contemporary Issues in Business Process Optimization	Online	45	3

BUSS 433	Emergent Roles of Project Management in Business	Online	45	3
BUSS 435	Management and Ethical Leadership	Online	45	3
BUSS 478	Business Risk Analysis and Optimization	Online	45	3
	General Education Courses			
HUMN 101	Introduction to the Arts and Humanities	Online	45	3
HUMN 105	Principles of Learning	Online	45	3
PHIL 102	Philosophy, Living and Being	Online	45	3
RLGN 111	World Religions	Online	45	3
COMM 111	Oral Communication	Online	45	3
ENGL 113	English Composition and Rhetoric	Online	45	3
ENGL 120	Academic Writing and Research	Online	45	3
ARAB 100	Elementary Arabic I	Online	45	3
ARAB 105	Elementary Arabic II	Online	45	3
CHIN 100	Elementary Chinese I	Online	45	3
CHIN 105	Elementary Chinese II	Online	45	3
FREN 100	Elementary French I	Online	45	3
FREN 105	Elementary French II	Online	45	3
SPAN 100	Elementary Spanish I	Online	45	3
SPAN 105	Elementary Spanish II	Online	45	3
MATH 160	Pre-Calculus	Online	45	3
MATH 165	Calculus I	Online	45	3
BIOL 102	Introduction to Biology	Online	45	3
CHEM 101	General Chemistry	Online	45	3
GEOL 101	Introduction to Geology	Online	45	3
PHYS 101	College Physics	Online	45	3
GOVT 121	World Governments	Online	45	3
GOVT 130	American Society and Politics	Online	45	3
GEOG 101	GEOG 101	Online	45	3
HIST 101	World History	Online	45	3
INCS 300	The Context of Global Citizenship	Online	45	3
SOCI 101	Sociology	Online	45	3
PSYC 101	Psychology	Online	45	3
TLLP 105	Foundations of Learning and Being	Online	45	3
HUMN 125	Foundations of Adult Development	Online	45	3
HUMN 150	Practices of Learning	Online	45	3
HUMN 200	Designing Your Life	Online	45	3
INCS 300	Principles of Global Citizenship	Online	45	3
INCS 325	Practices of Global Citizenship	Online	45	3
TLLP 400	Models of Thinking	Online	45	3

GRADUATE CERTIFICATE IN PROJECT MANAGEMENT				
REQUIRED COURSES: 6				
PREREQUISITE COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Required Courses			
PMP 625	Advanced Project Management Practices	On-ground	45	3

PMP 605	Project Management Systems	Online	45	3
PMP 610	Quality Project Management Practices	Online	45	3
PMP 615	Risk Project Management	Online	45	3
PMP 620	Contract and Procurement Management	Online	45	3
PMP 650	PMP Exam Preparation	Online	45	3
	Prerequisite Courses			
ECON 101	Principles of Microeconomics	Online	45	3
STAT 200	Introduction to Statistics	Online	45	3

MASTER OF BUSINESS ADMINISTRATION				
FUNDAMENTAL COURSES: 4				
SPECIALIZATION COURSES: 8				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Fundamental Courses			
BUSS 501**	Descriptive Analysis and Data Visualizations	Online	45	3
BUSS 535**	Management and Ethical leadership	Online	45	3
BUSS 561**	Sustainable Business Metrics and Reporting	Online	45	3
BUSS 582**	Quantitative Analysis for Decision Making	Online	45	3
	Business Analytics Specialization			
BUSS 502**	Business Decision and Predictive Analysis	Online	45	3
BUSS 503**	Business Intelligence Tools and Techniques	Online	45	3
BUSS 504**	Advanced Business Analytics	Online	45	3
BUSS 545**	Human Resource Analytics	Online	45	3
BUSS 548**	Marketing Analytics	Online	45	3
BUSS 578**	Business Risk Analysis and Optimization	Online	45	3
BUSS 579**	Advanced Data Prediction and Business Optimization	Online	45	3
BUSS 582**	Quantitative Analysis for Decision Making	Online	45	3
BUSS 587	Contemporary Issues in Applying Business Analytics	Online	45	3
BUSS 588	Ethical Dilemma of Business Analytics	Online	45	3
BUSS 604**	Internship in Business Analytics	Online	45	3
BUSS 605**	Capstone in Business Analytics	On-ground	45	3
	Social Innovation and Sustainable Business Specialization			
BUSS 509**	Social Entrepreneurs	Online	45	3
BUSS 513**	Quantitative Analysis of Sustainable Development	Online	45	3
BUSS 516**	Sustainable Business and Financing	Online	45	3
BUSS 517**	Digital Social Innovations	Online	45	3
BUSS 551**	Development and Globalization	Online	45	3
BUSS 553**	Economics of Development	Online	45	3
BUSS 557**	International Perspectives in Sustainable Business	Online	45	3
BUSS 561**	Sustainable Business Metrics and Reporting	Online	45	3
BUSS 563	Contemporary Issues in Sustainable Business	Online	45	3
BUSS 665**	Strategic Planning for Sustainability	Online	45	3
BUSS 680**	Internship in Sustainable Business	Online	45	3
BUSS 693**	Social Capital Innovation and Investment	Online	45	3
BUSS 695**	Capstone in Sustainable Business	On-ground	45	3

	Organizational Development Specialization			
BUSS 521	Human Behavior and Learning in Organizations	Online	45	3
BUSS 522	Organizational Change	Online	45	3
BUSS 506	Leadership in Organization	Online	45	3
BUSS 535	Management and Ethical Leadership	Online	45	3
BUSS 540	Organizational Performance Measure	Online	45	3
BUSS 542	Strategic Change	Online	45	3
BUSS 544	Contemporary Issues in Organizational Development	Online	45	3
BUSS 547	Legal and Regulatory Environment of Business	Online	45	3
BUSS 624	Global leadership	Online	45	3
BUSS 635	Internship in Organization Development	Online	45	3
BUSS 632	International and Multicultural Issues in Organizations	Online	45	3
BUSS 626	Globalization and Organizational Development Human Resources in the Global Economy	Online	45	3
BUSS 640	Capstone in Organizational Development	On-ground	45	3
	Human Resource Management Specialization			
BUSS 541	Principle and Practice of Human Resources	Online	45	3
BUSS 549	Human Resources Across Organizations	Online	45	3
BUSS 543	Finance for HR Professionals	Online	45	3
BUSS 551	HR Change Management	Online	45	3
BUSS 535	Management and Ethical Leadership	Online	45	3
BUSS 537	Talent Acquisition and Development	Online	45	3
BUSS 545	Human Resource in Global Economy	Online	45	3
BUSS 600	Consulting and HR Application	Online	45	3
BUSS 548	Organizational Lifecycles and HR Applications	Online	45	3
BUSS 649	Organizational Leadership, Team Effectiveness and Communications	Online	45	3
BUSS 652	Strategic Human Capital Development	Online	45	3
BUSS 635	Internship in HR Management	Online	45	3
BUSS 656	Workplace Ethics	Online	45	3
BUSS 670	Theory and Practice of Diversity, Equity & Inclusiveness	Online	45	3
BUSS 641	Capstone in HR Management	On-ground	45	3
	Business Optimization Specialization			
BUSS 510**	Contracts, Procurement & Supply Chain Management	Online	45	3
BUSS 515**	Risk Management in Project Management	Online	45	3
BUSS 527**	Emergent Roles of Project Management in Business	Online	45	3
BUSS 580**	Operations Management and Analysis	Online	45	3
BUSS 581**	Supply Chain and Logistic Management	Online	45	3
BUSS 583**	Project and Operation Management Seminar	Online	45	3
BUSS 584**	Administration of Service Operations	Online	45	3
BUSS 685**	Optimality of Project Financing	Online	45	3
BUSS 686**	Managing Multinational Operations	Online	45	3
BUSS 687**	Emerging Challenges in Business Optimization and Technologies	Online	45	3
BUSS 688**	Resource Optimizations Techniques	Online	45	3
BUSS 689**	Internship in Business Optimization	Online	45	3
BUSS 690**	Capstone in Business Optimization	On-ground	45	3
	Prerequisite Courses			
BUSS 280	Introduction to Statistics	Online	45	3
BUSS 290	Introduction to Business Analytics	Online	45	3
BUSS 300	Organization Theory & HR Management	Online	45	3

<p style="text-align: center;"> MASTER OF SCIENCE IN ACCOUNTING FUNDAMENTAL COURSES: 7 ELECTIVE COURSES: 3 THESIS COURSES: 2 </p>				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
STAT 200	Introduction to Statistics	Online	45	3
ACCT 201	Principles of Financial Accounting	Online	45	3
ACCT 202	Principles of Managerial Accounting	Online	45	3
BUSS 303	Principles of Finance	Online	45	3
	Fundamental Courses			
MBA 511	Managerial Accounting and Finance	Online	45	3
MBA 605	Auditing	Online	45	3
MBA 608	Financial Reporting and Decision Making	Online	45	3
MBA 610	Taxation of Business Entities	Online	45	3
MBA 611	Business Ethics and Law	Online	45	3
MBA 654	Accounting Information Systems	Online	45	3
ACCT 600	Cost Accounting	Online	45	3
	Elective Courses			
MBA 614	International Finance	Online	45	3
MBA 620	Long-term Financial Decisions	Online	45	3
MBA 621	Trading and Risk Management	Online	45	3
ACCT 601	Advanced Financial Accounting	Online	45	3
ACCT 602	International Accounting	Online	45	3
ACCT 603	Contemporary Topics in Accountancy	Online	45	3
	Thesis Courses			
ACCT 698	Master Thesis I	Online	45	3
ACCT 699	Master Thesis II	On-ground	45	3
	Optional Course	Online	45	3
ACCT 650	CPA Exam preparation	Online	45	3

<p style="text-align: center;"> MASTER OF SCIENCE IN PROJECT MANAGEMENT FUNDAMENTAL COURSES: 4 SPECIALIZATION COURSES: 6 THESIS COURSES: 2 </p>				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
ECON 101	Principles of Microeconomics	Online	45	3
STAT 200	Introduction to Statistics	Online	45	3
	Fundamental Courses			
MBA 511	Managerial Accounting and Finance	Online	45	3
MBA 512	Project & Cost Management	Online	45	3

MBA 513	Organizational Behavior	Online	45	3
MBA 514	Marketing Management	Online	45	3
	Specialization Courses			
PMP 605	Project Management Systems	Online	45	3
PMP 610	Quality Project Management Practices	Online	45	3
PMP 615	Risk Project Management	Online	45	3
PMP 620	Contract and Procurement Management	Online	45	3
PMP 623	Leading Projects Across Cultural, Corporate, and Global Boundaries	Online	45	3
PMP 625	Advanced Project Management Practices	Online	45	3
	Thesis Courses			
PMP 698	Master Thesis I	Online	45	3
PMP 699	Master Thesis II	On-ground	45	3
	Optional Course			
PMP 650	PMP Exam Preparation	Online	45	3

MASTER OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS				
FUNDAMENTAL COURSES: 4				
SPECIALIZATION COURSES: 8				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
BUSS 280**	Introduction to Statistics	Online	45	3
BUSS 290**	Introduction to Business Analytics	Online	45	3
BUSS 351**	Business Development	Online	45	3
	Fundamental Courses			
BUSS 501**	Descriptive Analysis and Data Visualizations	Online	45	3
BUSS 562**	Product Design and Development	Online	45	3
BUSS 582**	Quantitative Analysis for Decision Making	Online	45	3
BUSS 601**	Operational Analytics	Online	45	3
	Business Analytics Specialization			
BUSS 502**	Business Decision and Predictive Analysis	Online	45	3
BUSS 503**	Business Intelligence Tools and Techniques	Online	45	3
BUSS 504**	Advanced Business Analytics	Online	45	3
BUSS 545**	Human Resource Analytics	Online	45	3
BUSS 548**	Marketing Analytics	Online	45	3
BUSS 578**	Business Risk Analysis and Optimization	Online	45	3
BUSS 579**	Advanced Data Prediction and Business Optimization	Online	45	3
BUSS 582**	Quantitative Analysis for Decision Making	Online	45	3
BUSS 587	Contemporary Issues in Applying Business Analytics	Online	45	3
BUSS 588	Ethical Dilemma of Business Analytics	Online	45	3
BUSS 604**	Internship in Business Analytics	Online	45	3
BUSS 605**	Capstone in Business Analytics	On-ground	45	3
	Business Optimization Specialization			
BUSS 510**	Contracts, Procurement & Supply Chain Management	Online	45	3
BUSS 515**	Risk Management in Project Management	Online	45	3
BUSS 527**	Emergent Roles of Project Management in Business	Online	45	3

BUSS 580**	Operations Management and Analysis	Online	45	3
BUSS 581**	Supply Chain and Logistic Management	Online	45	3
BUSS 583**	Project and Operation Management Seminar	Online	45	3
BUSS 584**	Administration of Service Operations	Online	45	3
BUSS 685**	Optimality of Project Financing	Online	45	3
BUSS 686**	Managing Multinational Operations	Online	45	3
BUSS 687**	Emerging Challenges in Business Optimization and Technologies	Online	45	3
BUSS 688**	Resource Optimizations Techniques	Online	45	3
BUSS 689**	Internship in Business Optimization	Online	45	3
BUSS 690**	Capstone in Business Optimization	On-ground	45	3
	Entrepreneurship Specialization			
BUSS 518**	Merger and Acquisitions	Online	45	3
BUSS 519**	Venture Capital	Online	45	3
BUSS 565**	Social Media Marketing	Online	45	3
BUSS 566**	New Venture Management	Online	45	3
BUSS 571**	Introduction to New Ventures	Online	45	3
BUSS 572**	Venture Initiation	Online	45	3
BUSS 573**	Case in Feasibility Analysis	Online	45	3
BUSS 585**	International Strategy	Online	45	3
BUSS 599	Contemporary Issues in Entrepreneurship	Online	45	3
BUSS 667**	Technology Commercialization	Online	45	3
BUSS 668**	Entrepreneurship in Innovative Industries	Online	45	3
BUSS 669**	Entrepreneurship eCommerce	Online	45	3
BUSS 671**	Corporate Entrepreneurship	Online	45	3
BUSS 673**	Social Entrepreneurship	Online	45	3
BUSS 676**	Internship in Entrepreneurship	Online	45	3
BUSS 691**	Capstone in Entrepreneurship	On-ground	45	3

MASTER OF SCIENCE IN INTERNATIONAL RELATIONS				
FUNDAMENTAL COURSES: 6				
SPECIALIZATION COURSES: 4				
ELECTIVE COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
GOVT 121	World Governments	Online	45	3
STAT 200	Introduction to Statistics	Online	45	3
ENGL 120	Academic Writing	Online	45	3
	Fundamental Courses			
GOVT 505 or CMP 551	Research Methods	Online	45	3
GOVT 510	Theories of International Relations	Online	45	3
GOVT 520	International Security	Online	45	3
GOVT 618	International Economics & Trade	Online	45	3
GOVT 632	Comparative Politics	Online	45	3
GOVT 711	Globalization	Online	45	3

	International Economic Development Specialization			
GOVT 530	Democratization	Online	45	3
GOVT 633	Politics of Development Aid	Online	45	3
GOVT 650	Policy Making in a Global Context	Online	45	3
GOVT 651	International Economics & Politics	Online	45	3
GOVT 652	International Industrial Development Strategies	Online	45	3
GOVT 790	Advanced Research Project	On-ground	45	3
	International Business Specialization			
GOVT 612	International Management	Online	45	3
GOVT 613	Enterprise Resource Planning	Online	45	3
GOVT 614 or MBA 614	International Finance	Online	45	3
GOVT 615	International Strategy	Online	45	3
GOVT 616	International Marketing	Online	45	3
GOVT 617	Import & Export Management	Online	45	3
GOVT 634	Operations Management	Online	45	3
GOVT 790	Advanced Research Project	On-ground	45	3
	Elective Courses			
GOVT 540	International Law	Online	45	3
GOVT 551	Conflict Resolution	Online	45	3
GOVT 625	Effective Negotiations	Online	45	3
GOVT 631	Intercultural Communication	Online	45	3
GOVT 635	Intelligence & Foreign Policy	Online	45	3
GOVT 665	Graduate Internship I	Online	45	3
GOVT 666	Graduate Internship II	Online	45	3
GOVT 713	Fundamentals of US Economic Policy	Online	45	3
GOVT 745	Topics in International Relations	Online	45	3
CAR 600	Career Planning Management	Online	45	3

MASTER OF PUBLIC ADMINISTRATION				
FUNDAMENTAL COURSES: 6				
SPECIALIZATION COURSES: 4				
ELECTIVE COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
BUSS 301 Or BUSS 312	Principles of Management Organizational Theory & HR Management	Online	45	3
ECON 101 Or ECON 102	Principles of Microeconomics Principles of Macroeconomics	Online	45	3
ENGL 120	Academic Writing	Online	45	3
	Fundamental Courses			
PUAD 505 or CMP 551	Research Methods	Online	45	3
PUAD 513 or MBA 513	Organizational Theory & HR Management	Online	45	3

PUAD 514	Public Policy Analysis & Implementation	Online	45	3
PUAD 515	Administration in Public & Non-Profit Organizations	Online	45	3
PUAD 608 or MBA 608	Financial Reporting & Decision Making	Online	45	3
PUAD 611 or MBA 611	Business Ethics & Law	Online	45	3
	Public Management Specialization			
PUAD 512 or MBA 512	Project & Cost Management	Online	45	3
PUAD 536	Labor Relations	Online	45	3
PUAD 612	International Management	Online	45	3
PUAD 613	Enterprise Resource Planning	Online	45	3
PUAD 614	Emergency Planning & Preparedness	Online	45	3
CAR 600	Career Planning & Management	Online	45	3
PUAD 790	Advanced Research Project	On-ground	45	3
	Information Systems Specialization			
PUAD 552 or CMP 552	Information Systems	Online	45	3
PUAD 556 or CMP 556	Database Management Systems I	Online	45	3
PUAD 610 or CMP 610	Managing Information System Development	Online	45	3
PUAD 620 or CMP 620	IT Governance	Online	45	3
PUAD 628 or CMP 628	Global Sourcing & Logistics	Online	45	3
CAR 600	Career Planning & Management	Online	45	3
PUAD 790	Advanced Research Project	On-ground	45	3
	Healthcare Administration & Public Health Specialization			
PUAD 640	The Health Services System	Online	45	3
PUAD 641	Economics of Healthcare & Policy	Online	45	3
PUAD 642	Financial Management of Healthcare Institutions	Online	45	3
PUAD 643	Legal Aspects of Healthcare	Online	45	3
CAR 600	Career Planning & Management	Online	45	3
PUAD 790	Advanced Research Project	On-ground	45	3
	Elective Courses			
PUAD 511 or MBA 511	Managerial Accounting & Finance	Online	45	3
PUAD 520 or GOVT 520	International Security	Online	45	3
PUAD 538	Compensation & Benefits	Online	45	3
PUAD 551	Conflict Resolution	Online	45	3
PUAD 557	Political Theory	Online	45	3
PUAD 558 or CMP 558	Network and Information Security	Online	45	3
PUAD 615	Special Topics in Public Administration	Online	45	3
PUAD 625	Effective Negotiations	Online	45	3
PUAD 630	Public & Private Partnerships	Online	45	3
PUAD 634	Operations Management	Online	45	3
PUAD 665	Graduate Internship I	Online	45	3

PUAD 666	Graduate Internship II	Online	45	3
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MASTER OF SCIENCE IN COMPUTER SCIENCE FUNDAMENTAL COURSES: 5 SPECIALIZATION COURSES: 5 ELECTIVE COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
CMP 220	Programming II	Online	45	3
CMP 260	Introduction to Operating Systems	Online	45	3
CMP 270	Essentials of Networking	Online	45	3
CMP 330	Data Structures and Algorithm Analysis	Online	45	3
CMP 350	Database Concepts	Online	45	3
	Fundamental Courses			
CMP 511	Computer Architecture and Implementation	Online	45	3
CMP 556	Database Management Systems I	Online	45	3
CMP 560	Software Engineering	Online	45	3
CMP 561	Design and Analysis of Algorithms	Online	45	3
CMP 641	Operating Systems	On-ground	45	3
	Computer Animation and Gaming Specialization			
CMP 582	Computer Graphics	Online	45	3
CMP 583	Computer Animation	Online	45	3
CMP 584	Human-Computer Interface Design	Online	45	3
CMP 585*	Design of Interactive Multimedia	Online	45	3
CMP 586*	Computer Vision	Online	45	3
CMP 587*	Game Design and Programming	Online	45	3
CMP 588*	Special Topics Computer Animation and Gaming	Online	45	3
	Cybersecurity Specialization			
CMP 558	Network and Information Security	Online	45	3
CMP 562	Computer Networks	Online	45	3
CMP 630*	Network Security Audit and Forensics	Online	45	3
CMP 643*	Database Security and Data Protection	Online	45	3
CMP 644	Intrusion Detection and Prevention Systems	Online	45	3
CMP 645*	Security Management	Online	45	3
CMP 647*	Wireless and Mobile Security	Online	45	3
CMP 648*	Special Topics in Cybersecurity	Online	45	3
	Data Management Specialization			
CMP 622	Database Management Systems II	Online	45	3
CMP 624	Data Warehousing	Online	45	3
CMP 625	Text Analytics	Online	45	3
CMP 626	Distributed Databases	Online	45	3
CMP 627*	Data Mining	Online	45	3
CMP 628*	Special topics in Data Management	Online	45	3
CMP 643*	Database Security and Data Protection	Online	45	3
	Intelligent Systems Specialization			
CMP 621	Artificial Intelligence	Online	45	3

CMP 652	Natural Language Processing	Online	45	3
CMP 653	Machine Learning	Online	45	3
CMP 654*	Adaptive Learning Systems	Online	45	3
CMP 655*	Intelligent Agents	Online	45	3
CMP 658*	Special Topics Intelligent Systems	Online	45	3
	Networking Specialization			
CMP 558	Network and Information Security	Online	45	3
CMP 562	Computer Networks	Online	45	3
CMP 602	Network Design and Implementation	Online	45	3
CMP 603*	Network Management	Online	45	3
CMP 604*	Cloud Computing	Online	45	3
CMP 608*	Special Topics Networking	Online	45	3
CMP 647*	Wireless and Mobile Security	Online	45	3
CMP 665*	Virtualization Technologies	Online	45	3
	Software Applications Development Specialization			
CMP 573	Compiler Construction	Online	45	3
CMP 632	Requirements Engineering	Online	45	3
CMP 636	Trends in Software Applications Development	Online	45	3
CMP 650*	Software Design and Construction	Online	45	3
CMP 661*	Software Testing	Online	45	3
CMP 663*	Web Applications Development	Online	45	3
CMP 664*	Mobile Applications Design & Development	Online	45	3
CMP 618*	Special Topics in Software Applications Development	Online	45	3
	Software Engineering Specialization			
CMP 632	Requirements Engineering	Online	45	3
CMP 635*	Software Quality and Process Improvement	Online	45	3
CMP 637	Software Engineering Management	Online	45	3
CMP 650*	Software Design and Construction	Online	45	3
CMP 661*	Software Testing	Online	45	3
CMP 662*	Software Maintenance & Configuration Management	Online	45	3
CMP 673*	Special Topics in Software Engineering	Online	45	3
	Elective Courses			
CMP xxx	Elective from any specialization	Online	45	3
CMP 551	Research Methods	Online	45	3
CMP 589	Computer Animation and Gaming Capstone Project	Online	45	3
CMP 609	Networking Capstone Project	Online	45	3
CMP 619	Software Applications Development Capstone Project	Online	45	3
CMP 629	Data Management Capstone Project	Online	45	3
CMP 639	Software Engineering Capstone Project	Online	45	3
CMP 649	Cybersecurity Capstone Project	Online	45	3
CMP 659	Intelligent Systems Capstone Project	Online	45	3
CMP 591	Graduate Internship Level I	Online	45	3
CMP 691	Graduate Internship Level II	Online	45	3
CMP 696	Independent Study I	Online	45	3
CMP 697	Independent Study II	Online	45	3
CMP 698	Master's Thesis I	Online	45	3
CMP 699	Master's Thesis II	Online	45	3
CAR 600	Career Planning & Management	Online	45	3

MASTER OF SCIENCE IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING				
FUNDAMENTAL COURSES: 4				
SPECIALIZATION COURSES: 6				
CAREER APPLICATION COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			
COMP 109	Computer Algorithm and Programming Logic Using Python	Online	45	3
COMP 260	Introduction to Operating Systems	Online	45	3
COMP 270	Essentials of Networking	Online	45	3
COMP 329	Data Structures and Algorithm Analysis	Online	45	3
COMP 350	Database Concepts	Online	45	3
	Fundamental Courses			
COMP 501	Advanced Operating Systems	Online	45	3
COMP 502	Design and Analysis of Algorithms	Online	45	3
COMP 503	Networking and Telecommunications	Online	45	3
COMP 504	Database Management Systems	Online	45	3
	Specializations Courses			
COMP 513	Robotics Design and Programming	Online	45	3
COMP 514	Neural Networks	Online	45	3
COMP 515	Pattern Recognition	Online	45	3
COMP 516	Deep Learning	Online	45	3
COMP 517	Special Topics in AI	Online	45	3
COMP 518	Special Topics in ML	Online	45	3
COMP 521	Smart Devices Design and applications	Online	45	3
COMP 522	Data Mining	Online	45	3
COMP 593	Internship I in AI and Machine Learning	Online	45	3
COMP 610	Cognitive Computing	Online	45	3
COMP 611	Data Warehousing	Online	45	3
COMP 613	Game Design	Online	45	3
COMP 614	Speech Recognition	Online	45	3
COMP 617	AWS Certified Machine Learning	Online	45	3
COMP 618	Google Machine Learning	Online	45	3
COMP 693	Internship II in AI and Machine Learning	Online	45	3
	Career Application Courses			
COMP 505	Research Methods	On-ground	45	3
COMP 681 Or COMP 698	AI and ML Capstone Project Master Thesis	Online	45	3

MASTER OF SCIENCE IN DATA ANALYTICS				
FUNDAMENTAL COURSES: 4				
SPECIALIZATION COURSES: 6				
CAREER APPLICATION COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE	TOTAL ONLINE

			CONTACT HOURS	CREDIT HOURS
	Prerequisite Courses			
COMP 109	Computer Algorithm and Programming Logic Using Python	Online	45	3
COMP 260	Introduction to Operating Systems	Online	45	3
COMP 270	Essentials of Networking	Online	45	3
COMP 329	Data Structures and Algorithm Analysis	Online	45	3
COMP 350	Database Concepts	Online	45	3
	Fundamental Courses			
COMP 501	Advanced Operating Systems	Online	45	3
COMP 502	Design and Analysis of Algorithms	Online	45	3
COMP 503	Networking and Telecommunications	Online	45	3
COMP 504	Database Management Systems	Online	45	3
	Specializations Courses			
COMP 523	Big Data Principles	Online	45	3
COMP 524	Metadata Applications in Complex Big Data Problems	Online	45	3
COMP 525	Role of Analytics in Decision-making	Online	45	3
COMP 528	Data Analytics Foundation	Online	45	3
COMP 529	Information Fusion	Online	45	3
COMP 531	Algorithms for Data Analytics	Online	45	3
COMP 542	Numerical Analysis	Online	45	3
COMP 543	Data-Intensive Distributed Computing	Online	45	3
COMP 544	Special Topics in Data Science	Online	45	3
COMP 596	Internship I in Data Analysis	Online	45	3
COMP 626	Web Analytics	Online	45	3
COMP 627	Descriptive and Predictive Analytical Tools	Online	45	3
COMP 628	Special Topics in Data Analytics	Online	45	3
COMP 629	Privacy and Security in Big Data	Online	45	3
COMP 630	Text Analytics	Online	45	3
COMP 631	Cloudera Certified Associate (CCA) Data Analyst	Online	45	3
COMP 632	Microsoft Certified Azure Data Scientist Associate	Online	45	3
COMP 696	Internship II in Data Analysis	Online	45	3
	Career Application Courses			
COMP 505	Research Methods	On-ground	45	3
COMP 682 Or COMP 698	Data Analytics Capstone Project Master Thesis	Online	45	3

MASTER OF SCIENCE IN NETWORKING AND CYBERSECURITY				
FUNDAMENTAL COURSES: 4				
SPECIALIZATION COURSES: 6				
CAREER APPLICATION COURSES: 2				
COURSE NUMBER	COURSE NAME	DELIVERY METHOD	TOTAL ONLINE CONTACT HOURS	TOTAL ONLINE CREDIT HOURS
	Prerequisite Courses			

COMP 109	Computer Algorithm and Programming Logic Using Python	Online	45	3
COMP 260	Introduction to Operating Systems	Online	45	3
COMP 270	Essentials of Networking	Online	45	3
COMP 329	Data Structures and Algorithm Analysis	Online	45	3
COMP 350	Database Concepts	Online	45	3
	Fundamental Courses			
COMP 501	Advanced Operating Systems	Online	45	3
COMP 502	Design and Analysis of Algorithms	Online	45	3
COMP 503	Networking and Telecommunications	Online	45	3
COMP 504	Database Management Systems	Online	45	3
	Specializations Courses			
COMP 510	Intrusion Detection and Prevention Systems	Online	45	3
COMP 511	Cloud Security	Online	45	3
COMP 512	Special Topics in Networking	Online	45	3
COMP 519	Special Topics in Cybersecurity	Online	45	3
COMP 520	Digital Forensics	Online	45	3
COMP 527	Distributed Operating Systems	Online	45	3
COMP 532	Operating System Security	Online	45	3
COMP 533	IoT and Smart Cities Security	Online	45	3
COMP 534	Information Risk Management	Online	45	3
COMP 591	Internship I in Networking and Cybersecurity	Online	45	3
COMP 620	Wireless Network Security	Online	45	3
COMP 621	Data Security and Protection	Online	45	3
COMP 622	Principles of GIS	Online	45	3
COMP 623	Cisco Certified Network Professional (CCNP)	Online	45	3
COMP 625	Certified Information Systems Security Professional (CISSP)	Online	45	3
COMP 629	Privacy and Security in Big Data	Online	45	3
COMP 691	Internship II in Networking and Cybersecurity	Online	45	3
	Career Application Courses			
COMP 505	Research Methods	On-ground	45	3
COMP 682 Or COMP 698	Networking and Cybersecurity Capstone Project Master Thesis	Online	45	3

* Internship qualified course

** CPT Qualified Course

Important Definitions

Distance Education or Online course: “Distance Education or Distance Learning is a structured, educational situation in which the students and instructors are physically separated. Distance education supports regular and substantive interaction synchronously or asynchronously between instructor and learner, among learners, and between learners and learning resources through one or more interactive technologies,” (ACICS 2020).

Hybrid Course: ACICS defines a hybrid course as “one that mixes face-to-face, traditional classroom instruction with online instruction.” (ACICS, 2020)

Hybrid Program: ACICS defines a hybrid program as a program that “offers or requires a percentage of the required courses in a program [to be] online.” (ACICS, 2020)

Academic Calendar

The academic calendar is the same for both on-ground and online courses. The Academic Calendar is subject to change without prior notice. The latest version of the calendar is available on the university's website.

Admission Requirements

The admissions requirements are the same for both on-ground and online courses. Applicants for online programs are not required to take any additional admissions tests or submit any additional documentation.

Online Student Orientation

The online orientation for new students consists of a virtual orientation on FXUA and its services.

New Student Online Orientation

Once accepted, we provide students with a virtual orientation to the academic services offered at the university from. This includes an overview of the following:

- Technology requirements for students
- Introduction to the FXUA email, the Student Portal, and to the learning management system Canvas
- An introduction to the University library and its resources
- An introduction to other departments on campus including their functions, why students might contact them, and information on who to contact (Accounting/Finance, Financial Aid, Admissions, University Library, the WRMC)
- A one-on-one advising session with their advisor

Student Technology Resources

Students studying in a distance education format have access to all common systems and resources that residential students do. This includes the same level of support and assistance. The following are common and important technology resources used by all students at the university:

FXUA Official Email: office.com

- All students and faculty are provided an @fxua.edu email. All university correspondence and notifications are sent via university email, therefore it is required that all students and faculty use it. Everyone is expected to log into their university email regularly. No university communication (communications about classes or academic administrative matters should occur student-to-student, faculty-to-student, faculty-to-faculty, student-to-staff, etc.) should occur via personal email. The university's official email leverages Microsoft application. Tutorials on how to install and use these resources can be found here: <https://it.fxua.edu/students/office-365>.

Student Portal: <https://portal.viu.edu/student/login.asp>

- The student portal is a centralized location for accessing and managing students' personal information. In the portal students will be able to access university announcements, grades, class schedules, electronic bills, and much more. In addition, the portal is place for students to be able to update their personal details including any changes to their address or phone number. While

our learning management system includes a gradebook, the Canvas gradebook is an unofficial grade. Please refer to the Student portal for your official grades for the course

Canvas: canvas.viu.edu

- All courses have a course resource page through the learning management system (LMS), Canvas. Courses can be accessed at <http://canvas.fxua.edu>. The LMS is a place where faculty will conduct synchronous lectures, provide resources to students for their classes as well as accept electronically submitted homework. Therefore, students are expected to log in and use the LMS to access their course resource pages. Students can access their current semester's course(s) under "My Courses". On the course's resource page, students can access resources, submit assignments, participate in discussion forums, etc. Students will have access to their previous course pages as long as they are actively enrolled in courses.

Lockdown Browser & Respondus Monitor: <https://web.respondus.com/he/lockdownbrowser/>

- Students will complete their exams through LockDown Brower and Respondus Monitor applications. These applications help control the testing environment while they are taking online exams.

Student Technical Requirements

System Requirements

All users must have access to a high-speed internet, a personal computer that is up-to-date and maintained, as well as a microphone, speaker (or earphones), and a webcam. These items can be either built-in or external.

For PC Users:

- A modem or other device capable of connecting to the Internet. A high-speed connection is strongly recommended.
- Processor: 2GHz processor (Dual Core processor strongly recommended)
- Operating System: Windows 8.1 or newer with current updates installed
- Memory: 4 Gigabytes RAM Memory or higher
- Hard drive: 500 Gigabytes or higher
- Speaker (built-in or external)
- Microphone (built-in or external)

For Mac Users:

- A modem or other device capable of connecting to the Internet. A high-speed connection is strongly recommended.
- Processor: Intel I3/equivalent or better
- Operating System: MAC OS X 10.6 (Snow Leopard) or newer
- Memory: 4 Gigabytes RAM Memory or higher
- Hard drive: 500 Gigabytes or higher
- Speaker (built-in or external)
- Microphone (built-in or external)

Tablets and Smart Phones: Although Canvas works on most tablets and smart phones, some features may not work properly on these devices. We recommend using a PC or Mac as your primary means of access to Canvas.

For recent updates, you should always check: <https://community.canvaslms.com/docs/DOC-14263-what-are-the-computer-specifications-for-canvas-studio>

Recommended Hardware

Cameras

- Logitech QuickCam Sphere AF
- Logitech QuickCam E3500
- Samsung Pleomax PWC-7100
- Genius Look320S
- Integrated Lenovo 3000 n100
- Skypemate WC-103M
- Logitech 720p Webcam C510

Headsets

- Logitech Clear Chat Style
- ClearChat PC Wireless
- Logitech H330 USB Microphone

Recommended Software

FXUA recommends the following applications and to maintain them within working conditions:

- Current virus detection software that must be installed and kept up to date
- To view and create resources for Canvas, the use of [Microsoft Office 365 and](#) its applications are encouraged.
- [Java](#)
- [Adobe Acrobat Reader/Microsoft Edge](#) to open and save PDF files
- [Adobe Flash Player](#)
- [Screencast-O-Matic](#)
- [Windows Movie Maker](#) (for PC users)
- [VLC Media Player](#)
- [Quick Time Player](#) (for MAC users with 10.6 or higher)

Browser Requirements

The latest version of the following browsers can work with Canvas:

- Chrome 79 and 80
- Firefox 73 and 74 (Extended Releases are not supported*)
- Edge 79 and 80
- Respondus Lockdown Browser (supporting the latest system requirements)
- Safari 12 and 13 (Macintosh only)

For recent updates, you should always check: <https://community.canvaslms.com/docs/DOC-10720-which-browsers-does-canvas-support>

For several reasons, Chrome and Firefox run Canvas optimally, but most of the functions should work on any of the browsers. If you encounter any problems accessing resources, consider use of Chrome or Firefox browsers. Other browsers may be used, but may not support all functionalities of the LMS. All browsers should have JavaScript, Cookies and Pop-ups enabled.

The following browser settings required for smooth operation of Canvas:

- Enable cookies

- Enable Javascript (Javascript and Java are not the same, Canvas does not require Java) Please use the latest versions of above mentioned browsers, and keep the browser up to date.

Verification of Student Identification

FXUA has established and will periodically evaluate its process to ensure that a student who has enrolled in distance education courses/programs to verify that the student is the same person who participates in online class discussions, completes all required coursework, including quizzes, tests and exams, and receives the academic credit.

To authenticate online student identification, FXUA

- Uses a unique and secure login and pass code to verify the identity of students who participate in online programs. This username and password is unique to the student and, following the university's policies, is not to be shared with anyone other than the student. When students sign their enrollment agreement, they are agreeing to the university's policies and procedures, one of which is defined in the IT Security Policies.
- Uses a secure web form to reset LMS user passwords. When LMS username and/or password is forgotten, users will be directed to an online form where they enter their VIU provided email address to receive a new password to regain access to the LMS. Account password will not be sent to the user by using any other means.
- Uses secure emails. In case student is also having trouble accessing to the university- provided email account, student will be required to reset the email account password either in person on campus by providing photo ID, or scheduling a virtual meeting with someone from IT via video conferencing in which the student would be required to present a photo ID to reset email password. During this session, students will be asked at least two personal and/or demographic questions such as date of birth, Social Security Number, birth city, current address in file to verify identification.
- Staff communicate all user account related messages through the university-provided student email accounts.
- Uses secure connection to connect to the Learning Management System (LMS) to protect the security of user credentials.

Guidelines for Accounts and Passwords

Students, staff, and faculty are forbidden from sharing their usernames and passwords with anyone. Users are responsible for all activity involving their user accounts. User accounts should be kept secure and private. Users should not use identifying data or common words as passwords. Passwords should be difficult to crack or otherwise guess by individuals or by sophisticated computer programs. It is recommended that users change passwords for all user accounts every 120 days in order to secure access to accounts. Users are strictly prohibited from revealing passwords or otherwise permitting the use by others (by intent or negligence) of personal accounts for computer and network access.

Online Tuition, Fees, and Course Cancellation and Refund Policy

Online courses have the same tuition and fees as residential students. The university establishes its tuition and fees in the Financial Information section of the academic catalog. Tuition does not include the cost of textbooks and other course related materials.

FXUA's Cancellation and Refund Policy establishes the refund schedule for all students. Students can cancel their initial enrollment and provides all requirements for refunds and cancellations.

Course Descriptions

Course descriptions are the same for on-ground and online courses. They are listed in the Academic Catalog.