



Bachelor of Science in Information Technology - Cybersecurity Concentration

STUDENT DATA:

NAME: Jonathan Sample

ID: SYS-312679580

*****Program Description*****

The purpose of the School of Computer and Information Sciences is to provide instructional programs that focus on the computer and information sciences and prepare individuals for various occupations in information technology and computer operations fields

General Education

	Credit Required	Potential Credit
University Orientation (OREN 120)	2.00	0
<p>This course will help students gain the skills necessary to excel in UCs online learning environment. The course introduces the tools necessary to effectively navigate an online classroom, highlights campus support resources, and reviews key university policies and procedures related to enrollment at the University of the Cumberlands. This course must be completed during the first semester of enrollment.</p>		
	Credit Required	Potential Credit
English Composition I (ENGL 131)	3.00	3.00
<p>This course provides students with the opportunity to study the basic principles of English composition. These fundamentals help students develop their reading skills, expand their vocabularies, understand and evaluate the various organizational and rhetorical strategies used in expository writing, and practice these strategies in their own writings. (NOTE: College credit for credit-by-examination may apply.)</p>		

ENGL 101 Introduction to Writing	University of Maryland University College	LL	3.00
		Credit Required	Potential Credit
English Composition II (ENGL 132)		3.00	3.00
English 132 students are encouraged to master further the reading and writing skills taught in English 131. This course emphasizes objective and critical thinking in response to various literary genres. Class activities and student writing will foster and demonstrate analytical, research, and documentation skills. Prerequisite: ENGL 131. (NOTE: College credit for credit-by-examination may apply.)			
ENGL 102 Composition and Literature	University of Maryland University College	LL	3.00
		Credit Required	Potential Credit
Exploring the Old Testament -OR- Exploring the New Testament		3.00	0
Exploring the Old Testament (MSMN 135): An exploration of Old Testament literature, history, and faith to help students understand the Old Testament and develop and apply Christian values in contemporary life.			
-OR-			
Exploring the New Testament (MSMN 136): An exploration of New Testament literature, history, and faith to help students understand the teachings of Jesus and the early church and develop and apply Christian values in contemporary life.			
		Credit Required	Potential Credit
Christian Faith Course Requirement		3.00	0
Students must select an additional 3 semester hours (1 course) from the following:			
MSMN 133 Church History			
MSMN 135 Exploring the Old Testament			
MSMN 136 Exploring the New Testament			
MSMN 233 Introducing Christian Ethics			
MSMN 239 Exploring World Religions			
_____ Integrated Studies Course			
Please visit the website for a description of each course. (NOTE: College credit for credit-by-examination may apply.)			
		Credit Required	Potential Credit
Mathematics Requirement		3.00	3.00
Students must select one of the following Mathematics courses:			
MATH 131 College Mathematics			
MATH 132 College Algebra			
MATH 136 Precalculus			

MATH 140 Calculus I
MATH 240 Calculus II

_____ Integrated Studies Course

Or both of the following courses:

MATH 130 Concepts of Math for the Elementary and Middle School
Teacher I

MATH 230 Concepts of Math for the Elementary and Middle School
Teacher II

Please visit the undergraduate catalog for a description of each
course. (NOTE: College credit for credit-by-examination may
apply.)

MATH 107 College Algebra	University of Maryland University College	LL	3.00
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Credit Required	Potential Credit
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Science with Lab Requirement

4.00	0
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Students must select one of the following Natural or Physical
Science courses along with the Lab:

BIOL 130 General Biology and BIOL 110 General Biology Lab

BIOL 133 Intro to Population Biology and BIOL 113 Population
Biology Lab

BIOL 134 Introduction to Cellular Biology and BIOL 114 Cell
Biology Lab

BIOL 231 Environmental Science and BIOL 116 Environmental Science
Lab

CHEM 131 Intro to General Chemistry and CHEM 110 General
Chemistry Lab

CHEM 132 General Chemistry I and CHEM 111 General Chemistry Lab I

CHEM 140 Chemistry of Everyday Life

PHYS 137 Physical Science and PHYS 117 Physical Science
Laboratory

PHYS 140 Astronomy

PHYS 241 Physics I

_____ Integrated Studies Course

Please visit the undergraduate catalog for a description of each
course.

Credit Required	Potential Credit
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Historical Understanding Requirement

3.00	3.00
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Students must select one of the following History courses:

HIST 138 World Civilization since 1648

HIST 231 American History to 1877

_____ Integrated Studies Course

Please visit the undergraduate catalog for a description of each
course. (NOTE: College credit for credit-by-examination may
apply.)

HIST 156 History of the United States to 1865	University of Maryland University College	LL	3.00
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Credit Required	Potential Credit
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Culture Understanding Requirement	3.00	3.00
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Students must select one of the following Cultural Understanding courses:

- BADM 135 Macroeconomics
- BADM 136 Microeconomics
- FREN 135 French Popular Culture
- SPAN 135 Hispanic Popular Culture
- POLS 131 Introduction to Political Science
- POLS 233 American National Government
- POLS 235 Introduction to International Relations
- PSYC 131 Basic Psychology
- _____ Integrated Studies Course

Please visit the undergraduate catalog for a description of each course. (NOTE: College credit for credit-by-examination may apply.)

TA014 GENERAL PSYCHOLOGY	Clep Subject	LL	3.00
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Credit Required	Potential Credit
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Aesthetic Appreciation Requirement	6.00	3.00
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Students must select two of the following Aesthetic Appreciation courses representing two departments:

- ART 131 Art Appreciation
- ART 132 Ancient To Gothic Art
- ART 133 Renaissance to Modern Art
- ART 134 Drawing I
- ENGL 330 Literary Studies
- ENGL 331 English Literature through 1660
- ENGL 332 English Literature 1660-1830
- ENGL 333 English Literature since 1830
- ENGL 334 American Literature through 1865
- ENGL 335 American Literature since 1865
- MUPR 108-112, 114-116, 119 Music Ensemble or Band
- MUSC 130 Music Appreciation
- THTR 130 Introduction to Theatre
- _____ Integrated Studies Course

Please visit the undergraduate catalog for a description of each course. (NOTE: College credit for credit-by-examination may apply.)

DANT-0018 Ethics in America	DSST	UL	3.00
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Credit Required	Potential Credit
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Social and Professional Awareness Requirement	6.00	6.00
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Students must select two of the following Social and Professional Awareness courses representing two departments:

- BMIS 130 Introduction to Application Software
- COMM 130 Introduction to Interpersonal Comm
- 131 Introduction to Mass Media
- 230 Introduction to Public Speaking
- JOUR 130 Introduction to Journalism & Public Relations
- HLTH 236 Health and Wellness
- SOCI 131 Introduction to Sociology
- CRJS 131 Introduction to Criminal Justice
- HSRV 131 Survey of Human Services

_____ Integrated Studies Course

Please visit the undergraduate catalog for a description of each course. (NOTE: College credit for credit-by-examination may apply.)

CMIS 270 Intro Computer Systems and Architecture	University of Maryland University College	LL	3.00
Computer systems and applications	AR-1402-0168	LL	3.00

Information Technology Major Requirements

	Credit Required	Potential Credit
Application Software (ITSS 130)	3.00	0

A general introduction to popular application software packages used in industry and academia. The course will include applications software for word processing, spreadsheets, database management and presentation management, and an introduction to the operating environment. The course is hands-on in nature with in-class labs conducted weekly.

	Credit Required	Potential Credit
Introduction to Object Oriented Programming (ITSS 131)	3.00	0

An introduction to object oriented programming. The course will include lecture sessions covering concepts of programming, out-of-class programming, and homework assignments. The assignments will use the computer as a tool to solve mathematical and business problems. Topics will include sequential, selective and repetitive structures, arrays, strings, file manipulation, pointers, dynamic memory allocation, and data structures.

	Credit Required	Potential Credit
Fundamentals of Databases (ITSS 230)	3.00	0

Emphasis on the concepts and structures necessary to design and implement a database management system. Topics covered will include data models, normalization, query facilities, file and index organization, security, and database programming.

	Credit Required	Potential Credit
Information Security and Assurance (ITSC 230)	3.00	3.00
<p>An introduction to network security, compliance, operation security, threats, vulnerabilities, application security, and host security. Other topics that will be discussed include access control, identity management, and cryptography.</p>		
Information security management	AR-1402-0168	LL 3.00
	Credit Required	Potential Credit
Hardware (ITSI 231)	3.00	0
<p>A general introduction to computer hardware including computer maintenance issues and an overview of computing components (microprocessor, system boards, storage devices). Students get hands on experience diagnosing computer problems and dealing with software and hardware installation issues.</p>		
	Credit Required	Potential Credit
Web Design (ITSS 232)	3.00	0
<p>Introduction to Web page design using a professional web development tool. Students learn the general syntax of the HTML language, links, anchors, images, frames, tables, and style sheets. Emphasis is on planning the design, validating work, effective visual alternatives, attracting and retaining visitors, proper use of font and color, and creation of professional graphics.</p>		
	Credit Required	Potential Credit
Networking (ITSI 331)	3.00	0
<p>An introduction to networking exploring theoretical hardware and software issues of networking. Students get hands on experience setting up network hardware, configuring network software, and exploring network topologies and technologies.</p>		
	Credit Required	Potential Credit
Server Administration (ITSI 336)	3.00	3.00
<p>An introduction to the installation and administration of network servers. Topics covered will include server installation and configuration, server roles, storage, Active Directory and Group Policy, file, print, and web services, remote access, virtualization, application servers, troubleshooting, performance, and reliability. Prerequisite ITSI 331.</p>		
Computer network fundamentals	AR-1402-0168	LL 3.00

	Credit Required	Potential Credit
Business Intelligence (ITSS 337)	3.00	0

An introduction to software solutions that enables an organization to gain insight into its critical operations through reporting applications and analysis tools. Students will learn how to integrate disparate data sources into a single coherent framework for real-time reporting and detailed analysis by anyone in the organization - customers, partners, employees, managers, and executives. Prerequisite ITSS 230.

	Credit Required	Potential Credit
Capstone I (ITSS 438)	3.00	0

Provides opportunity for students to integrate learning from throughout the Information Technology coursework. Students will do major practical or research projects requiring comprehension of complex literature. Meets the capstone course requirement in the major. Prerequisite Common Core and consent of the department chair.

Cybersecurity Concentration

	Credit Required	Potential Credit
Prevention and Protection Strategies in Cybersecurity (ITSC 330)	3.00	0

An in-depth study of the theories and practices for prevention of cyber-attacks. Countermeasures discussed include training, encryption, VPN's, policies, practices, access controls, secure systems development, software assurance arguments, verification and validation, firewall architectures, anti-virus, patching practices, personnel security practices, and physical security practices. Business continuity plans and disaster recovery plans (BCP, DRP) are also discussed. Strategies for large-scale prevention are also discussed, such as critical infrastructure protection, international collaboration, and law enforcement. Prerequisite ITSC 230.

	Credit Required	Potential Credit
Ethical Hacking (ITSC 331)	3.00	0

This course will immerse the students into an interactive environment where they will be shown how to scan, test, hack, and secure their own systems. The lab intensive environment gives each student in-depth knowledge and practical experience with the current essential security systems. Students will also learn about intrusion detection, policy creation, social engineering,

DDoS attacks, buffer overflows and virus creation. Prerequisite ITSC 230.

**Credit
Required** **Potential
Credit**

Database Administration (ITSS 332)

3.00

0

This course extends the topics introduced in ITS 230 to include basic Transact-SQL queries, Microsoft SQL Server maintenance, data warehouse creation, and data cleansing and validation. Prerequisite ITSS 230.

**Credit
Required** **Potential
Credit**

Information Security Management (ITSC 430)

3.00

0

Promotes international security practices and recognizes management, design, and oversight of enterprise information security. Topics include information security governance, risk management and compliance, program development and management, and incident management. Prerequisite ITSC 230.

**Credit
Required** **Potential
Credit**

Legal and Ethics (ITSC 431)

3.00

0

The course explores the impact of technology on society and the complex issue of ethics. The course surveys ethical theories and how they are applied to legal theories of computing. Students will deal with ethical and legal issues related to areas such as copyright, patents, trademarks, discrimination, privacy, information security, freedom of speech, freedom of expression, fairness, and artistic license in relation to the creation, access, and reproduction of materials appropriate for the Internet.

**Credit
Required** **Potential
Credit**

Capstone II: Cybersecurity (ITSC 439)

3.00

0

This course requires the student to apply the research conducted in ITSS 438 and ITSC related coursework. This course is required for students pursuing a cybersecurity area in ITS and it is an elective for majors. Prerequisite ITSS 438 and consent of department chair.

**Credit
Required** **Potential
Credit**

Major-Related Electives

6.00

3.00

Students must complete an additional 6 semester credit hours (approximately 2 courses). Please visit the website for a complete listing of currently available courses. (NOTE: College credit for credit-by-examination may apply.)

Computer operating systems	AR-1402-0168	LL	3.00
		Credit Required	Potential Credit
Electives		35.00	13.00

Students complete enough credits to fulfill the 128 semester credit hour requirement for achieving the Bachelor's degree from the University of the Cumberlands. Please visit the undergraduate catalog for a list of available courses. (NOTE: College credit for credit-by-examination may apply.)

Digital communications systems	AR-1402-0168	LL	3.00
PC Maintenance and Repair	AR-1402-0168	LL	3.00
First aid	AR-2201-0399	LL	1.00
Marksmanship	AR-2201-0399	LL	1.00
Military science	AR-2201-0399	LL	2.00
Physical conditioning	AR-2201-0399	LL	2.00
Security management	NATL-IRS-5052	UL	1.00

Excess or Duplicate Credit

The application of all credit, including any excess or duplicate credit remains at the discretion of the Admissions Department at the University of the Cumberlands.

TOTAL	128.00	46.00
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Thank you for using Degree Quest, the state-of-the-art degree exploration system that digitally connects you to hundreds of colleges and universities offering thousands of degrees on campus or at a distance from Associate's degrees to Ph.D's. This document is an UNOFFICIAL Degree Plan to provide you with a preliminary projection of how your prior learning experiences may fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must have official transcripts sent to this institution on admission, after which they will make the final decision on your student status.

ACCEPTANCE OF CREDIT:

The acceptance of the transfer of credit is at the sole discretion of this institution. It is up to the pending academic review by the registrar to verify and validate the courses, the transferability of the courses, and the placement of the courses within the chosen degree plan.

ACCEPTANCE OF NON-TRADITIONAL CREDIT:

The acceptance of non-traditional credit is at the sole discretion of this institution. Non-traditional credit includes, but is not limited to: credit-by-examination, portfolio credit, and professional/military training.

Please consult with your academic advisor at this institution to ensure the transferability and applicability of all credit-by-examinations suggested in this degree plan. All students are advised to consult their academic advisors before taking any credit-by-examination or completing a portfolio.

This document is an UNOFFICIAL Degree Plan to provide you with a preliminary projection of how your prior learning experiences may fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must present it to a college representative, at this institution who will review it for the following:

- Accurate representation of the college's degree program requirements, including course numbers and titles, credit hours for each course, lower- and upper-level course requirements, and the total number of credits needed for the degree.
- Appropriate assignment of non-traditional credit at the lower or upper level for corporate professional training, military service schools and occupations, CLEP, DSST, and other tests, transfer credit for courses from other colleges and universities, certification programs, if applicable.

Credit for all courses you have taken must be reflected on official transcripts sent directly to this institution from the administrative offices of the colleges and universities you previously attended when you seek formal admission. This degree plan is typically used for information purposes by institution's counselors pending receipt of the official transcripts from the source colleges and universities.

DEGREE PLAN LEGEND:

SH = Semester hours (or QH = Quarter Hours)

LL = Lower Level, i.e. courses at the Freshman/Sophomore level

UL = Upper Level, i.e. courses at the Junior/Senior level

GL = Graduate Level (sometimes recommended by ACE for very complex courses)

SCHOOL NOTES:

University of the Cumberlands General Information:

In 1888, a group of Baptist Ministers founded a small college in Kentucky known as the Williamsburg Institute, for the purpose of preparing young adults for lives as servant leaders. In 1913, following the acquisition of Highland College, Cumberland College was born. The school became the University of the Cumberlands in 2005.

Undaunted by wars, economic depressions, social unrest and natural disasters, University of the Cumberlands has continuously served students primarily, but not exclusively, from the beautiful Appalachian mountain regions of Kentucky, Tennessee, West Virginia, Virginia, Georgia, North Carolina, South Carolina, Ohio and Alabama. Now, thanks to the welcome addition of online learning, the University's doors are open to students from all over the world.

The school's vision for providing higher education in an under served area caught the eye of men like John D. Rockefeller and Andrew Carnegie, both of whom supported the institution. Cumberlands has produced two governors, five military generals, an admiral, five college and university presidents, a Congressman, ministers, missionaries, legislators, judges and more.

Online Learning Experience:

Our accelerated eight-week bi-terms allow you to complete your education and obtain your degree in the shortest amount of time possible. Many of our degree programs can be

completed in as little as ten months, allowing you to quickly and efficiently advance your career or broaden your perspectives.

ACCREDITATION:

University of the Cumberlands is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate, baccalaureate, masters, education specialist and doctorate degrees. Initial accreditation date was 1964.

RANKINGS:

The University of the Cumberlands has earned the following rankings in 2016 from U.S. News and World Report:

- #87 Regional Universities (South)
- #61 Best Colleges for Veterans
- #164 Best Online Bachelor's Programs
- #131 Best Online MBA Programs
- #17 Best Online Graduate Criminal Justice Programs
- #95 Best Online Graduate Education Programs

TUITION & FEES:*

Online Tuition:

- Bachelor's Degree: \$199/credit hour
- MS Information Systems Security: \$300/credit hour
- MA in Professional Counseling: \$400/credit hour
- All Other Online Master's Degrees: \$315/credit hour
- PhD in Clinical Psychology: \$550/credit hour
- All Other Online Doctoral Degrees: \$375/credit hour

Online Fees (All Programs):

- Technology Fee: \$50 each term

Yellow-Ribbon:

This school is a Yellow-Ribbon Program-participating institution. Please contact the school directly for more detailed information.

*This is only a general listing of the tuition and fees, of which the University of the Cumberlands reserves the right to modify without prior notice. All costs listed are subject to change. To view a complete listing of the most recently posted tuition and fees schedule, please visit the website.

CONTACT INFORMATION:

University of the Cumberlands
Graduate & Online Admissions
6985 College Station Drive
Williamsburg, KY 40769

Phone: (606) 539-4390

Web: www.ucumberlands.edu

While we strive to provide only the most accurate information, all of the information in this degree plan should only be used as an unofficial, preliminary comparison tool. We cannot guarantee the accuracy of the information presented. Additional information—such as potentially unlisted rankings and accreditations, availability of courses, licensure requirements, etc.—may need to be researched by the customer for a complete comparison. All student are encouraged to speak with the schools directly for the most complete and accurate information.

DEGREE POLICY NOTES:

TRANSFER POLICIES:

General Transfer Policy Notes:

- o Credit earned at a Nationally Accredited institution may be accepted at the discretion of the Registrar
- o A grade of "D" is accepted in transfer for general elective credit only
- o Technology-related courses must be no more than 10 years old to be accepted in transfer
- o Education-related courses must be no more than 5 years old to be accepted in transfer
- o The maximum amount of transfer credit earned at a 2-year institution accepted is 62 semester hours.
- o Students may transfer no more than 15 semester credit hours earned from portfolio assessment(s).

Experiential Learning Credit:

Advanced Standing Credit Through Experiential Learning -University of the Cumberlands does not award credit for experiential learning.

Credit-by-Examination:

University of the Cumberlands participates in the College Level Examination Program (CLEP). A student may receive credit for selected courses through the Subject Examinations approved by the University. Information regarding Subject Examinations should be obtained from the CLEP Administrator. Cumberland also offers examinations in lieu of many courses numbered 100 and 200, not covered by the CLEP tests. For further information contact the Office of the Registrar

DEGREE REQUIREMENTS:

The general requirements for graduation from the University of the Cumberlands are:

- 1.) The completion of at least 128 semester hours, including 37 hours in the General Education curriculum.
- 2.) All courses taken in the major or an area of concentration must have a grade of "C" or higher.
- 3.) Grades of "D" in the minor are acceptable provided the average for all courses taken in the minor is 2.00 or better.
- 4.) A minimum of 36 semester hours numbered 300 or above are required for graduation.
- 5.) A candidate for graduation must have earned 30 of the last 36 hours in residence at University of the Cumberlands.
- 6.) At least twenty-five percent of the total semester hours in any degree requirement must be completed at University of the Cumberlands
- 7.) The criteria for selecting courses which may be used in the Restricted Elective area are as follows:
 - a. no course may be selected if that course can be used as a part of the student's major;
 - b. the courses must be at or above the 300 level;
 - c. no course may be used as part of the General Education Curriculum and as part of the Restricted Electives;
 - d. no more than two courses may be taken from any one department.
- 9.) Students must submit Planned Program prior to completing 79 hours.

This college is rated as one of the nation's best in U.S. News & World Report's "America's Best Colleges" issue.

COST SAVINGS:

This institution values non-traditional learning experiences and awards credit for college level examinations, military training and experiences, corporate and government training; thereby saving students a substantial amount of time and money. In fact, we project 31 hours of college credit for your non-traditional learning may be applied to this degree, thereby saving you 589 hours of classroom time, \$6,169.00 in tuition, and approximately \$1,023.00 in textbook and material costs.

FINANCIAL AID NOTE:

Financial Aid Note: You may want to consider seeking federal financial aid in the pursuit of this degree. To request grants or loans from the federal government, you should visit <http://www.fafsa.ed.gov> or call their toll-free number at 1-800-4FED-AID (1-800-433-3243) or 1-319-337-5665. If you are hearing-impaired and have questions, please contact the TTY line at 1-800-730-8913. When submitting the Free Application for Federal Student Aid (FAFSA), you will be asked for the federal school code for the college or university that you want to attend. The identification number for this institution is 001962. Note: You do not have to be a U.S. citizen to receive federal financial aid - some non-citizens with Social Security Numbers may also qualify. It is in the student's best interest to utilize federal grants first (if eligible), followed by federally subsidized loans (such as the Stafford Loan), then use unsubsidized loans if needed.

Evaluation completed by Tim Scoggins on 29 October 2016