Department of Business Information Technology
Bachelor of Science in Business in Business Information Technology
Major: **Cybersecurity Management and Analytics (CMA)**

APPROVED
COMMISSION ON
UNDERGRADUATE
STUDIES
AND POLICIES

For students entering under UG Catalog 2023-2024

YEAR ONE

FALL SEMESTER	✦	Credits		SPRING SEMESTER	✦	Credits
ACIS 1504: Introduction to Business Analytics & Business Intelligence[1,2]	M	3		ACIS 2115: Principles of Accounting[1,2]	M	3
MATH 1524: Business Calculus[1,2]	5f	4		ECON 2005: Principles of Economics[1,2]	3	3
MGT 1104: Foundations of Business[2]	M	3		*BIT 2405: Introduction to Business Statistics, Analytics, & Modeling[1,2]	5f	3
ENGL 1105: First-Year Writing or COMM 1015: Communication Skills	1f	3		*ENGL 1106: First-Year Writing or *COMM 1016: Communication Skills	1f	3
Critique & Practice in the Arts	6a	3		Critical Thinking in the Humanities	2	3
				BIT 2104: Careers in Business Information Technology	M	1
Total		16		Total		16

YEAR TWO

FALL SEMESTER	✦	Credits		SPRING SEMESTER	✦	Credits
*ACIS 2116: Principles of Accounting[1,2]	C	3		*#BIT/ACIS 3554: Networks, Telecommunications & Security	M	3
*ECON 2006: Principles of Economics[1,2]	3	3		*#BIT 3474: Data Management and Business Analytics in Python	M	3
*BIT 2406: Introduction to Business Statistics, Analytics, & Modeling[1,2]	5a	3		HTM or MGT 2314: Introduction to International Business[2]	C	3
CS 1064: Introduction to Programming in Python	M	3		Reasoning in the Natural Sciences	4	3
*#BIT 2554: Linux, Shell Scripting, and Securing the OS for Business	M	3		Critique & Practice in Design	6d	3
PSYC 1004: Introductory Psychology or SOC 1004: Introductory Sociology	M	3				
Total		18		Total		15

YEAR THREE

FALL SEMESTER	✦	Credits		SPRING SEMESTER	✦	Credits
Free Elective		3		*#BIT 4604: Data Governance, Privacy, & Ethics	M/2	3
*#BIT 4614: Information Security	M	3		*#BIT 3484: Advanced Business Analytics in Python and R	M	3
*#MKTG 3104: Marketing Management[2]	C	3		*#FIN 3054: Legal & Ethical Environment of Business[2]	C	3
*#BIT 3414: Operations & Supply Chain Management[2]	C	3		*#FIN 3104: Introduction to Finance[2]	C	3
Reasoning in the Natural Sciences	4	3		Free Elective		3
Total		15		Total		15

YEAR FOUR

FALL SEMESTER	✦	Credits		SPRING SEMESTER	✦	Credits
*#CMA Elective (see page 2)	M	3		#BIT 4964: Field Study	M	3
*#FIN 4014: Cyber Law & Policy	M	3		*#MGT 4394: Strategic Management[2]	C	3
*#BIT 4484: Project Management	M	3		Critical Analysis of Identity & Equity in the U.S.[3] or Free Elective	7	3
*#BIT 4624: Cybersecurity Analytics for Business	M	3		*#CMA Elective (see page 2)	M	3
*#MGT 3404: Principles of Management[2]	M	3		Advanced/Applied Discourse	1a	3
Total		15		Total		15

✦	C = Degree Core Required Course	M = Major Required Course

CMA ELECTIVES (choose two – 6 credit hours)
#ACIS 4684: Information Systems Security & Assurance
*#BIT 3514: Systems Analysis & Design
*#BIT 3524: Database Management & Design
*#BIT 4424: Business Information Visualization & Analytics
*#BIT 4544: Artificial Intelligence, Machine Learning, and Deep Learning for Business
*#BIT 5114: Crime & Conflict in Cyberspace
*#BIT 5134: Cybersecurity Program Design
*#CS 4264: Principles of Computer Security
*#MATH 4175: Cryptography

GENERAL INFORMATION
A total of **125 credit hours** is required for graduation. Any exceptions to this curriculum must be approved by the student's department head and Associate Dean for Pamplin Undergraduate Programs.
Foreign Language Requirement: Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six credit hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement may not count towards the minimum credit hours required for graduation. Please refer to the Undergraduate Catalog for details.
Pre-requisites: Students are responsible for ensuring they have met necessary pre-requisites for all courses. Courses with pre-requisites are noted with * (e.g. *BIT 2405). Please refer to the Undergraduate Catalog or academic advisor.
Transferring Courses: Requirements and procedures for transferring courses are available http://pampl.in/transfercreditsteps.
Overall and In-Major GPA: Students must have an overall GPA of 2.0 and an in-major GPA of 2.0 to graduate. Courses used to calculate the in-major GPA are noted with a # (e.g. #BIT 3424).
Policy 91: University policy requires a student to make satisfactory academic progress towards a degree in order to remain enrolled at the institution (see footnote 1). Students are responsible for reading and understanding Policy 91 in accordance with Pamplin policies http://pampl.in/policy91.

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[1] Policy 91: Pamplin students in a business degree program must complete eight business courses (ACIS 1504, MATH 1524, ACIS 2115-2116, BIT 2405-2406, and ECON 2005-2006) with a grade of C- or higher by 72 attempted credit hours (or 90 attempted credit hours for students with more than 18 transfer credits). Students who have not met the requirements will be notified upon reaching 72 (or 90) credit hours that they must complete the missing course(s) in the next term(s) of enrollment. Failure to do so may result in the student's dismissal from the business degree program. This policy is strictly enforced.

[2] Graduation requirement: Students must achieve a grade of C- or higher in select business courses (ACIS 1504, MATH 1524, ACIS 2115-2116, BIT 2405-2406, ECON 2005-2006, MGT 1104, HTM or MGT 2314, MGT 3404, MKTG 3104, FIN 3104, FIN 3054, BIT 3414, and MGT 4394).

[3] Critical Analysis of Identity & Equity in the U.S. may be double-counted with another course (major, option, pathway, or free elective) that is designated as pathway 7. If this pathway is already met, students must take a free elective to meet the 125-credit hour requirement.