

- Minimum 30 of the last 60 credits earned at PennWest.
- Minimum of 26 major credits must be completed at PennWest or a State System (PASSHE) university.
- Minimum Total of 42 Credits in Advanced Coursework.

General Education

Foundations: (15-18 Credits)

First Year Seminar (3 Credits)

- ☐ FYS 1000 Navigating the First Year at PennWest

Quantitative Reasoning (3 Credits)

- ☐ MATH 1510 Discrete Structures

Written Communication (3-6 Credits)

- ☐ ENGL 1100 Intro. to Comp. & ENGL 1200 College Comp.
☐ Or ENGL 1200 College Composition

Oral Communication (3 Credits)

- ☐ COMM 1010 Public Speaking

Technological Literacy (3 Credits)

- ☐ CMIS 1100 Introduction to Information Systems

Discoveries: (24-27 Credits)

Arts and Humanities (6 Credits)

- ☐ _____
☐ _____

Social Sciences (6 Credits)

- ☐ ECON 2100 Principles of Microeconomics
☐ Or ECON 2200 Principles of Macroeconomics
☐ _____

Natural Sciences and Technology (6 Credits)

- ☐ CMIS 1200 Application Programming I
☐ STAT 2020 Elements of Statistics
☐ Or QBA 2000 QBA 2: Statistical Analysis

Flex Discoveries (If DSP into ENGL 1200) (9 Credits)

- ☐ CMSC 2000 Introduction to Cybersecurity
☐ _____
☐ _____

Essential Skills:

Intensive Writing

- ☐ CMIS 4900 Senior Capstone I

Capstone

- ☐ CMIS 4920 Senior Capstone II

General Education Notes:

If Directed Self-Placement (DSP) includes ENGL 1100, the student will complete 6 courses in Foundations and 8 courses in Discoveries. If DSP into ENGL 1200, the student will complete 5 courses in Foundations and 9 courses in Discoveries. DSP into ENGL 1100 reduces the number of Gen Ed Flex courses to 6 vs. 9.

Program Requirements

Required Major Courses: (34 Credits)

- ☐ CMIS 2200 Application Programming II
☐ CMIS 3010 Structured System Documentation
☐ CMIS 3125 Systems Analysis and Design
☐ CMIS 3200 Database Application Programming
☐ CMIS 3250 CISCO CCNA 1
☐ CMIS 3500 Web Programming I
☐ CMIS 3600 Systems Project Management
☐ CMIS 4250 Application of Machine Learning and Deep Learning
☐ CMIS 4500 Web Programming II
☐ CMIS 4900 Senior Capstone I
☐ CMIS 4920 Senior Capstone II

Major Electives: (6 Credits) Select from the following:

****See note on 2nd page ****

CMIS 3260 CISCO CCNA II , CMIS 3270 CISCO CCNA III, CMIS 3340 COBOL, CMIS 3720 Decision Support System, CMIS 3990 Special Topics, CMIS 4720 ERP, CMIS 4950 CIS Internship, CMSC 3380 Python, CMSC 3740 Mobile Application Development, DSA 5100 Database Mgmt Systems & Data Warehousing, DSA 5200 Python Data Science, DSA 5300 Analytical Methods & Optimization, DSA 5400 Applied Data Mining, PSC 6000 Operating Systems, PSM 6450 Applied Cryptography, PSC 7350 Biometrics, PSC 7450 Cyber Risk Mgmt & Assess, PSC 7550 Wireless Network & Security

Required Related Electives: (12 Credits)

- ☐ MGMT 3000 - Principles of Management
☐ Choose one from any 2000-4000 level ACC or FINA
☐ Choose one from any 2000-4000 level BLAW, BSIN, or MKTG
☐ QBA 1000 QBA 1: Optimization

Free Electives: (26 Credits)

- ☐ _____
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

Suggested Four Year Course Sequence

Year 1

Fall Semester

CMIS 1100 Introduction to Information Systems
CMIS 1200 Application Programming I
ENGL 1200 College Composition
FYS 1000 Navigating the First Year at PennWest
STAT 2020 Elements of Statistics

Spring Semester

Arts and Humanities
CMIS 2200 Application Programming II
CMSC 2000 Introduction to Cybersecurity
MATH 1510 Discrete Structures
QBA 1000 QBA 1: Optimization

Year 3

Fall Semester

CMIS 3500 Web Programming I
CMIS 3600 Systems Project Management
CMSC 3010 Structured Systems Documentation
Flex Discoveries
Free Elective

Spring Semester

CMIS 3200 Database Application Programming
CMIS 4500 Web Programming II
Free Elective
Free Elective
Free Elective

Year 2

Fall Semester

CMIS 3250 Cisco CCNA I
COMM 1010 Public Speaking
ECON 2100 Principles of Microeconomics
Or ECON 2200 Principles of Macroeconomics
MGMT 3000 Principles of Management
Social Sciences

Spring Semester

Arts and Humanities
CMIS 3125 Systems Analysis and Design
Free Elective
Major Elective
Required Related Elective

Year 4

Fall Semester

CMIS 4900 Senior Capstone I
CMIS 4250 Applications of Machine Learning
Free Elective
Major Elective
Required Related Elective

Spring Semester

CMIS 4920: Senior Capstone II
Free Elective
Free Elective
Free Elective
Free Elective

Program Notes:

Students must have a minimum grade of "C" in the following courses:

ENGL 1200, MATH 2410, CMSC 1200, CMSC 1240, CMSC 2040, CMSC 2100, CMSC 3040, CMSC 3100, CMSC 3240, CMSC 4140, CMSC 4900, MATH 1510

Restrictions apply for the allowed number of graduate credits (level DSA, PSM and PSC courses) allowed for an undergraduate major and only a maximum of 4 credits of CMIS 4950 will be allowed for electives