College of Science and Technology
Department of Mathematics, Computer Science, Digital Forensics

Bloomsburg   LOCK HAVEN   MANSFIELD

COMMONWEALTH UNIVERSITY

DIGITAL FORENSICS & CYBERSECURITY

Bachelor of Science (BS)

This degree map is based on the 2023-24 Academic Catalog and is subject to change. Students should meet with their academic advisor each semester and use Degree Works to monitor their individual progress toward degree completion. The time it takes to earn a degree will vary based on several factors including summer/winter enrollment, dual enrollment and number of courses successfully completed each semester. We recommend taking a minimum of 15 credits each fall and spring semester.

Sample 4-Year Plan

First Year

Fall Courses	Credits	Spring Courses	Credits
DGFR 121 File Systems 1	3	DGFR 122 File Systems 2	3
First Year Seminar	3	General Education Course	3
MATH 130 Finite Mathematics	3	STAT 141 Intro. To Statistics (Quantitative General Education)	3
CMSC 115 Python Programming (Technology General Education)	3	CMSC 150 Database Design(early)	3
General Education Course	3	Writing General Education Course	3
Semester Total	15	Semester Total	15

Second Year

Fall Courses	Credits	Spring Courses	Credits
DGFR 219 Intro. To Linux	3	DGFR 275 Intro. To Networks	3
ENGL 270 Technical Writing	3	COMM 101 Public Speaking (Oral Communications General Education Course)	3
MATH 230 Discrete Mathematical Structures	3	CMSC 357 Database Design (late)	3
PHIL 203 Business Ethics (Ethics General Education Course)	3	General Education Course	3
General Education Course	3	General Education Course	3
Semester Total	15	Semester Total	15

Third Year

Fall Courses	Credits	Spring Courses	Credits
DGFR 311 Security Fundamentals	3	DGFR 318 Small Devices	3
DGFR 317 DF Software	3	DGFR 417 Adv. Topics (regular)	3
General Education Course	3	Digital Forensics Elective	3
General Education Course	3	General Education Course	3
Elective	3	General Education Course	3
Semester Total	15	Semester Total	15

Fourth Year

Fall Courses	Credits	Spring Courses	Credits
Digital Forensics Elective	3	Digital Forensics Elective	3
DGFR 417 Adv. Topics (late)	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
Semester Total	15	Semester Total	15

Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

DIGITAL FORENSICS & CYBERSECURITY

Curriculum Checklist

REQUIRED DF Courses (24 credits)
___ DGFR 121 Digital Forensics File Systems 1 (3)
___ DGFR 122 Digital Forensics File Systems 2 (3)
___ DGFR 219 Intro to Linux for D.F. (3)
___ DGFR 275 Introduction to Networks (3)
___ DGFR 311 Security Fundamentals (3)
___ DGFR 317 Digital Forensics Software (3)
___ DGFR 318 Small Devices (3)
___ DGFR 417 Advanced Topics in Digital Forensics (3)

Digital Forensics Electives (At least 9 credits)
___ DGFR 257 Secure System Design and Administration (3)
___ DGFR 319 UNIX/LINUX for Digital Forensics (3)
___ DGFR 331 Electronic Discovery (3)
___ DGFR 351 Enterprise Network Investigations (3)
___ DGFR 371 Penetration Testing (3)
___ DGFR 419 Independent Study in Digital Forensics (3)
___ DGFR 431 Current Issues in Cybercrime (3)
___ DGFR 451 Malware Forensics (3)
___ DGFR 471 Internet of Things (IoT) Forensics (3)
___ DGFR 498 Internship in DF (At most 3 credit hours) (3)

REQUIRED Math & CS Courses (15 to 16 credits)
___ CMSC 115 Python Programming (3)
___ CMSC 150 Database Design (3)
___ MATH 130 Finite Mathematics (3) OR
　　　MATH 160 Calculus 1 (4)
___ STAT 141 Intro to Statistics (3) OR
　　　STAT 241 Probability and Statistics (3)
___ MATH 230 Discrete Mathematical Structures OR
　　　MATH 250 Discrete Mathematics (3)

Other Required Courses
___ ENGL 270 Technical Writing (3)

General Education Requirements
(45 credits)
Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below

- Foundations (15 credits)
  - STAT 141 -- Introduction to Statistics
  - COMM 101 – Public Speaking
- Interconnections (9 credits)

- Citizenship & Responsibility
  (6 credits from at least two goals)
  - PHIL 203 Business Ethics
- Natural World & Technologies (9 credits)
  - CMSC 115 -- Python Programming
- Creativity & Expression (6 credits)

Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

A minimum GPA of 2.0 in the major and overall are required.

Campus Locations

Bloomsburg	☐ Online;	☒ In-person;	☐ Blended
Lock Haven	☐ Online;	☐ In-person;	☐ Blended
Mansfield	☐ Online;	☐ In-person;	☐ Blended
Clearfield	☐ Online;	☐ In-person;	☐ Blended