Cyber Security and Computer Forensics
course descriptions

CFS136 Principles of Information Security
This course examines the current standard of due care and best business practice in information security. Demonstrations and hands-on practice will reinforce topics such as evaluation and selection of security models, risk management, threat analysis, organizational technology evaluation, security implementation, disaster recovery planning and security policy formation and implementation. Upon completion, the students will be able to examine security technology, methodologies and practices. CTAG approved CTCYBR001, effective fall 2019
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Course Attributes:
CTAG Approved Course

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CFS137 Computer Crime and Investigation
This course provides an overview of cybercrime and computer related crime issues facing businesses and the criminal justice system. Demonstrations and hands-on practice will reinforce topics such as how computers are used in crime, interview techniques, search warrants, evidence handling, chain of custody, identification and recovery of computer data, report writing, case preparation, and courtroom testimony. Upon completion, the students will be able to understand government response to cybercrime issues from a law enforcement perspective.
3.000 Credit hours
2.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level NET 120 Minimum Grade of D or Undergraduate level ECA 145 Minimum Grade of D

CFS256 Disaster Recovery and Incident Planning
This course is a detailed examination of the aspects of contingency planning operations. Demonstrations and hands-on practice will reinforce topics such as incident response-prevention, detection, reaction, disaster recovery, and business continuity. Upon completion, the students will be able to provide documentation for a disaster recovery plan.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CFS257 File Systems Analysis
This course is a comprehensive overview of contemporary volume and file systems. Topics include, discovering hidden evidence, recovering deleted data, data structures, and tool validation. Students will analyze example disk images, and participate in advanced investigation scenarios.
3.000 Credit hours
2.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web,
W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level ECA 137 Minimum Grade of D or Undergraduate level CFS 137 Minimum
Grade of D

CFS275 Ethical Hacking
In this course, students learn to discover weaknesses in operating environments using the well-
known hacking methods. Students will acquire the knowledge to systemically test and exploit
internal and external defenses. Students will learn the countermeasures used to mitigate and
reduce risk to enterprise networks. Students will be taught how to crack security systems so they
can advise organizations on how to protect their systems.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total
Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level NET 120 Minimum Grade of D and Undergraduate level NET
220 Minimum Grade of D or Undergraduate level ECA 145 Minimum Grade of D or
Undergraduate level ECA 277 Minimum Grade of D

CFS280 Digital Media Forensics
The student will understand the methods and tools used in preserving, duplicating, imaging and validating data from peripheral devices such as cellular phones, PDAs, IPODs, and Blackberrys. In addition to this, attention will be given to the gathering of evidence from both hard wired and wireless networks devices. Students will practice the gathering of information from these devices using the appropriate methods and software to allow the information to be admissible in court.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level CFS 137 Minimum Grade of D or Undergraduate level ECA 137 Minimum Grade of D

CFS287 Network Forensics
This course is designed to teach students the skills required to identify, acquire, and analyze data gathered from network devices using both passive and active tools. Emphasis will be placed on the use of open-source security tools to conduct an analysis of network activity to gather information relative to an investigation.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level CFS 137 Minimum Grade of D and Undergraduate level NET
121 Minimum Grade of D and Undergraduate level NET 220 Minimum Grade of D

NET120 PC Upgrading and Maintenance
The student will be working with various operating systems such as DOS, Windows 98, 2000
and XP. Student will also have hands-on experience building and repairing PC's in a lab
environment. Hardware topics include: system board, microprocessors, busses, memory, disk
drives, and power supplies.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total
Web, W4 Virtual

Information Tech Division
Computer Security Department

Course Attributes:
CTAG Approved Course

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

NET121 Introduction to Computer Networking
Fundamentals of networking, which includes sharing computer resources, protocols, cables and
adapters, E-mail, network, inter-operability and management is covered. Various network
products are described and compared. CTIT007 Cisco I
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web,
W4 Virtual

Information Tech Division
Computer Security Department

Course Attributes:
CTAG Approved Course

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

NET220 UNIX/LINUX Operating Environment
This course covers working at the Unix/Linux shell command line, customizing the shell
environment, understanding basic filesystem structure and permissions, file management tools,
basic shell scripting techniques, vi text editor, data processing tools, Xserver, Xwindows, remote
machine access using SSH & FTP, compiling C programs under Unix, and formation of make
files and the make command.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total
Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
(Undergraduate level NET 120 Minimum Grade of D and Undergraduate level NET
121 Minimum Grade of D)

SSC101 Student Success Seminar
This course is designed to aid students in gaining the skills necessary for academic success at
Stark State College (SSC). Topics include learning styles, critical thinking, time management,
study and test-taking techniques, communication skills, and a variety of personal development
strategies. Students will learn how to access and use SSC resources such as mystarkstate, the
College's Learning Management System (LMS), Digital Library, Writing Center, Career
Development, advising, tutoring, and other College support services. This course also fosters
connections between students, their respective academic divisions, and their classmates. Upon
completion of this course, students should be able to incorporate into their degrees or certificate
programs the tools and skills necessary to be academically and professionally successful.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture/Lab, Lecture, W2 Web/Lecture, W3 Total Web

Educ/ Liberal Arts/ Math Division
General Studies Department

Course Attributes:
Open Educational Resources

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

ACC235 Forensic Accounting

This course provides an overview of the methodology of forensic accounting and fraud investigation which involves obtaining documentary evidence, interviewing witnesses, writing investigative reports, testifying to findings, and examining forensic documentation. Students will apply prevention, detection, and investigative strategies to determine why and how occupational fraud is committed. Upon completion of this course, students should be familiar with the basic concepts of forensic accounting and fraud prevention and detection.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Business/ Entrepreneurial Division
Accounting/Finance Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CFS129 Cryptography

This course introduces the student to information security, potential threats to our information, and effective countermeasures to proactively combat those threats. A comprehensive review of cryptographic techniques is presented and explained in simple mathematical terms. Symmetrical and asymmetrical encryption, digital signatures, Kerberos, creation/deployment of strong keys and passwords, Virtual Private Networks, Tiny Encryption Algorithm (TEA) and other topics will be covered.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate

Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CFS140 Biometric Applications
This course will present an overview of the applications of Biometrics to Homeland Security and Information Security. Topics will include the application of Biometrics to airport security, border security, critical infrastructure, and commercial and consumer markets. Students will perform hands-on implementation of Biometric technologies.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CFS175 White Collar Crime
This course will familiarize students with the various types of white-collar crimes committed in the banking, health care and financial industry. Emphasis will be placed on recognition and investigation of white collar crime particularly those involving the use of information system resources.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Computer Security Department

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

CHM105 Introduction to Forensic Science
This course is designed to introduce students to the study of forensic science and crime scene investigation. It will cover basic general chemistry and biochemistry topics with an emphasis of applying the scientific method to investigating crime. The class will follow evidence from the time it is discovered at a crime scene until it is involved in a court case. Students will learn forensic methods required to assess, test and present evidence. The laboratory experiments presented are designed to teach critical thinking and laboratory skills necessary to ensure safety and protect crucial evidence. TMNS approved, effective Summer 2016.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, W2 Web/Lecture, W3 Total Web, W4 Virtual

Sciences Division
Chemistry Department

Course Attributes:
Transfer Module Approval

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

COM121 Effective Speaking
This course is designed to introduce students to the process of researching, writing, and presenting speeches. Students will explore the basic theories and principles of oral communication and will write and deliver formal speeches throughout the course. Areas of concentration include researching, outlining, organizing, language, verbal and nonverbal delivery, critical listening, and persuasion. TAG OCM004, summer 2007 TMCOM, Autumn 2008
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Educ/ Liberal Arts/ Math Division

Arts, Humanities & Rdg Department

Course Attributes:
Open Educational Resources, TAG Approved Course, Transfer Module Approval

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

ENG124 College Composition
This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual
All Sections for this Course

Educ/ Liberal Arts/ Math Division
English Department

Course Attributes:
Transfer Module Approval

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
ACT English 18 or Compass English 070 or HS English Proficiency 3 or Undergraduate level ENG 101 Minimum Grade of B or Undergraduate level ENG 105 Minimum Grade of C or Undergraduate level ENG 011 Minimum Grade of D or Undergraduate level ENG 024 Minimum Grade of D or Accuplacer English/Writeplacer 5 or GED Reasoning Through Lang Art 1

ITD122 Computer Applications for Professionals
Computer Applications for Professionals familiarizes students with major Windows-based applications software and introduces the Windows operating system, the Windows networking environment, and practices file and folder maintenance. The focus of the course is to provide students with basic understanding and competence in industry-standard word processing, spreadsheet, database, and presentation software applications that are used to solve scientific,

business, and engineering problems.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture/Lab, Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Information Tech Division
Administrative Srv Off Applion Department

Course Attributes:
TAG Approved Course

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Computer Test 21 or HS Computer Class 2 or Undergraduate level ITD 100 Minimum Grade of C

MTH125 College Algebra
In this course, students will study linear, quadratic, polynomial, radical, rational, exponential, logarithmic, and piecewise (including absolute value) equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions will be examined with reference to extrema, roots (zeros), and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of higher-order polynomial functions. Systems of equations will be solved by traditional algebraic methods. TMM001 approved Spring 2012.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Independent Study, Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Educ/ Liberal Arts/ Math Division
Mathematics Department

Course Attributes:
Instant Access Available, Transfer Module Approval

Restrictions:

Must be enrolled in one of the following Levels:
    Undergraduate

Prerequisites:
Undergraduate level MTH 094 Minimum Grade of B or Undergraduate level MTH
123 Minimum Grade of B or Undergraduate level MTH 025 Minimum Grade of B or ACT Math
22 or SAT Mathematics 530 or Compass Algebra 052 or M094 Transfer Prof/Placement 3 or
M025 Transfer Prof/Placement 3 or HS Math and Multiple Measures 3 or Accuplacer College-
level Math 055 or Accuplacer Elementary Algebra 108 or NextGen Accuplacer QAS Math 263
or NextGen Accuplacer AAF Math 250 or GED Mathematical Reasoning 1 or (Undergraduate
level MTH 094 Minimum Grade of B and Undergraduate level MTH 025 Minimum Grade of B)
or (ACT Math 19 and Undergraduate level MTH 025 Minimum Grade of B) or (Compass
Algebra 039 and Undergraduate level MTH 025 Minimum Grade of B) or (Accuplacer College-
level Math 040 and Undergraduate level MTH 025 Minimum Grade of B) or (Undergraduate
level MTH 023 Minimum Grade of B and Undergraduate level MTH 025 Minimum Grade of B)
or Accuplacer Elementary Algebra 108

SOC225 Cultural Diversity
Provide students with an understanding of the cultural diversity of our changing society. Students
will examine and discuss the diverse values and characteristics of ethnic and minority
populations and how those values influence society, social and economic processes, and race
relations. TMSBS Approved. Effective Autumn 2008.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, W2 Web/Lecture, W3 Total Web, W4 Virtual

Educ/ Liberal Arts/ Math Division
Social Sciences Department

Course Attributes:
Instant Access Available, Transfer Module Approval

Restrictions:
Must be enrolled in one of the following Levels:
    Undergraduate