

Information Technology Security (ITSY 1342 2A1)



CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

**LAMAR INSTITUTE
OF TECHNOLOGY**

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

Completed the [Online Orientation](https://www.lit.edu/online-learning/online-orientation) and answered Yes to 7+ questions on the Online Learner Self- Evaluation: <https://www.lit.edu/online-learning/online-orientation>.

COURSE DESCRIPTION

Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. *This course is time-bound, structured, and completed online.*

COURSE OBJECTIVES

Upon completion of this course, the student will be able to:

- Apply National Institute of Standards and Technology (NIST) guidelines and other best practices.
- Develop backup/recovery procedures to provide for data security.
- Use desktop /device operating system features to implement security.
- Identify computer and network threats and vulnerabilities and methods to prevent their effects
- Use tools to enhance network security
- Use encryption techniques to protect network local and distributed systems data.

INSTRUCTOR CONTACT INFORMATION

Instructor: Jennifer Graham

Email: jgraham2@lit.edu

Office Phone: 409 241 9837

Office Location: TA4-105B

Office Hours: MW: 11:00-1:00, TR: 10:30-1:00, F: 10:00-11:30

REQUIRED TEXTBOOK AND MATERIALS

Ciampa, M. D. (2022). CompTIA Security+: Guide to Network Security Fundamentals (7th ed.). Cengage. ISBN: 9780357424377

PARTICIPATION POLICY

This is a fully online class. You are expected to log into BlackBoard 3 to 4 times a week to check for updates and announcements.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

Last Day to Drop with Refund	09/10/2025
Last Day to Pay Tuition to Avoid Drop	09/22/2025
Last Day to Drop without Academic Penalty	09/26/2025
Last Day to Drop with Academic Penalty	10/31/2025

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR (Subject to change)

DATE	TOPIC	READINGS	ASSIGNMENTS (Due on this Date)
Week 1 8/25-8/3	Introduction Discussion Board /Syllabus	Syllabus	CompTIA Security+ Knowledge Check, Respondus LockDown Quiz*, Introduce Yourself Discussion Board* 9/1/2025
Week 2 9/1-9/7	Introduction to Security	Module 1 Pages 3-32	Two Rights & A Wrong (1-1,2,3), Sim. Lab 1.1, Sim. Lab 1.2, Module 1 Quiz 9/8/2025
Week 3 9/8-9/14	Threat Management & Cybersecurity Resources	Module 2 Pages 33-62	Two Rights & A Wrong (2-1,2,3), Live VM Lab 2.1, Sim. Lab 2.1, Module 2 Quiz 9/15/2025

Week 4 9/15-9/21	Threats & Attacks on Endpoints	Module 3 Pages 63-94	Two Rights & A Wrong (3-1,2,3), Live VM Lab 3.3, Sim. Lab 3.1, Module 3 Quiz 9/22/2025
Week 5 9/22-9/28	Endpoint & Application Development Security	Module 4 Pages 95-126	Two Rights & A Wrong (4-1,2,3), Sim. Lab 4.1, Sim. Lab 4.2, Module 4 Quiz, Test 1* (Ch. 1-4) 9/29/2025
Week 6 9/29-10/5	Mobile, Embedded, & Specialized Device Security	Module 5 Pages 127-154	Two Rights & A Wrong (5-1,2), Sim. Lab 5.1, Sim. Lab 5.2, Module 5 Quiz 10/6/2025
Week 7 10/6-10/12	Basic Cryptography	Module 6 Pages 157-190	Two Rights & A Wrong (6-1,2,3,4), Live VM Lab 6.1, Live VM Lab 6.2, Module 6 Quiz 10/13/2025
Week 8 10/13-10/19	Public Key Infrastructure & Cryptographic Protocols	Module 7 Pages 191-222	Two Rights & A Wrong (7-1,2,3,4), Live VM Lab 7.1, Live VM Lab 7.2, Module 7 Quiz 10/20/2025
Week 9 10/20-10/26	Networking Threats, Assessments, & Defenses	Module 8 Page 223-254	Two Rights & A Wrong (8-1,2,3), Live VM Lab 8.1, Live VM Lab 8.2, Module 8 Quiz, Test 2* (Ch. 5-8) 10/27/2025
Week 10 10/27-11/2	Network Security Appliances & Technologies	Module 9 Pages 255-284	Two Rights & A Wrong (9-1,2), Live VM Lab 9.1, Live VM Lab 9.2, Module 9 Quiz 11/3/2025
Week 11 11/3-11/9	Cloud and Virtualization Security	Module 10 Pages 285-316	Two Rights & A Wrong (10-1,2,3), Live VM Lab 10.1, Live VM Lab 10.2, Module 10 Quiz 11/10/2025
Week 12 11/10-11/16	Wireless Network Security/Authentication	Module 11-12 Pages 317-388	Two Rights & A Wrong (11-1,2,3), Live VM Lab 11.1, Live VM Lab 11.2, Module 11 Quiz, Two Rights & A Wrong (12-1,2), Live VM Lab 12.1, Live VM Lab 12.2, Module 12 Quiz 11/17/2025
Week 13 11/17-11/23	Incident Preparation, Response, & Investigation	Module 13 Pages 389-422	Test 3* (Ch. 9-12), Two Rights & A Wrong (13-1,2,3), Live VM Lab 13.2, Live VM Lab 13.3, Module 13 Quiz 11/24/2025

Week 14 11/24-11/30	Cybersecurity Resilience	Module 14 Pages 423-452	Two Rights & A Wrong (14-1,2), Live VM Lab 14.1, Live VM Lab 14.2, Module 14 Quiz 12/1/2025
Week 15 12/1-12/4	Risk Management & Data Privacy	Module 15 Pages 453-452	Two Rights & A Wrong (15-1,2) Live VM Lab 15.1, Live VM Lab 15.2, Module 15 Quiz, Test 4* (Ch. 13-15) 12/4/2025
Week 16 12/4-12/9	Final Exam	Blackboard	<u>FINAL EXAM</u> 12/9/2025

** denotes assignments located in Blackboard Content*

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Assignments 15%
- Labs 15%
- Chapter Quizzes 15%
- Tests 20%
- Final Exam 25%
- Discussion 10%

GRADE SCALE

- ☐ 90-100 A
- ☐ 80-89 B
- ☐ 75-79 C
- ☐ 70-74 D
- ☐ 0-69 F

LIT does not use +/- grading scales

You must make a C or better for all required program classes. You must make a D or better for all general education classes.

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook accessible on the LIT website.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or Wi-Fi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand, and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these

emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

Certification Requirement

Cyber Security and Networking majors are required to earn certification in one of the following areas prior to graduation.

- A+ Certification
- Network+ Certification
- Security+ Certification
- Linux+ Certification
- Cisco Certified Network Associate (CCNA)

Course Policies

1. Email is the preferred method of communication (jgraham2@lit.edu). I cannot respond to Blackboard Messages, I can see them, but I have no way to respond. I will respond within 48 hours except for weekends and holidays.
2. You must email from your LIT student email account when contacting the instructor and include the course number (ITSY 1342) and section number (section 2A1).
3. Please allow 24 hours during the week and 48 hours on the weekend for a response.
4. All assignment due dates are indicated in the Blackboard course for this class. Any work submitted after the assigned due date will receive a 10 point per week deduction.
5. Tests are assigned a due date and must be completed by that date. Tests will not be reactivated after the due date.
6. All tests will require lockdown browser. Please see "Test Browser" in the introduction section of the Blackboard course.
7. All written assignments should be submitted in APA format. Refer to the "APA Format Assistance" section in the introduction section of the Blackboard course.
8. All assignments must be submitted via Blackboard unless specified by your instructor. Assignments submitted through any other method will receive a "0".
9. Grades for assignments may be accessed through My Grades in Blackboard. Each assignment shows your grade and any grading comments made on your assignment.
10. All assignments must be turned in before the final exam.

EAGLE LEARNING ESSENTIALS

Eagle Learning Essentials (ELE) <https://lit.edu/student-success/eagle-learning-essentials> is an affordable textbook rental program through the Barnes and Noble Bookstore. Through this program, students can receive required textbooks, lab manuals, access codes and electronic books conveniently before the first day of class.

The ELE bundle will provide the needed learning materials at \$14 per credit hour (added to your student account), saving students up to 35-50% on the cost of course materials. The cost can be paid by financial aid or by the student. If a student enrolls in a payment plan, this charge will be

included in the payment plan calculations. Supplies are not included in this program and will need to be purchased separately.

LIT students are automatically enrolled in the program at the time of registration and will begin receiving emails about selecting their preferred delivery method.