

# Encryption Controls

TRD-260

3 Semester Credit Hours

Contact the advising team at DSU with any questions:  
602.648.5750 or [info@dunlap-stone.edu](mailto:info@dunlap-stone.edu)

## Course description

This course provides a practical, systems-level understanding of U.S. encryption export controls. Students will examine key U.S. regulatory frameworks (primarily under the Export Administration Regulations, or EAR) as they relate to the classification, licensing, and use of encryption items and software. Emphasis is placed on identifying when encryption is controlled, understanding License Exception ENC, and navigating the documentation, submission, and reporting requirements associated with encryption exports. Students will also evaluate compliance responsibilities related to self-classification, mass market treatment, technical review requests, and post-market enforcement risks.

## Course outcomes

By the end of this course, students will be able to:

- TRD-260-1: Explain the scope and regulatory basis of U.S. encryption export controls under the EAR.
- TRD-260-2: Identify and classify encryption items using relevant ECCNs and regulatory definitions.
- TRD-260-3: Evaluate the applicability of License Exception ENC and other exceptions to encryption exports.
- TRD-260-4: Prepare internal documentation and reporting required for self-classification or technical review.
- TRD-260-5: Analyze organizational compliance obligations related to encryption controls, including ongoing reporting, internal screening, and enforcement risks.

## Pre Requirements

Recommended: TRD-307, TRD-306

## Learning Resources

Students should utilize library resources provided at the main level of the classroom to support their learning and to master the course learning objectives.

## Instructor Expectations

Faculty members may post additional materials or make changes to this syllabus. Please contact your instructor with questions about specific criteria.

## Grading Scale

92-100 A	72-74 C
89-91 A-	69-71 C-
85-88 B+	65-68 D+
82-84 B	62-64 D
79-81 B-	<62 F
75-78 C+	

## The Learning Environment

This course is delivered fully online using distance education best practices. Students are expected to actively engage with their peers and instructor at least five (5) days each week. All courses are offered in English to students who meet the minimum entrance requirements and meet any published prerequisite requirements or program admission.

**The classroom is accessed through the Moodle platform.**

**Technical support is available during business hours by calling 602.648.5750.**

## Discussion Boards

The DSU learning model is built on a foundation of discussion. Students should actively participate in the discussion questions each week. At the end of the week, students will affirm that they have met the posting requirements. Students are expected to post four direct answers to discussion questions, one per day, for at least four days during the week. Students must also post substantive responses to their peers, at least one per day, for at least five days of the week. This should be a total of nine posts over five days. Points are assigned for discussion questions based on their completeness. Students should cite learning materials, outside articles or other materials whenever possible to demonstrate their mastery of course outcomes within the discussion questions.

## Grading Criteria

Grades are determined by grading rubrics and grading guides throughout the course materials. Generally, students who meet or exceed the stated expectations for an assignment will receive the total number of points possible for that assignment. Deductions from the total number of points possible occur because of a lack of content or clarity, errors, failure to integrate course materials into the assignment or failure to complete the assignment.

## **Academic Integrity, Privacy and Identity**

By signing into the electronic classroom with your unique username and password, you affirm that you are the individual who registered for the course and that the work you submit is your original work. Students are expected to maintain standards of academic integrity. Plagiarism is a serious offense. Presenting another's work as your own could jeopardize your enrollment at the university. Please refer to the catalog for more information.

## **Intellectual Property**

Unless otherwise noted, materials within the classroom belong to the noted copyright holder. There is no expectation of privacy or ownership of the posting of the students or faculty members. Please use good judgment when posting within the classroom. In some courses, you may wish to carefully consider what information you choose to disclose about your organization or your organization's activities. Contact your organization's legal representation for more information about your company's intellectual property and disclosure rules. Refer to the catalog for more information about the expectations of student behavior.

## **Study Suggestions and Estimated Time to Complete Work**

Depending on the level of this course and the number of credit hours assigned for this course, the estimated time to complete work varies. Each credit hour assigned in this course has been designed to represent 15 hours of direct engagement with course materials and 30 hours of preparation. *This course is three credit hours in length and therefore represents 45 hours of engagement and 90 hours of preparation. In a six week course, you should spend about 7.5 hours working in the classroom and about 15 hours in preparation.* You may need more or less time to complete this course.

Preparation can be classified in a number of ways. Reading assignments are based on the number of pages you are expected to read each week and the level of complexity of those reading materials (whether they contain a large number of technical terms or difficult concepts). Written assignments are generally based upon the number of pages you are expected to produce as noted in the assignment description. Studying for exams is estimated by the number of hours you would be expected to spend reviewing materials.

Direct engagement includes reviewing websites, posting and participating in discussion forums, reading materials, listening to audio content, and taking exams.

The following page's recommendations may help you develop a plan to successfully complete this course.

## *Student Success Strategies*

Week 1	<b>Review the syllabus thoroughly and make sure you understand the course expectations and how to navigate the classroom.</b> Accessing Moodle, familiarizing yourself with the layout of the classroom, accessing materials and printing them if you choose, and posting a brief introduction and biographical information in the classroom are tasks you should complete prior to or on the first day of class. Review your peers' posts and any from your instructor. If you feel uncomfortable navigating, please contact DSU and schedule a time to have a staff member walk you through the classroom. These tasks should take about an hour.
Weekly	<b>Review your Lecture and Assignments document and plan your activities for the week.</b> Carefully note assignments and their due dates and expectations for the week. Note any questions you may have for your instructor. Confirm that you have all of the assigned readings and can access any supplemental materials noted. You may wish to review your personal and professional obligations each week and designate what times you can schedule to complete the week's coursework. This step should take about one hour each week.
Weekly	<b>Reading the lecture, textbook, and supplemental materials.</b> Depending on the length of the lectures within the weekly assignment document, reading, reviewing and understanding the lecture for the week may take half an hour to an hour. Generally, the lecture highlights areas within your other assigned readings that are most critical. Many classes may also require you to read textbooks, watch video presentations, review websites, legal documents, or other supplemental materials. The average student spends about an hour reading 30 pages of a textbook designated at their degree level. More complex materials or legal documents may reduce this to 20 to 25 pages per hour. You may wish to allocate more time to make notes or review important points.
Weekly	<b>Participation in discussion forums.</b> Online classroom discussions should take about five hours per week. To meet the discussion question and participation requirements for this course, you should answer the designated number of questions completely, referencing your reading whenever possible. Be sure to read each of your classmates' posts, commenting meaningfully whenever possible and review your instructor's posts within the discussion questions as well. This is an opportunity to bring in your experiences and demonstrate your understanding of the course materials.
Weekly	<b>Submitting assignments.</b> Assignment submissions should take about a half an hour each week, depending on the number of assignments. Assignments are submitted through the Moodle assignment description. Before submitting your assignment, carefully review the assignment and any rubrics that are included for grading. Read through your submission carefully, checking for errors in grammar or spelling and to ensure that the content fully addresses the assignment. Give yourself extra time for a thorough review.
Other Actions	<p><b>Research in preparation for a written assignment.</b> Typically, students take about three hours to research the materials for one page of a research paper.</p> <p><b>Preparing for an article review.</b> Typically, students spend about an hour and a half to research and summarize materials for an article review.</p> <p><b>Preparing a case study.</b> Typically, students spend about an hour to two hours preparing to complete a case study.</p> <p><b>Completing other assignments.</b> The time required to complete other assignments may vary depending on the assignment type. You may wish to ask your instructor how much time to plan to spend on an assignment.</p> <p><b>Studying for quizzes or exams.</b> Depending on the course, the amount of time you spend preparing for an exam will vary. If you spend time each week reviewing the material as suggested above, the time spent preparing for a midterm or final exam may be lower, between two and four hours.</p> <p><b>Taking quizzes or exams.</b> Depending on the course, the typical open-book exam should take about an hour for each 20-30 questions.*</p> <p><b>Group work or peer interaction.</b> Depending on the assignment, collaborative or group assignments may vary greatly. Students should expect to spend about an hour collaborating with their peers for every page of a group assignment.</p> <p><b>Faculty interaction.</b> Receiving and incorporating faculty feedback from your assignments, asking questions, and clarifying concepts are critical elements of interaction with your instructor.</p>

\*When a final project is used in lieu of an exam, the steps that you take to complete a final project may include research, identifying appropriate sources, brainstorming, outlining, creating a first draft, editing, incorporating feedback, and formatting a final draft for submission.

## Course Assignment and Topic Matrix

<b>Week 1</b>	<p>TRD-260-1a: Describe the role of the Bureau of Industry and Security (BIS) and the scope of the Export Administration Regulations (EAR) related to encryption.</p> <p>TRD-260-1b: Define key regulatory terms such as “encryption item,” “controlled,” and “mass market.”</p> <p>TRD-260-1c: Identify the primary ECCNs related to encryption controls (e.g., 5A002, 5D002, 5A992).</p> <p>TRD-260-1d: Summarize when and why encryption controls apply under U.S. law.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (15 points)</p>	<b>24 points possible</b>
<b>Week 2</b>	<p>TRD-260-2a: Identify the correct ECCN for common encryption-related items and software.</p> <p>TRD-260-2b: Distinguish between ECCNs 5A002, 5D002, and 5A992 based on functionality and market type.</p> <p>TRD-260-2c: Interpret BIS classification guidance for encryption products.</p> <p>TRD-260-2d: Draft a classification worksheet to justify how an item is classified under the EAR.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (15 points)</p>	<b>24 points possible</b>
<b>Week 3</b>	<p>TRD-260-3a: Explain the purpose and scope of License Exception ENC under the EAR.</p> <p>TRD-260-3b: Distinguish between ENC eligibility categories (e.g., 740.17(b)(1), (b)(2), (b)(3)) and understand their application.</p> <p>TRD-260-3c: Identify the notification and reporting requirements associated with ENC use.</p> <p>TRD-260-3d: Prepare a practical decision tool or summary guide for applying License Exception ENC in a real-world organizational context.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (15 points)</p>	<b>24 points possible</b>
<b>Week 4</b>	<p>TRD-260-4a: Explain the BIS requirements for self-classification and technical review of encryption items.</p> <p>TRD-260-4b: Describe the process of submitting encryption notifications and review requests to BIS and NSA.</p> <p>TRD-260-4c: Identify common documentation and recordkeeping expectations associated with ENC use.</p> <p>TRD-260-4d: Develop an internal submission checklist or procedural guide to support compliance operations.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (15 points)</p>	<b>24 points possible</b>
<b>Week 5</b>	<p>TRD-260-5a: Identify ongoing reporting and compliance obligations under License Exception ENC.</p> <p>TRD-260-5b: Explain how encryption-related compliance requirements evolve as products and organizations change.</p> <p>TRD-260-5c: Design internal control measures for monitoring changes in product classification or reporting deadlines.</p> <p>TRD-260-5d: Draft an organizational plan for maintaining encryption control compliance over time.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (15 points)</p>	<b>24 points possible</b>

<b>Week 6</b>	<p>TRD-260-6a: Synthesize all components of encryption control compliance into a comprehensive internal reference guide.</p> <p>TRD-260-6b: Demonstrate a practical understanding of licensing, classification, submission, and recordkeeping requirements under the EAR.</p> <p>TRD-260-6c: Reflect on organizational implementation strategies and the operational impact of encryption compliance.</p> <p>TRD-260-6d: Communicate compliance processes clearly to non-specialist internal audiences.</p>	<p>Read lecture and assigned readings</p> <p>Participation (5 points)</p> <p>Discussion Questions (4 points)</p> <p>Written Assignment (25 points)</p>	<b>34 points possible</b>
---------------	---	--	---------------------------

**Grades are posted in the gradebook section of your Moodle class.**