Master of Science in Information Assurance

NSA/DHS Designated Center of Academic Excellence in Information Assurance/Cyber Defense, in IA Research and in Cyber Operations

MSIA Student Guidelines

1. Grading Guidelines
All class assignments, quizzes, mid-term and final examinations, term papers, laboratory projects, presentations and class participation will receive a numerical value. The following grades will be used for transcript reporting: A, B, C, with + and – as indicated (at the discretion of the instructor). The IA course grading scale for Grade Point Average (GPA) calculations:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97-100</td>
<td>4.000</td>
</tr>
<tr>
<td>A</td>
<td>94-96</td>
<td>4.000</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
<td>3.667</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>3.333</td>
</tr>
<tr>
<td>B</td>
<td>84-86</td>
<td>3.000</td>
</tr>
<tr>
<td>B-</td>
<td>80-83</td>
<td>2.667</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
<td>2.333</td>
</tr>
<tr>
<td>C</td>
<td>74-76</td>
<td>2.000</td>
</tr>
<tr>
<td>C-</td>
<td>70-73</td>
<td>1.667</td>
</tr>
<tr>
<td>F</td>
<td>69 and below</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Assignments submitted after the due date will be graded at the discretion of the instructor. If a late assignment is graded, then the grade will not be higher than a B.

Assignments and exams may be available online. Students are responsible for their own computing environments and should have all necessary software required for the assignments and exams. Northeastern University offers free and discounted software on the MyNEU web portal.

In response to instructor questions posted on the Discussion Board, on Blackboard or NU Online, the Discussion Board is the only approved method to post entries that will be graded. Similarly for assignments the Blackboard or NU Online is the only approved method to post entries that will be graded.

Failure to complete a major component of a required course, such as assignments, quizzes, mid-term and final examinations, term papers, or laboratory projects, presentations and class participation may lead to an incomplete (I) grade. Guidelines for giving incomplete grades are as follows:
- A student has already completed a substantial portion of the course with passing grades.
- A student is unable to complete the entire course because of extenuating and unforeseen circumstances such as serious illness or family emergency.

An incomplete grade is explicitly not to be used as a mechanism to avoid receiving an undesirable grade when a student is performing poorly in a course. If an incomplete grade is given, the instructor must complete an incomplete grade form, available in the College of Computer and Information Science Graduate Office, specifying the reason for the incomplete grade and indicating the agreed upon method for completing the course requirements. A copy of the form should be retained by both the student and the instructor and the original left in the Graduate Office for the Registrar’s records.

Although the instructor determines the actual length of period for clearing an incomplete grade, this period cannot be longer than one calendar year from the end of the semester in which the course was taken.

According to University Policy an all A Grade Point Average (GPA) is assigned a 4.0 for external transcript reporting purposes.
A student who has an overall GPA of less than 3.0 in any semester is placed on Academic Probation at the end of that semester. A student placed on Academic Probation has one semester to improve their GPA to 3.0 or higher. A notation of the Academic Probation action will appear on the student’s internal record, but not on the permanent academic transcript.

According to MSIA Policy an overall GPA of 3.0 or higher, as well as an IA Technical Track GPA of 3.0 or higher and an IA Contextual Track GPA of 3.0 or higher, are required for graduation. The IA Technical Track GPA and the IA Contextual Track GPA are calculated based on the two highest course grades in each Track.

2. **Honor Code**
   All students must adhere to the Northeastern University Honor Code, including copyright and intellectual property issues, available on the Northeastern web site (www.neu.edu) and the graduate student handbook.

   The use of electronic recording devices in lectures and labs is prohibited, unless the instructor is informed and agrees, and subsequently informs the class that such recording is occurring. If any student objects to the recording of a class or lab, they can bring this issue to the attention of the Director of Graduate Information Assurance Program.

3. **Academic Integrity Policy**
   The University defines plagiarism as intentionally representing the words, ideas, or data of another as one’s own in any academic exercise without providing proper citation.

   The following sources require citation:
   - Word-for-word quotations from a source, including another student’s work.
   - Paraphrasing (using the ideas of others in your own words).
   - Unusual or controversial facts not widely recognized.
   - Audio, video, digital, or live exchanges of ideas, dialogue, or information.

   Students unclear as to whether or not a source requires citation should speak with their professor or consult the Writing Center in 412 Holmes Hall.

   Examinations for online courses are offered online. Online examinations require registration with an online proctoring service providing monitoring during the examination by web camera and computer screen sharing.

   All students must read, understand, and agree to comply by signing the Northeastern University Academic Integrity Policy:
   - [http://www.northeastern.edu/osccr/academic-integrity-policy/](http://www.northeastern.edu/osccr/academic-integrity-policy/)

   Cases referred to the Office of Student Conduct & Conflict Resolution will be investigated and, if sufficient evidence is presented, the case will be referred to the University's Student Conduct Board. If a student is found responsible for violating any of the identified items, a minimum sanction of deferred suspension will follow. A second violation will meet with expulsion from the University. Students who violate Northeastern University's Academic Integrity Policy may also be subject to individual course penalties. This can result in, but is not restricted to, failing the course, in addition to any University penalty. OSCCR's decision and the course grade due to Academic Integrity Policy violation will be permanently attached to the student's academic record.

4. **Use of Information Assurance Laboratory**
   The general use of the Information Assurance Laboratory is for training purposes for IA courses. Students should use the IA Lab only with supervision by an instructor. As a best practice an inventory of lab
equipment should be taken at each lab station at the beginning and at the end of each lab session. The IA Lab can be used for research purposes only with permission from the Director of Graduate Information Assurance Program.

5. **Hacking and Ethics**
Students are reminded that it is a violation of US Government Federal and in many cases State law to attempt to gain unauthorized access, or to exceed authorized access, and maliciously damage information assets or systems of Northeastern University or any other organization. All student cases will be reviewed by the Director of Graduate Information Assurance Program and by CCIS, which may result in sanctions depending on the severity of the violation. The University will also fully cooperate with Federal and other law enforcement agencies to provide evidence in any case of unauthorized access or malicious damage to information assets or systems.

6. **Student Absenteeism**
Students are expected to attend all classes. Students who cannot attend a class are expected to inform the instructor by email and make arrangements to obtain notes, assignments, etc. from the students in the class. Students who do not attend a class and do not inform the instructor are subject to review of their status in the class by the instructor, and potentially on the instructor's recommendation review by the Director of Graduate Information Assurance Program.
In cases where a student cannot attend classes or complete course work due to health related issues, an official letter from a physician on official letterhead needs to be submitted, preferably from Northeastern University Health and Counseling Services, confirming the student absence due to health issues and also allowing the student to return to class and take on normal course work load. Then it is at the instructor's discretion and judgment if the student can make up the material and complete the class, thus allowing late submission of assignments, or advise the student to take the class at a later semester.
Students are expected to take exams on the prescribed dates. If a student needs to miss an exam and take a make-up exam, the student needs to provide formal justification to the Director of Graduate Information Assurance Program for approval.

7. **Auditing of Classes (instead of attending for credit)**
College of Computer and Information Science policy does not allow auditing of classes for Master of Science students. The Master of Science in Information Assurance program does not allow auditing of classes. Any requests for exceptions of this policy should be referred to the Director of the Graduate Information Assurance Program.

8. **Course Enrollment**
On-campus students are strongly encouraged to enroll in on-campus courses. Similarly, online students are strongly encouraged to enroll in online courses. These guidelines are based on pedagogical reasons and experience with MSIA graduates. Valid reasons for change of instruction modality for a course are course scheduling, change of location, change in work requirements or family requirements. US Government regulations require that International students cannot take more than one online course in the Fall and Spring semesters, in addition to taking one on-campus course, with at least 50% of credit-hours earned from on-campus courses. International students can take one or two online courses in the Summer Semester.
All classes are required to have a minimum of 10 students, with the possible exception of the first semester that they are offered in either on-campus or online modality. A class with fewer than 10 students will be cancelled. Required IA courses and certain elective courses, such as IA Directed Study, IA Independent Study, IA Research, and IA Readings are exempt from this policy. All students are required to take the Foundations of Information Assurance course. Students with experience in IA can receive approval by the course instructor to “test out” of the course and take another IA course for 4 credit hours.
Students who fail a course and receive an F grade can decide to repeat the course or take another course, in which case the F grade will be carried forward in the academic transcript. Only the required Foundations of Information Assurance course needs to be repeated in case of an F grade. In all cases the most recent grade earned in a course is the one used in calculating the overall grade-point average; however, previous grades remain on the transcript followed by the word “Repeat.” Students are required to pay normal tuition charges for all repeated course work and should consult their academic advisor before repeating a course. All students are required to take the Capstone course for graduation. The Capstone requirement for graduation can be waived by students taking either a) a Research Project on National Information Security course or b) an IA Research Project course and a Master of Science in Information Assurance thesis course, for a total of 2 semesters. Students are required to take at least 2 elective courses from each of the IA Technical Track and IA Contextual Track. Students can take up to 2 approved elective non-IA courses. Students are not allowed to take both Network Security Practices (IA Technical Track course) and Network Security (approved elective non-IA course) for credit towards their MSIA.

Students are advised to have completed the required Foundations of Information Assurance course and the IA Technical Track and IA Contextual Track course requirements prior to submitting proposals for a Capstone project. Capstone teams are required to have at least one student with a social sciences background and a student with a technical background. Due to class demographics Capstone teams cannot have more than one student with a social sciences background. If students with a social sciences background are not available for all teams, then a student with significant business experience, at the discretion of the course instructor and with input from the Director of the Graduate Information Assurance Program, could complete the composition of a Capstone team. A Capstone kick-off meeting with students and Capstone instructor is scheduled in mid-Fall for Spring Semester and mid-Summer for Fall Semester to start working on team composition, sponsor companies and topics. A formal proposal by each Capstone team including student backgrounds, sponsor company, and topic needs to be submitted and approved by the Capstone instructor prior to the start of the semester.

The MSIA graduation requirement IA7900 Capstone can be waived by students taking the IA8660 Research Project in National Information Security course. Participation is approved by the course instructor and the relevant agencies providing the topics, with input when necessary from the Director of the Graduate Information Assurance Program. All NSF/SFS IA graduate students are required to enroll in the course during their study in the program.

The finalized Capstone course teams, sponsor companies and topics as well as finalized Research Project on National Information Security course teams, sponsor agencies and topics are submitted prior to the start of the semester to the Director of the Graduate Information Assurance Program as the plan of record for fulfilling the graduation requirement.

The MSIA graduation requirement IA7900 Capstone can be waived by students taking the MS Thesis option. The MS Thesis option is fulfilled when a student successfully defends his/her own thesis in a public forum after taking

- either a research project course IA5984, followed by the thesis course IA7990
- or two semesters of thesis course IA7990 for a total of 8 credit hours.

IA Research Project topics and Master of Science in Information Assurance thesis topics and advisors are approved by the IA Curriculum Committee, chaired by the Director of the Graduate Information Assurance Program. The IA Research Project course requires an initial proposal for course approval and a final report/thesis proposal at the end of the semester for approval of the Master of Science in Information Assurance thesis course. A thesis proposal, together with the composition of the thesis committee, require approval by the IA Curriculum Committee prior to the registration of thesis IA7990.
Approval of the final written thesis has to be obtained from the Thesis Committee. The Thesis Committee should consist of an Advisor and a Reader.

9. Graduate Co-op
Students who are interested in participating in Cooperative Education opportunities with leading companies are required to register in Graduate Cooperative Education Seminar during the Fall or Spring Semester. Participation in all Co-op seminar sessions is required for graduate co-op approval. A GPA of 3.2 or higher is required to initiate a co-op search at the end of the Fall/Spring Semester. A GPA of 3.0 or higher is required for a student to receive approval to go on co-op. US Government regulations require that international students on F-1 or J-1 visa use Curricular Practical Training (CPT) time for their Co-op internships (always keep ISSI informed). This means they are considered full time employees of the Co-op employers and need to work 35-40 hours per week, thus they cannot be hired as part time (“1099”) employees. Students on CPT can enroll in one course on-campus or online when on Co-op internships, however a GPA of 3.5 or higher is required for approval. All students must return to campus for at least one full semester after the co-op industry experience and register in at least a one credit hour on-campus course prior to graduation.
Optional Practical Training (OPT) up to 12 months is available for students who have done less than 12 months of CPT and have completed all IA course work except for MSIA thesis or PhDIA dissertation. Practically all students do their OPT after graduation. Therefore pre-completion OPT may be done prior to graduation by students completing only MSIA thesis or PhDIA dissertation in that semester, but not concurrently with Co-op or Teaching Assistantships, and requires approval from the Director of the Graduate Information Assurance Program and CCIS (ISSI Form 217).

10. School Calendar for Fall 2016 Semester
School Calendar for on-campus and online IA courses in the Fall 2016 Semester:
  - MSIA orientation on Tuesday, September 6, 2016: 5:00-6:00 pm online, 6:00-7:00 pm on-campus
  - First day of classes on Wednesday, September 7, 2016
  - No classes on Monday, October 10, 2016 (Columbus Day)
  - No classes on Friday, November 11, 2016 (Veterans’ Day)
  - No classes Wednesday-Sunday, November 23-27, 2016 (Thanksgiving recess)
  - Last day of classes on Saturday, December 17, 2016

On-campus and Online students: Last day to add a class is Tuesday, September 20, 2016.

On-campus and Online students: Last day to drop a class without a W grade on the academic transcript is Tuesday, September 27, 2016.

On-campus and Online students: Last day to drop a class with a W grade on the academic transcript is Sunday, December 11, 2016.