



Academic Year 2025-2026

**Master of Science in Information Technology
(MSIT) Student Handbook Addendum**

Degree Programs Covered by This Handbook:
MSIT Information Technology Management
MSIT Information Security and Assurance
MSIT Business Intelligence and Data Analytics
Customized Partner Programs (General Motors)

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1. Introduction

This handbook provides specific information on the curriculum and program requirements for the Master of Science in Information Technology (MSIT) program. The Heinz College also publishes a separate handbook which details College-wide policies and procedures pertaining to educational planning, program committee, teaching, scheduling and course credit, performance standards, academic standing, ethics and discipline, student privacy rights and major forms and deadlines.

While this handbook is specific to your academic experience in the department, it is just one element of the Graduate Student Handbook Suite. There are several other resources within the suite that you should consult when needed:

- [The Heinz College Handbook](#)
- [University-Wide Graduate Student Handbook](#) (Office of Graduate & Postdoctoral Affairs)
- [The Word Student Handbook](#)

You must familiarize yourself with all handbooks, but this handbook will include any policies that may differ from the college-wide handbook.

2. MSIT Program Overview

The MSIT program is designed for experienced technology professionals to complete one of three master's degrees on a **part-time** basis alongside their full-time job. It offers fully online study, or a hybrid of online and on-campus evening classes for local students, and the flexibility for students to choose a course load each semester that best suits their work and personal situation. Most part-time MSIT students take 1-2 courses each semester (typically 18-24 units) and can complete the program in 2-3 years. However, students have up to five years to finish the program, allowing them to take a slower pace (under 18 units) each semester. They may extend the length up to seven years when due to extenuating circumstances resulting in leaves of absence.

The MSIT program offers three majors of study:

- MSIT-Information Technology Management – evening (MSIT-ITM) or online (MSIT-IMD)
- MSIT-Information Security & Assurance – evening (MSIT-ITA) or online (MSIT-DIA)
- MSIT-Business Intelligence & Data Analytics – evening (MSIT-BI) or online (MSIT-DBI)

Each degree requires completion of 60 units of core courses and 84 units of elective coursework. Of those 84 units of elective, up to 12 units may be an independent study related to the selected major and up to 24 units may be from graduate credit earned at another university prior to matriculation into MSIT.

Electives may be courses from our home department of Information Systems Management (95-xxx), the MSIT online course catalog, and graduate-level courses offered by other Heinz College programs (i.e., 94-xxx, 91-xxx, 90-xxx) or CMU departments (e.g., Tepper, Software & Societal Systems, Language Technologies), subject to pre-approval from the MSIT Program Director.

This handbook also covers customized degree programs for our partnership with General Motors. These custom programs are variations of the above programs of study and their requirements are in section 4.4 of this handbook.

Students who graduate from the MSIT program will be able to:

- Identify and summarize evidence-based governance and decision making techniques to practice data-driven goals and experiments that assemble and appraise effective engagements with diverse stakeholders
- Select and outline new and emergent technologies, as well as current and legacy information systems, that would demonstrate the ability to discriminate and formulate real-world problem solutions through a justifiable approach combining and applying innovative leadership and technical skills
- Define and classify a problem and solution set, apply proper analysis to synthesize results, compose a critically thought-out action plan for summarizing decisions and next steps
- Arrange and generalize various industry contexts, demonstrate and model a developed situational awareness of evolving information systems or new-to-the-world emergent technologies, utilize critical thinking to formulate a detailed analysis and summarization considering the complexities in data and technologies behind them to deliver justifiable solutions
- Recognize and distinguish between diverse and variable workforce environments for effective summarizations of work performed, show competency to apply communications skills effectively in synchronous visual and verbal delivery and ability to compose and describe effectively in written and visual delivery

3. Department Overview

The staff listed below are directly associated with the MSIT program. There is a robust team at Heinz College and CMU available to help you navigate your education, from financial aid and student services to disability services and more.

Dareen Basma	Associate Dean	dbasma@andrew.cmu.edu
J. David Riel	Interim Program Director for MSIT	jriel@andrew.cmu.edu
Allie Andrews	Academic Advisor for MSIT	alliea@andrew.cmu.edu
Kayla Molzer	Academic Program Coordinator for MSIT	kmolzer@andrew.cmu.edu
Annie Julian	Director of Student Experience	ajulian@cmu.edu
Christine Sundry	Assistant Director, Career Advisor for MSIT	christinesundry@cmu.edu

4. MSIT Program-Specific Policies

The **Master of Science in Information Technology (MSIT)** program abides by the policies of the Heinz College as outlined in the college-wide [Student Handbook](#). MSIT students are expected to maintain good academic performance with integrity, as outlined in its sections on Grading and Evaluation, Academic Standing, and Ethics and Discipline. Following are MSIT program requirements and some modifications from the college handbook that are specific to MSIT:

4.1. Graduation Requirements

A MSIT student must satisfy the following requirements within five years from the first semester in which they matriculated to graduate from the MSIT program:

Students who achieve a final QPA of 3.75 or higher will be recognized with a certificate of graduation with distinction or highest distinction from the Heinz College. See the section on Awards in the Student Handbook for more information.

- Earned 144 units of course credit (including approved transfer credit)
- Successfully passed all core courses (or earned an exemption from the course)
- Achieved a minimum cumulative quality point average (QPA) of 3.0

The statute of limitations to complete the MSIT degree is five years. This is a more restrictive policy than the 7-year statute posted in the college handbook or by [Carnegie Mellon University](#). After five years, a student may petition to extend this up to seven years if the delay was due to extenuating circumstances and/or extended leave(s) of absence.

Students must contact the Program Director during their fifth year to discuss their plan for completion within seven years.

4.2. Part-Time Course Load

MSIT is a part-time only program so students may take **up to 30 units per semester**, although most find around 18 units is a manageable load. Students who intend to enroll full-time (36 units or more) on a regular basis should pursue one of the full-time Heinz College programs instead. **MSIT is not eligible for a student (F-1 or J-1) immigration status**

Students may petition to exceed 30 units **temporarily** if the student has extenuating circumstances that warrant a heavier course load and their academic performance to that point shows they can handle the extra course load. **International MSIT students can never exceed 30 units**, regardless of circumstances, due to visa regulations.

A full-semester course carries 12 units (equivalent to 4 credits on that common scale) and generally expects 12 hours of time and effort per week on average, including 3 hours of lecture per week. "Mini" courses are half of a semester in length; they generally carry 6 units (equivalent to 2 credits) and require about 12 hours per week as well. Part-time students should use this as a guide to determine how much coursework they can manage on top of their existing employment and personal commitments.

Students may adjust their course load without any academic or financial penalty up until the official Add/Drop deadline for Heinz College classes, which is typically within the first two weeks of a semester-long class and just the first week of each mini-semester class. Any schedule changes after that deadline must be due to extenuating circumstances and require filing a [General Petition form](#). Students should discuss their situation with the Program Director first as there may be other options besides dropping, such as requesting an Incomplete (I) grade or using your annual Late Voucher to switch to Pass/No Pass Grade.

4.3. Exemption and Transfer Credit

All petitions for exemption and transfer credit should be submitted within your first semester of enrollment.

MSIT students may pursue exemptions from core courses if you have already acquired all or most of the skills taught in that course outside of the College. To receive an exemption, you must petition the instructor of the relevant course or take their qualifying

exam. The procedures are in the [Student Handbook](#) and general information is posted [here](#). Please note you do not earn credit for an exemption; therefore, you must take additional elective to make up the core units that were exempted. An exemption does mean you have satisfied completion of that core course for purposes of graduation, as well as if that course is a prerequisite for another class.

Refer to the [Heinz College Student Handbook](#) section for **Transfer Credit** information. In general, the Heinz College full-time programs do not give transfer credit for graduate courses taken prior to admission. However, the **MSIT program will consider up to 24 units of relevant transfer credit** to count towards MSIT electives. The **Application for Transfer Credit** is provided by the MSIT Program Director during orientation and upon request. Applications are decided on a case-by-case basis and depend on a few factors. Minimum criteria include that the credit was earned with a grade of B or better within the last 5 years at a regionally accredited university. That grade will not be calculated into your CMU quality point average, but the units will be counted towards MSIT elective and will appear on your CMU transcript.

4.4. Elective Options

Independent Study: Students may take up to 12 units of Independent Study as an elective, except for our sponsored students from General Motors. Contact the MSIT Program Director for guidelines on developing an appropriate independent study.

Pass/No Pass Grade Option: Students may take up to 12 units of elective coursework with the Pass/No Pass grade, except for our sponsored students from General Motors. See more details in the College Handbook.

Registering for Non-Heinz College Courses: Students may take up to 40 units of graduate coursework from other CMU departments outside of Heinz College, except for our sponsored students from General Motors. You must get approval in advance from the Program Director over email or by filing a [General Petition](#) prior to the course start date.

Courses at Other Universities: This falls under the transfer credit policy for MSIT (see Section 3.3 above) and must be courses completed prior to admission. Any exceptions to that policy must be due to extenuating circumstances and require a petition to the Program Director before taking the non-CMU course.

4.5. Java Programming Prep Course and Other Training Resources

The Heinz College's School of Information Systems and Management courses (95-xxx) typically expect students to have had an undergraduate level object-oriented programming

course or equivalent work experience. This background is absolutely required before taking our Java programming classes, 95-712 or 95-807. Anyone lacking that background or needing a refresher should pursue a prep course outside of the MSIT curriculum, such as:

- CMU Open Learning:
<https://oli.cmu.edu/courses/introduction-to-programming-in-java-o-f/>
- Heinz College Admissions: [Pre-Approved Java Programming Courses](#) for MSIT/MISM applicants
- CMU students have free access to online training at [Lynda/LinkedIn Learning](#)

5. MSIT Curriculum

5.1. MSIT-Information Technology Management (MSIT-ITM, MSIT-IMD)

This degree can be done fully online or a hybrid of online and on-campus evening classes. It requires one undergraduate level object-oriented programming class or equivalent work experience prior to admission (see [Java Programming Prep Course and Other Training Resources](#) for java prep suggestions.)

No.	Title	Units
95-703	Database Management	12
95-807*	Object Oriented Programming for Managers (Java)	12
95-705	Telecommunications Management	12
95-734	Managing Digital Business	12
95-706	Object-Oriented Analysis and Design	6
95-808**	IT Project Management	6
Various	Electives	84
Total:		144

* 95-712 can be substituted for 95-807 by local students; you may take either one but not both. 95-712 is recommended if you intend to take more technical electives on-campus, like 95-702 Distributed Systems, 95-771 Data Structures, or any School of Computer Science course.

** 94-813 can be substituted for 95-808.

5.2. MSIT-Information Security and Assurance (MSIT-ITA, MSIT-DIA)

This degree can be done fully online or a hybrid of online and on-campus evening classes.

No.	Title	Units
95-752	Intro to Information Security Management	12
95-705	Telecommunications Management	12
95-743*	Cybersecurity Policy and Governance I	6
95-744*	Cybersecurity Policy and Governance II	6
95-748	Software and Security	6
95-755	Information Security Risk Management	6
95-758	Network and Internet Security	12
Various	Electives	84
Total:		144

* For students admitted before Fall 2024: See your program director for clarification on how recent changes to the cyber policy classes may impact your core requirements. Prior students had a 6-unit cyber policy with a 6-unit privacy core requirement, instead of 12 units of cyber policy.

5.3. MSIT-Business Intelligence and Data Analytics Track (MSIT-BI, MSIT-DBI)

This degree can be done fully online or a hybrid of online and on-campus evening classes.

No.	Title	Units
95-703	Database Management	12
95-888	Data-focused Python	6
95-796*	Statistics for IT Managers	6
94-806	Privacy in the Digital Age	6
95-797	Data Warehousing	6
95-868	Applied Exploratory Data Analysis	6
95-854	Machine Learning	6
95-865	Unstructured Data Analytics	6
95-866	Advanced Business Analytics	6
Various	Electives	84
Total:		144

* For local students only: 95-796 can be substituted with 91-801 or 90-707, which are all on-campus classes.

5.4. Customized Partner Programs

All Heinz College and MSIT policies apply unless otherwise modified in the curriculum distribution listed here or in the educational partnership agreement/contract.

5.4.1. General Motors Information Systems Management (MSIT-DIM aka MSIT-ISM)

No.	Title	Units/Credits
95-703	Database Management	12/4
95-807	Object Oriented Programming for Managers (Java)	12/4
95-705	Telecommunications Management	12/4
95-734	Managing Digital Business	12/4
95-706	Object-Oriented Analysis and Design	6/2
95-808	IT Project Management	6/2
95-752	Intro to Info Security Management	12/4
95-720	Information Systems Project	24/8
Various*	ISM-related Electives	30/10
Various*	General Electives	18/6
Total:		144/48

* See the GM TEP Office for the approved list of electives in the TEP MSIT-ISM Curriculum Plan.

5.4.2. General Motors Business Intelligence & Data Analytics (MSIT-GBI aka MSIT-BIDA)

This major was added by GM TEP in Spring 2018:

No.	Title	Units/Credits
95-703	Database Management	12/4
95-888	Data-focused Python	6/2

95-796	Statistics for IT Managers	6/2
94-806	Privacy in the Digital Age	6/2
95-797	Data Warehousing	6/2
95-868	Applied Exploratory Data Analysis	6/2
95-854	Machine Learning	6/2
95-865	Unstructured Data Analytics	6/2
95-866	Advanced Business Analytics	6/2
95-720	Information Systems Project	24/8
Various*	BIDA-related Electives	30/10
Various*	General Electives	30/10
Total:		144/48

* See the GM TEP website for the approved list of electives in the TEP MSIT-ISM Curriculum Plan.

5.4.3. General Motors Information Security & Assurance (MSIT-GSA aka MSIT-ISA)

This major was added by GM TEP in Fall 2018:

No.	Title	Units/Credits
95-752	Intro to Information Security Management	12/4
95-705	Telecommunications Management	12/4
95-743*	Cybersecurity Policy and Governance I	6/2
95-744*	Cybersecurity Policy and Governance II	6/2
95-748	Software and Security	6/2
95-755	Information Security Risk Management	6/2
95-758	Network and Internet Security	12/4
95-720	Information Systems Project	24/8
Various**	BIDA-related Electives	30/10
Various**	General Electives	30/10
Total:		144/48

* For students admitted before Fall 2024: See your program director for clarification on how recent changes to the cyber policy classes may impact your core requirements. Prior

students had a 6-unit cyber policy with a 6-unit privacy core requirement, instead of 12 units of cyber policy.

**See the GM TEP website for the approved list of electives in the TEP MSIT-ISM Curriculum Plan.