

Name: _____

Date Submitted: _____

ID# (Last 4 digits): _____

Date Reviewed: _____

Reviewed with: _____

Anticipated Term of Graduation: _____

Areas of Concentration (Please mark with a "X"):

- | | |
|--|---|
| <input type="radio"/> Networking Protocols | <input type="radio"/> Business Information Technology |
| <input type="radio"/> Telecommunications | <input type="radio"/> Health Information Technology |
| <input type="radio"/> Security | <input type="radio"/> Analytics and Business Intelligence |
| <input type="radio"/> Software Development | <input type="radio"/> Decision Support |
| <input type="radio"/> Big Data | |

Sequence of Courses:

Completion of the VT-MIT degree consists of taking 11 courses* total (33 credit-hours). You must take a minimum of four foundation courses, however you can take all six. You will then choose from 16 elective courses, to complete 11 courses in total. The VT-MIT program offers concentration areas (modules), as shown above. Courses may be taken in any order if there is not a prerequisite. You will see there is great flexibility, and it is possible to complete up to three modules. Your plan of study should be discussed with the VT-MIT Program Office no later than your third semester in the program. New modules and courses may be added.

	Courses Taken/ To Be Taken	Semester	Year
Foundation Courses	ACIS 5504 – Information Systems Design and Database Concepts (Fall, Spring)		
	BIT 5594 – Web-based Applications and E-Commerce (Fall, Spring)		
	CS 5044 – Object-Oriented Analysis & Design (Fall, Spring, Summer) <i>Requires experience programming in a modern language such as C, C#, C++ or Java</i>		
	CS 5704 – Software Engineering (Fall, Spring) <i>Prerequisite: CS 5044</i>		
	ECE 5484 – Computer System Architecture (Fall, Spring, Summer) <i>Requires experience programming in a modern language such as C, C#, C++ or Java</i>		
	MGT 5804 – Leadership in Technology-Based Organizations (Fall, Spring, Summer I)		
Electives	ACIS 5524 – Advanced Data Management Systems I (Fall, Spring) <i>Prerequisite: ACIS 5504</i>		
	ACIS 5534 – Systems Development (Fall, Spring) <i>Prerequisites: ACIS 5504</i>		
	ACIS 5574 – Healthcare Data Management (Summer II)		
	BIT 5474 – Computer-Based Decision Support Systems (Fall)		
	BIT 5495 – Decision Support Systems; Design & Implementation (Last Offering Spring 2016)		
	BIT 5484 – Cognitive Computing with Smart Service Systems (Spring) <i>Prerequisites: BIT 5474</i>		
	BIT 5524 – Introduction to Business Intelligence & Business Analytics (Fall)		
	BIT 5534 – Applied Business Intelligence & Business Analytics (Spring) <i>Prerequisites: BIT 5524</i>		
	BIT 5564 – Healthcare Information Technology (Summer I)		

*If you enrolled in the program before Fall 2015, then your VT-MIT degree will consist of 10 courses. You are automatically “grandfathered” into the new degree set-up; you may choose whether or not to take an 11th course.

	Courses Taken/ To Be Taken	Semester	Year
Electives	CS 5244 – Internet Software (Fall, Spring) Prerequisites: CS 5044 and CS 5704		
	CS 5744 – Software Design & Quality (Fall, Spring) Prerequisites: CS 5044 and CS 5704		
	CS 5644 - Machine Learning with Big Data (Fall) Prerequisites: CS 5044		
	CS 5664 – Social Media Analytics (Spring) Prerequisites: CS 5044		
	ECE 5485 – Network Architecture & Protocols I (Fall 2015, Fall 2017, Fall 2019) Prerequisite: ECE 5484		
	ECE 5486 – Network Architecture & Protocols II (Spring 2016, Spring 2018, Spring 2020) Prerequisites: ECE 5484 and ECE 5485		
	ECE 5585 – Information Technology Security & Trust I (Fall) Prerequisite: ECE 5484		
	ECE 5586 – Information Technology Security & Trust II (Spring) Prerequisites: ECE 5484 and ECE 5585		
	ECE 5665 – Telecommunications I (Last Offering Fall 2016) Prerequisite: ECE 5484		
	ECE 5666 – Telecommunications II (Last Offering Spring 2017) Prerequisites: ECE 5484 and ECE 5565		

Area of concentration (modules) may be taken utilizing the majority of electives in the VT-MIT program curriculum. Courses to be taken for each concentration are listed below. Note that the modules and selected courses may change over time, with **Networking** being offered to students **every other year** and the 2016-2017 school year being the *last offering of the Telecommunications* module.

Networking Protocols**

- ECE 5484 – Computer System Architecture
- ECE 5565/5984 – Networking Architecture & Protocols I
- ECE 5566 – Networking Architecture & Protocols II

Telecommunications**

- ECE 5484 – Computer System Architecture
- ECE 5665 – Telecommunications I
- ECE 5666 – Telecommunications II

Security

- ECE 5484 – Computer System Architecture
- ECE 5585 – Security & Trust I
- ECE 5586 – Security & Trust II

Software Development

- CS 5044 – Object-Oriented Analysis & Design
- CS 5704 – Software Engineering
- CS 5244 – Internet Software
- CS 5744 – Software Design & Quality

Big Data

- CS 5044 – Object Oriented Analysis & Design
- CS 5644 – Machine Learning with Big Data
- CS 5665 – Social Media Analytics

Business Information Technology

- ACIS 5504 – Info Systems Design & Database Concepts
- ACIS 5524 – Advanced Data Management Systems I
- ACIS 5534 – Systems Development

Health Information Technology

- ACIS 5504 – Info Systems Design & Database Concepts
- BIT 5564 – Healthcare Information Technology
- ACIS 5574 – Healthcare Data Management

Analytics and Business Intelligence

- BIT 5594 – Web-based Applications & E-Commerce
- BIT 5474 – Intro to Business Intel & Business Analytics
- BIT 5534 – Applied Business Intel & Business Analytics

Decision Support

- BIT 5594 – Web-based Applications & E-Commerce
- BIT 5474 – Computer-Based Decision Support Systems
- BIT 5495* – Decision Support Design & Implementation (or)
- BIT 5484* – Cognitive Computing with Smart Service Systems

** Networking is offered during the 2017-2018 and 2019-2020 academic years and the final offering of the Telecommunications module will be offered during the 2016-2017 academic year.