



THE VT-MIT DEGREE REQUIRES A MINIMUM OF 11 COURSES (33 CREDIT HOURS), OF WHICH AT LEAST FOUR MUST BE CORE COURSES. THE REMAINING SEVEN MAY BE CHOSEN FROM THE LIST OF ELECTIVES BELOW. YOU MAY MIX AND MATCH YOUR ELECTIVES. THE ELECTIVES ARE ORGANIZED BELOW INTO SUGGESTED AREAS OF SPECIALIZATION. VIEW THE [COURSE LISTING](#) FOR A LIST OF THE CORE COURSES.  
FA = FALL SP= SPRING SU = SUMMER

COURSE NUMBER	COURSE TITLE	REQUIRED PREREQUISITE	SUGGESTED PREREQUISITE	TERMS AVAILABLE
<b>ANALYTICS &amp; BUSINESS INTELLIGENCE</b>				
BIT 5524	Introduction to Business Intelligence & Analytics		BIT 5594 or MGT 5804	FA
BIT 5534	Applied Business Intelligence & Analytics	BIT 5524		SP
<b>BIG DATA</b>				
CS 5644	Machine Learning with Big Data	CS 5044		FA
CS 5664	Social Media Analytics	CS 5044		SP
<b>BUSINESS INFORMATION SYSTEMS</b>				
ACIS 5524	Advanced Database Management Systems	ACIS 5504		FA, SP
ACIS 5534	Information Systems Analysis and Design	ACIS 5504		FA
<b>CYBERSECURITY</b>				
ECE 5480	Cybersecurity and the Internet of Things	ECE 5484 or CS 5044		FA, SP
ECE 5585	IT Security and Trust I	ECE 5484		FA
ECE 5586	IT Security and Trust II	ECE 5585		SP
<b>CYBERSECURITY MANAGEMENT</b>				
BIT 5134	Cybersecurity Program Design & Operations		BIT 5594 or MGT 5804	FA, SU
ACIS 5624	Cybersecurity Governance and Risk Management		BIT 5594 or MGT 5804	SP
<b>CYBERSECURITY POLICY</b>				
BIT 5114	Crime and Conflict in Cyberspace		BIT 5594 or MGT 5804	SP, SU
BIT 5124	Cyber Law and Policy for Information Technology		BIT 5594 or MGT 5804	FA
<b>DECISION SUPPORT SYSTEMS</b>				
BIT 5474	Computer-Based Decision Support Systems		BIT 5594	FA
BIT 5484	Cognitive Computing for Smart Service Systems	BIT 5474		SP
<b>HEALTH INFORMATION TECHNOLOGY</b>				
BIT 5564	Healthcare Information Technology		ACIS 5504	SU
BIT 5574	Healthcare Data Management		ACIS 5504	SU
<b>INNOVATION/ENTREPRENEURSHIP IN AI/ML</b>				
ECE 5494	Innovative Pathways in AI & Machine Learning	ECE 5484 or MGT 5804		SP
MGT 5824	Technology-Based Entrepreneurship	MGT 5804		SU
<b>NETWORKING</b>				
ECE 5485	Networks and Protocols I	ECE 5484		FA
ECE 5486	Networks and Protocols II	ECE 5485		SP
<b>SOFTWARE DEVELOPMENT</b>				
CS 5744	Software Design & Quality	CS 5704		FA
CS 5244	Web Application Development	CS 5044		FA, SU
CS 5254	Mobile Application Development	CS 5044		SP
<b>SOFTWARE ENGINEERING</b>				
CS 5044	Object-Oriented Programming with Java (CORE)	Java, C, C++ or C#		FA, SP, SU
CS 5704	Software Engineering (CORE)	CS 5044		FA, SP
CS 5744	Software Design & Quality	CS 5704		FA