1 ITB credits is equivalent with 45 hours/semester

CoC GVSU Courses	GVSU Credits	GVSU Mandatory or Elective	GVSU Track	ITB Courses	ITB Credits
CIS 518 Secure Software Engineering	3	Mandatory	Cybersecurity	IF5161 Data and Software Security	3
CIS 611 Introduction to Software Engineering	3	Elective		IF5200 Applied Research Project	5
CIS 612 Requirements Specification	3	Elective		IF5120 Software Requirement Engineering	3
CIS 613 Software Testing	3	Elective		IF5220 Software Quality	3
CIS 616 Data Security and Privacy	3	Mandatory	Cybersecurity	IF6160 System Security and Privacy	3
CIS 617 Digital Forensics and Investigations	3	Mandatory	Cybersecurity	IF5260 Digital Forensics	3
CIS 622 Software Design Methodologies	3	Elective		IF5121 Software Design	3
CIS 635 Knowledge Discovery and Data Mining	3	Mandatory	All Tracks	IF5141 Data Mining	4
CIS 656 Distributed Systems	3	Elective		IF5112 Advanced Distributed Systems	3
CIS 657 Mobile Application Development	3	Elective		IF5230 Mobile Technology and Application	3
CIS 671 Information Visualizaiton	3	Mandatory	DSA, HIB	IF6140 Data Visualization and Storytelling	3
CIS 672 Computer Systems Architecture	3	Elective		IF6211 Advanced Computer Architecture	3
CIS 673 Principle of Database Design	3	Mandatory	Applied Computer Science	IF5101 Data Management	3
CIS 675 Compiler Construction	3	Elective		IF5210 Compilator design	3
CIS 678 Machine Learning	3	Elective	ACS, CBS, DSA, HIB	IF5140 Machine Learning	3
CIS 690 Thesis Research Preparation	3	Mandatory	All Tracks	IF5002 Research Proposal	2
CIS 693 Master's Project	3	Mandatory	All Tracks	IF5200 Applied Research Project	5
CIS 695 Master's Thesis	3	Mandatory	All Tracks	IF5091Thesis 1, IF6098 Thesis 2, IF6099 Master Thesis Defense	12

1 ITB credits is equivalent with 45 hours/semester

ITB Course Code	ITB Course Name	ITB Credits	ITB Mandatory or Elective	CoC GVSU Course Name	GVSU Credits
IF5002	Research Proposal	2	Program Mandatory	CIS 690 Thesis Research Preparation	3
IF5091	Thesis 1	4	Program Mandatory	CIS 695 Master's Thesis	3
IF5101	Data Management	3	Program Mandatory	CIS 673 Principle of Database Design	3
IF5112	Advanced Distributed Systems	3	CS Track Mandatory	CIS 656 Distributed Systems	3
IF5120	Software Requirement Engineering	3	SE Track Mandatory	CIS 612 Requirements Specification	3
IF5121	Software Design	3	SE Track Mandatory	CIS 622 Software Design Methodologies	3
IF5140	Machine Learning	2	DS Track Mandatory	CIS 678 Machine Learning	3
IF5141	Data Mining	4	DS Track Mandatory	CIS 635 Knowledge Discovery and Data Mining	3
IF5161	Data and Software Security	3	CSec Track Mandatory	CIS 518 Secure Software Engineering	3
IF5200	Applied Research Project	5	Program Mandatory	CIS 611 Introduction to Software Engineering CIS 693 Master's Project	3
IF5220	Software Quality	3	SE Track Mandatory	CIS 613 Software Testing	3
IF5230	Mobile Technology and Application	3	MMT Track Mandatory	CIS 657 Mobile Application Development	3
IF6098	Thesis 2	6	Program Mandatory	CIS 695 Master's Thesis	3
IF6099	Master Thesis Defense	2	ITB Mandatory	CIS 695 Master's Thesis	3
IF6140	Data Visualization and Storytelling	3	Elective	CIS 671 Information Visualization	3
IF6160	System Security and Privacy	3	CSec Track Mandatory	CIS 616 Data Security and Privacy	3
IF6211	Advanced Computer Architecture	3	Elective	CIS 672 Computer Systems Architecture	3