

James Madison University Bachelor of Science in Information Technology

Associate Transfer Degree Plan in Information Technology

COURSE REQUIREMENTS

Complete at VCCS				Complete at JMU		
BACHELOR'S DEGREE REQUIREMENT	SATISFIED BY			BACHELOR'S DEGREE REQUIREMENT		
Course	Credits	CC Course	Notes	Course	Credit	Notes
UNST 000	1-2	SDV 100 College Success Skills or 101 Orientation		IT 212	3	Digital Electronics
WRTC 000	3	ENG 111 College Comp I	ENG 111 + ENG 112 (Both must be completed to receive credit for WRTC 103)	IT 240	3	Database Administration
WRTC 103*	3	ENG 112 College Comp II or 113 Tech Prof Writing		IT 301	3	Web Technologies
JMU General Education Requirements*	3	Any UCGS Art or Humanities	These two courses must come from two different disciplines.	IT 302	3	Societal and Ethical Issues in Information Technology
JMU General Education Requirements*	3	Any UCGS Art, Humanities, or Literature		IT 333	3	Advanced Networking for Information Technology
JMU General Education Requirements*	3	Any UCGS Social & Behavioral Science (not History)		IT 311	3	Operating Systems Administration
JMU General Education Requirements*	3	Any UCGS Social & Behavioral Science (not History)		IT 313	3	Community Projects
JMU General Education Requirements*	4	Any UCGS Natural Sciences		IT 340	3	Data Science and Machine Learning
MATH 220	3	MTH 245 Statistics	Prerequisite: MTH 154 or 161	IT 347	3	Interactive Computing Systems
JMU General Education Requirements*	3	Any UCGS History		IT 444	1	Capstone Project Design
JMU General Education Requirements*	3	CST 100 - Public Speaking or CST 110 - Human Communication	CST 100 = SCOM 122 CST 110 = SCOM 121	IT 445	3	Capstone Project Implementation
MATH 235	4	MATH 263 Calculus I		Senior IT 400-level Electives	9	Complete three IT Senior Electives from the following list: IT 460 (Advanced Cybersecurity), IT 461 (Internetworking), IT 462 (Network Applications Development), IT 465 (Wireless Networking and Security), IT 334 (Computer Cyber Crime, Forensics and Auditing), IT 341 (Mobile Applications), IT 342 (Web Server Administration), IT 435 (Cryptography for Information Technology), and IT 443 (Cloud Computing and IoT Networks).
CS 149	3	CSC 221 Introduction to Problem Solving and Programming or ITP 120 Java Programming I				
				University Electives	20	All students must complete 30 credits at JMU, 60 credits from a 4-year university, and 120 total credits for the degree

MATH 227 or CS 227 or IT 201	3	MTH 288 Discrete Math OR CSC 208 Introduction Discrete Structures	MTH 263 is a prerequisite for MTH 288			
IT General Elective	3-4	ITN 100 Introduction to Telecommunications or ITN 101 Introduction to Network Concepts	= IT 101			
CS 159 or IT 160	4	CSC 222 Object-Oriented Programming or ITP 150 Python Programming	CSC 221 is a prerequisite for CSC 222			
IT 215	3-4	ITN 170 Linux System Administration	Credit only awarded for IT 215 if student has also completed ITN 100 or 101 in addition to ITN 170			
IT 203	3-4	ITN 260	Both required to receive transfer credit for IT 203. 3 credits will be awarded for IT 203, the other credits will transfer as IT 000.			
	3-4	ITN 262				
Calculus prerequisites if needed or additional major requirements or transfer electives	0-6	Math prerequisites: MTH 161 + 162 or MTH 167	<p>Take math prerequisites if needed before taking MTH 245 and MTH 263</p> <p>If available, you are encouraged to take ITD 256 (=IT 240) and/or ETR 113 (=IT 212). Students who complete both courses in addition to other coursework above before transfer will be eligible to begin 300-level coursework in their first semester at JMU.</p> <p>Otherwise, use these credits for other IT courses or transfer electives to reach 60 credits for the associate degree.</p>			
CREDITS PRE-TRANSFER: 60-62				CREDITS POST-TRANSFER: 60		

* Students who complete an approved transferable associate degree will qualify for a full waiver of general education requirements at JMU. Students who will not be earning an approved transferable associate degree should complete core community college requirements with courses that also satisfy area requirements in JMU's general education program. For example, the WRTC 103 requirement can only be filled with ENG 111-112 at VCCS. Learn more about JMU general education equivalents offered at VCCS at www.jmu.edu/transfer/vccs-transfer/genedequiv.shtml. Email transferadvising@jmu.edu with questions.

TRANSFER GUIDANCE

Admission into the Information Technology major at JMU

Students who meet the requirements for guaranteed admission to JMU are also guaranteed admission to the IT major.

- Students must complete an approved transferable associate degree from their Virginia community college with a minimum GPA of 3.0 for guaranteed admission to JMU. Students who do not qualify for guaranteed admission are encouraged to apply to JMU through the regular admission process. For additional details about requirements for guaranteed admission, please see the JMU letter of intent for your community college: www.jmu.edu/admissions/apply/transfer-gaa.shtml.

IMPORTANT LINKS & DATES:

- **University Transfer Center:** <https://www.jmu.edu/transfer/>
- **Register Intent to Transfer:** Students can notify JMU of their interest in transferring through College Connect at www.TransferVirginia.org. Transfer applicants from a VCCS institution intending to apply through the Guaranteed Admission Agreement (GAA) must submit a Letter of Intent prior to applying. Requirements and forms are available at: <https://www.jmu.edu/admissions/apply/transfer-GAA.shtml>.
- **Admission Application:** By March 1 for Fall or October 15 for Spring at <https://www.jmu.edu/admissions/apply/apply-online.shtml>
- **Financial Aid:** <https://www.jmu.edu/financialaid>
- **FAFSA - Free Application for Federal Student Aid:** Deadline is March 1. Learn more at studentaid.gov.

WHAT SHOULD I CONSIDER WHEN SELECTING COURSES?

- Create a schedule for all required courses, pay attention to prerequisites and when courses are offered, complete your first math and English courses in your first year. For help, see Transfer Steps and Resource Center at www.TransferVirginia.org.
- Connect with an advisor at your community college and make an appointment with a [JMU Next Transfer Advisor](#) in your first year.



IS THIS DEGREE RIGHT FOR ME?

Information Technology is an excellent match for people who gain satisfaction from doing hands-on with technology, problem-solving, and finding a technology-oriented solution for real-world problems. Information Technology is everywhere, from smart appliances to autonomous vehicles to smart cities. The world is becoming increasingly connected, and job opportunities are abundant for those with the necessary skills.

The Information Technology (IT) major at James Madison University, a Bachelor of Science (BS) degree, focuses on highly relevant skills in cybersecurity, computer networking, and end-user design and development. We go beyond the science behind computers, teaching you how to

design and develop solutions in various computing and networking application areas. The IT major will provide you with the knowledge and skills to meet the computer technology needs of business, government, healthcare, education, and other organizations.

Students majoring in IT can also pursue a minor, such as robotics, mathematics, or data science, among others.

WHAT IS THE IMPACT ON MY DEGREE OF WORK I HAVE ALREADY COMPLETED?

- **Associate Transfer Degree Completion:** An approved transferable associate degree from a Virginia Community College will waive general education requirements at JMU. The list of approved transferable associate degrees can be found at www.jmu.edu/transfer/vccs-transfer/asdegrees.shtml.
- **Dual Enrollment – Completion of Associate Degree in HS:** Students who complete a transferable associate degree from a Virginia Community College through Dual Enrollment will not be eligible for guaranteed admission but will receive the general education waiver at JMU. DE associate degree earners who want to make progress toward their intended major should follow the curriculum in this guide.
- **Credit for Prior Learning:** Credit for prior learning may be awarded differently at JMU than at your previous institution. JMU accepts and reviews AP, IB CIE, and CLEP examinations for all students with eligible scores. JMU will complete an independent review of the test score to apply credit to your JMU student record. Other credit for prior learning is awarded on a per case basis for the ADP and RN-BSN programs in consultation with the department of expertise. Credit for learning acquired in military service is awarded by the registrar's office using the ACE guide credit recommendation for study/experience listed on the military transcript and in consultation with the department of expertise.
- **Catalog Year:** Catalog year determined by first semester of attendance at JMU

IS THIS COLLEGE RIGHT FOR ME?

JMU is a mid to large size institution that behaves more like a smaller institution. Faculty and staff hold students as the top priority. JMU has a 96% satisfaction rate. 88% of classes have fewer than 50 students. JMU is the #1 most recommended public University in the US by the Wall Street Journal and Times Higher Education; JMU is the #1 Best College for Employment in Virginia according to U.S. Department of Education statistics compiled by Zippia. JMU has the highest post-graduation job levels of all Virginia colleges. Learn more about our college at www.jmu.edu and www.TransferVirginia.org.

DID YOU KNOW THAT...

- There is no limit to the number of credits you can transfer to JMU, but 50% of the credits required for graduation in your major must be taken at a 4-year college or university, and 25% must be taken at JMU. (Most JMU majors require 120 credits, so 60 must come from a 4-year and 30 must be taken at JMU.)
- Completing your Associate transfer degree post-high school satisfies all lower division general education requirements and increases the chance of completing your bachelor's degree.

- Exceeding 3 years or 90 credits at your community college means you may have exhausted your financial aid at that college and have limited your future financial aid at JMU.
- Students who may be eligible for Virginia's Two-Year College Transfer Grant should transfer in the fall or spring immediately following the completion of their associate degree. Learn more about the state transfer grant here: <https://www.schev.edu/financial-aid/financial-aid/federal-state-financial-aid/two-year-college-transfer-grant>

WHAT CAN I DO WITH THIS DEGREE?

Explore possible careers, salaries, and job outlook at www.TransferVirginia.org

PROGRAM SUCCESSES & HIGHLIGHTS

The IT Major program was launched at JMU for the Fall 2023 semester and has been growing quickly since then.

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

- Generally, two-thirds of transfer applicants are admitted to JMU. Competitive applicants will have mostly As & Bs and have completed at least one class in each of our four core areas (English, mathematics, lab science, and social science).

- JMU defines a transfer student as a student that has graduated from high school (or holds a GED equivalency) AND has taken courses in college after high school graduation.
- Learn more about applying at <https://www.jmu.edu/transfer/> or www.TransferVirginia.org.

DO MORE WITH YOUR DEGREE!

The IT major is working closely with the Commonwealth Cyber Initiative to provide opportunities for internships and jobs in the workforce of cybersecurity and computer networks. Also, you are encouraged to participate in the research with JMU IT/CS faculty members or in the College of Integrated Science and Engineering (CISE), including presenting your work in national and international conferences and being part of peer-reviewed published work.

There is enough space in the IT major curriculum to claim a minor. Options include the Robotics Minor, Math Minor, and Data Science Minor.

OTHER THAN CLASSES, ARE THERE OTHER PROGRAM REQUIREMENTS?

Students are encouraged to get involved in the different clubs offered in the Computer Science Department.