Transfer Guide

Virginia Community College – Associate of Science in Engineering to James Madison University Bachelor of Science in Engineering

Courses to be completed at your Virginia community college

Note: *If there is a course on this guide that is not offered by your community college or doesn't satisfy associate degree requirements, contact your community college advisor to ask about options. You should also connect with a JMU Next Transfer Advisor (www.jmu.edu/transfer/next) to learn if your progress at JMU will be impacted if you do not complete the course prior to transferring.*

Total credits before transfer: 67

VCCS Course	Credits	JMU Equivalent	Notes
SDV 100 College Success Skills or 101 Orientation to Education	1	UNST 000	
ENG 111 College Comp I	6	WRTC 000	
ENG 112 College Comp II	3	WRTC 103	ENG 111 + 112 both required to satisfy WRTC 103.
UCGS Art, Humanities or Literature - Any	3	Varies	
UCGS Art, Humanities or Literature- Any, but different group than above	3	Varies	
UCGS Social Science - Any	3	Varies	
UCGS History - Any	3	Varies	
MTH 263 Calculus I	4	MATH 235	If needed, complete MTH 161-162 or MTH 167 prior to Calculus I to satisfy prerequisites.
MTH 264 Calculus II	4	MATH 236	
MTH 265 Calculus III	4	MATH 237	
MTH 266 Linear Algebra *and* MTH 267 Differential Equations	6	MATH 300 + 336	Courses transfer as MATH 300 + MATH 336 (3 credits each) and together can be used to satisfy MATH 238 (4 credits).
PHY 241 University Physics I	4	PHYS 240 + 240L	
PHY 242 University Physics II	4	PHYS 250 + 250L	
CHM 111 General Chemistry I	4	CHEM 131 + 131L	
CHM 112 General Chemistry II	4	CHEM 132 + 132L	
EGR 121 Foundations of Engineering*	2	ENGR 000	
EGR 122 Engineering Design*	3	ENGR 112	
EGR 240 Statics* ***and*** EGR 246 Mechanics of Materials*	6	ENGR 212 + ENGR 212L + ENGR 000	
EGR 125, CSC 221 or EGR 206* Programming or Engineering Economics	3	ENGR 000 or CS 149	

* These 5 courses together will qualify you for junior-level engineering courses at JMU. All are required, but some transfer as electives because they do not match exact courses offered at JMU.

Courses to be completed at James Madison University

Total credits at JMU: 65

JMU Courses	Credits	Notes
ENGR 301 Transfer Year Bridge	3	
ENGR 311 + 311L Fluid Mechanics	4	
ENGR 312 + 312L Thermodynamics & Heat Transfer	4	
ENGR 313 + 313L Circuits and Devices	4	
ENGR 314 + 314L Materials and Mechanics	4	
ENGR 315 Computational Methods in Engineering	3	
ENGR 317 Principles of Sustainable Engineering	3	
ENGR 321 Engineering Practicum I	1	
ENGR 323: Engineering Practicum II	1	
ENGR 324 Engineering Project I	1	
ENGR 331 Engineering Design III	3	
ENGR 421: Engineering Practicum III	1	
ENGR 422: Engineering Project II	1	
ENGR 424 Engineering Capstone	2	
5 ENGR Electives	15	Students choosing one of the three concentrations (Civil and Environmental, Geo-Environmental, or Electro-Mechanical Systems) will complete electives specific to that area. Students not choosing a concentration can select any ENGR electives.
4-5 JMU Electives	13	The engineering major requires 129 credits, 65 of which must come from a 4-year institution

Total credit hours: 132

Transfer Guidance for the JMU B.S. in Engineering

Admission into JMU Engineering

If you meet the following criteria, you will be admitted into the engineering major at JMU:

- 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. 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.
- Students must complete the curriculum for the Virginia Community College System's Associate Transfer Degree Plan in Engineering for admission into JMU Engineering.
- A minimum grade of C is required in MTH 263, 264, 265, 266 and 267, PHY 241 and 242, CHM 111 and 112, and all engineering coursework at your Virginia community college.
- Following the end of your first fall semester at JMU, you will apply to the engineering program at JMU. Admission to the program requires having completed at least 15 credits at JMU, including specific ENGR courses, and may be a competitive process. See the JMU Academic Catalog for details.

Students who have not completed the courses shown on this guide are still eligible to apply to JMU as a transfer student and declare a major in engineering but will need to complete remaining 200-level coursework prior to advancing to 300-level engineering courses at JMU. Completing the degree could take longer in this case. To talk about how your courses

will map to the engineering major at JMU, make an appointment with a JMU Next Transfer Advising academic advisor at www.jmu.edu/transfer/next.

Advising Guidance

To learn more about transferring to JMU in your preferred major, connect with an advisor at your community college and James Madison University within your first year. You can make an appointment directly with a JMU Next Transfer Advisor: www.jmu.edu/transfer/next.

Program successes and highlights

Our alumni have been employed in more than 420 companies spanning sustainable design, process design, product design, process engineering, project management and systems engineering. A wide range of graduate school options include master's and doctoral programs in civil engineering, environmental engineering, industrial engineering, materials engineering, mechanical engineering, and systems engineering. Over 35 different graduate programs have recruited students from our program. We have ongoing relationships with University of Virginia and Virginia Tech for direct graduate school admission opportunities for our students.

Is this degree right for me?

The JMU Engineering degree program provides an opportunity for exploration of numerous engineering careers. A significant exploration opportunity resides in an immersive engineering experience: a faculty directed team-based project that spans the junior and senior years.

Students in the program may choose to pursue one of the following program concentrations:

- Civil and Environmental Concentration
- Geo-Environmental Concentration
- Electro-Mechanical Systems Concentration

Selection of a concentration is not required.

Do more with your degree!

Many engineering majors complete minors in math, general business, and other related fields. There is also room for 9 elective credits in the major, which allows students to explore professional interests. The program also hosts several student organizations including American Welding Society (AWS), National Society of Black Engineers (NSBE), Society of Automotive Engineers (SAE), Society of Hispanic Professional Engineers (SHPE), and Society for Women Engineers (SWE).

Transferring to JMU

Important links and dates

- **University Transfer Center:** www.jmu.edu/transfer
- **Register Intent to Transfer:** Transfer applicants from a VCCS institution intending to apply through the Guaranteed Admission Agreement (GAA) must review requirements and submit a Letter of Intent prior to applying: www.jmu.edu/admissions/apply/transfer-GAA.shtml
- **Admission Application:** By February 1 for Summer, March 1 for Fall, or October 15 for Spring at www.jmu.edu/admissions/apply/apply-online.shtml
- **Financial Aid:** www.jmu.edu/financialaid
- **FAFSA - Free Application for Federal Student Aid:** Deadline is March 1. Learn more at studentaid.gov.

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.

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/.

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.
- **Dual Enrollment – Completion of Associate Degree in High School:** Students who complete a transferable associate degree from a Virginia Community College through Dual Enrollment (DE) 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's 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

Did you know that…

- There is no limit to the number of credits you can transfer to JMU, but at least 50% of the credits required for graduation in your major must be taken at a 4-year college or university, and at least 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: www.schev.edu/financial-aid/financial-aid/federal-state-financial-aid/two-year-college-transfer-grant.