Transfer Guide
Catalog Year: 2025 - 2026

Bachelors of Science in Materials Science and Engineering
Associate Transfer Degree Plan in Engineering

COURSE REQUIREMENTS

Complete at VCCS				Complete at Virginia Tech						
BACHELOR'S DEGREE REQUIREMENT		**SATISFIED BY**		**BACHELOR'S DEGREE REQUIREMENT**		1st sem (fall)	2nd sem (spring)	3rd sem (fall or spring)	4th sem (fall)	5th sem (spring)
Course	**Credits**	**CC Course**	**Notes**	**Course**	**Credits**	**Notes**				
VT 1XXX	1-2	SDV 100 or 101		MSE 2044	4					
ENGL 1105	3	ENG 111		MSE 2884	1					
ENGL 1106	3	ENG 112		ISE 2214	1					
Pathways Concept 2	3	Any UCGS Art or Humanities		Technical Elective	6	2 courses				
Pathways Concept 2	3	Any UCGS Art, Humanities, or Lit	This course must come from a different group than prior requirement.	MSE 3054 + 3064	3 + 1					
Pathways Concept 3	3	Any UCGS History		MSE 2054	3					
ECON 2005 (Pathways Concept 3)	3	ECO 202		MSE 2114	1					
MATH 1225	4	MTH 263		MSE 3314	1					
MATH 1226	4	MTH 264		MSE 3044	3					
MATH 2204	4	MTH 265		MSE 3884	1					
MATH 2214	3	MTH 267		MSE 4644	3					
PHYS 2305	4	PHY 241	Need CHM 111 and PHY 241+242	Physical Materials class	3					
PHYS 2306	4	PHY 242	Need CHM 111 and PHY 241+242	MSE 3114	1					
CHEM 1035+1045	4	CHM 111		MSE 3134	3					
ENGE 1215	2	EGR 121		MSE 4034	3					
ENGE 1216	3	EGR 122		MSE 4424	1					

MATH 2114	3	MTH 266		Physical Materials classes	6	2 courses
ESM 2104	3	EGR 240		MSE 4075 / MSE 4076	1 + 2	Year-long design project (must begin in fall, and end in spring)
ESM 2204	3	EGR 246		MSE 4055	3	
ESM 2304	3	EGR 245	(counts as Technical Elective)	MSE 4085	3	
CHEM 1036	4	CHM 112		MSE 4086	1	
				Physical Materials Class	3	
				Technical Elective	6	
				ENGE 3900	0	Bridge Experience
				Career Bridge Experiences help prepare students for post-graduation life and develop a professional identity. Internships, Co-ops, and Undergraduate Research are examples of possible Career Bridge Experiences. Because some of these experiences are not credit bearing, the ENGE 3900 course is used to track and assess student participation in Career Bridge and to record fulfillment of this degree requirement on the transcript. Students should enroll in ENGE 3900 during the semester (or one of the semesters) that they undertake the Career Bridge Experience. Enrollment in ENGE 3900 requires approval of a Career Bridge Plan. Further information about acceptable Career Bridge Experiences and the process for submitting a Career Bridge Plan are explained within your major courses.		
CREDITS PRE-TRANSFER: 67 - 68				**CREDITS POST-TRANSFER: 64 (degree total 125)**		

TRANSFER GUIDANCE

Guaranteed Admission Agreement

Students who complete the prescribed curriculum and meet the criteria below are guaranteed admission into Virginia Tech and directly into the Materials Systems and Engineering Major:

- Earn a transfer associate degree AS in Engineering (or AS/AA&S in Science with Specialization in Engineering)
- Earn a minimum of 3.2 GPA for the associate degree.
- Applicants for this major can be guaranteed for the Spring, Summer, or Fall entry terms..
- Complete all steps of the formal admissions application process by the appropriate deadlines for the intended term of entry. Most applicants pursuing guaranteed admission will apply as they are finishing their associate degree.

IMPORTANT LINKS & DATES:

- **Transfer Initiatives Office:** https://advising.vt.edu/transfer-student-advising.html
- **Admission Application:** Find full application instructions and applicable deadlines at: https://vt.edu/admissions/transfer/checklist.html
- **Financial Aid:** https://www.finaid.vt.edu
- **FAFSA** - Free Application for Federal Student Aid: March 1 for fall semester at https://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 https://www.TransferVirginia.org
- Connect with an advisor at your community college and Virginia Tech within your first year. College Connect available in your account of https://www.TransferVirginia.org
- Students entering VT in the fall semester following this plan will have the next spring or fall semester open for a co-op. Students will need to take one of those semesters off due to sequencing of our courses. If students enter VT in the spring following this plan, they will not have a co-op semester but will complete the requirements in 2.5 years.

IS THIS DEGREE RIGHT FOR ME?

- The Bachelor of Science degree in MSE is accredited by ABET.
- Materials scientists and engineers are central to the success of critical technologies, including biotechnology, nanotechology, energy, information technology, transportation systems, national defense and security, and environmental stewardship. Students tailor their degree with electives in several subdisciplines, such as metals, ceramics, polymers, electronic materials, composites, biomaterials, and nanomaterials. These credits may also focus on areas of study in manufacturing, aerospace, automotive, information technology, microelectronics, and other specialities.
- Students are encouraged to participate in undergraduate research with faculty at Virginia Tech

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

- **Associate Transfer Degree Completion:** The completion of an Associate Degree results in all lower-division general education requirements being met when you transfer to Virginia Tech.
- **Credit for Prior Learning:** AP, IB, and CLEP are evaluated for credits https://www.registrar.vt.edu/Advanced-Standing-Transferable-Credit.html
- **Catalog Year:** Catalog year determined by first semester of attendance at Virginia Tech
- **Dual Enrollment – Completion of Associate Degree in HS:** The completion of an Associate Degree concurrent with high school results in up to half the required credits (125) towards a MSE degree, with all general education courses satisfied. Students will be enrolled as a freshman for orientation and engagement purposes.

IS THIS COLLEGE RIGHT FOR ME?

- Virginia Tech's College of Engineering undergraduate programs are ranked 13th in the nation, according to U.S. News & World Report
- Located in rural area, with 2600-acre campus, 37,000 on and off campus students, and a 14:1 student-faculty ratio
- Transfer students have both on-campus and off-campus housing options, including a living community on campus just for transfer students (all majors). https://llp.vt.edu/llc/transfer.html
- Virginia Tech is a diverse campus with students from over 40 states and 115 countries.
- Students can attend full-time or part-time.
- Classes are most typically offered Monday – Friday, 8am – 5pm
- Learn more about our university at https://vt.edu/about/facts-about-virginia-tech.html

DID YOU KNOW THAT…

- 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 Virginia Tech

WHAT CAN I DO WITH THIS DEGREE?

- Graduates are employed in aerospace, automotive, chemical and material, communications, electronics, petroleum and energy, and basic materials-producing industries. Students may qualify for graduate study in engineering, the sciences, medicine, law, and business.
- Explore possible careers, salaries, and job outlook at https://www.TransferVirginia.org and https://eng.vt.edu/academics/undergraduate-students/explore-engineering.html

PROGRAM SUCCESSES & HIGHLIGHTS

- The Engineering Communications Program team is an integral part of the MSE curriculum, teaching courses, conducting workshops, tutoring students, evaluating assignments, and conducting regular programmatic assessment. The program provides instruction in written, oral, and visual communications in both traditional engineering courses and dedicated professional development courses from the sophomore through senior years.
- The median starting salary of 22/23 BAE graduates was $76,000 (with a median bonus of $7,500)

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

- Each year around 400-450 VCCS transfer students apply for admission to a program in the Virginia Tech College of Engineering. Between 60-70% are typically offered admission. The average GPA of transfer students enrolling is 3.5. Learn more about applying at https://vt.edu/admissions/transfer.html

DO MORE WITH YOUR DEGREE!

- Students may complete an accelerated Master's degree in one additional year of enrollment