

# Bachelors of Science in Mechanical 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		1 <sup>st</sup> sem (fall)	2 <sup>nd</sup> sem (spring)	3 <sup>rd</sup> sem (fall or spring)	4 <sup>th</sup> sem (fall)	5 <sup>th</sup> sem (spring)
Course	Credits	Gen ED*	CC Course	Notes	Course	Credits	Notes				
			SDV 100 or 101		ISE 2214	1					
ENGL 1105	3	PUA	ENG 111		MSE 2034	3					
ENGL 1106	3	UA	ENG 112 or 113	Must take ENG 112	ME 2004	3					
Pathways Concept 2	3	PUA	Any Humanities or Fine Arts (PHI 220 may be required)		ECE 2054	3	If EGR 251+255 not taken @ VCCS				
Pathways Concept 2	3	UA	Any Humanities, Fine Arts, or Lit	This course must come from a different group than prior requirement.	ME 2134	4					
Pathways Concept 3	3	PUA	Any History		STAT 3704	2					
Pathways Concept 3	3	PUA	Any Social/Behav Science (ECO 202, PSY 200, or SOC 200 may be required)	This course may not be a history course.	ME 3024	3					
MATH 1225	4	PUA	MTH 263		ME 3414	4					
MATH 1226	4		MTH 264		ME 3524	4					
MATH 2204	3	UA	MTH 265		ME 3624	4					
MATH 2214	3		MTH 267		ME 3304	3					
PHYS 2305	4		PHY 241	Need CHM 111 and PHY 241+242	ME 3534	4					
PHYS 2306	4	PUA	PHY 242	Need CHM 111 and PHY 241+242	ME 4005	3					

CHEM 1035+1045	4		CHM 111		ME 3034		1	
ENGE 1215	2		EGR 121		ME 4015 +	4016	3 + 3	Year-long design project (must begin in fall, and end in spring)
ENGE 1216	2		EGR 122		Technical Electives		12	4 courses total – taken as needed to fill in schedule
ECE 2054	3		EGR 271	(or EGR 251 + 255)	ME 4124		3	
ESM 2104	3		EGR 240		Elective		3-6	Taken as needed to fill in schedule
ESM 2304	3		EGR 245					
ESM 2204	3		EGR 246					
MATH 2114	3		MTH 266					
CREDITS PRE-TRANSFER: 63					CREDITS POST-TRANSFER: 66-69 (degree total 129)			
* <b>A</b> = Completion of the Associate Degree satisfies this General Education Requirement. <b>U</b> = This course satisfies a Uniform Certificate of General Studies requirement. <b>P</b> = This course satisfies a Passport requirement.								

## TRANSFER GUIDANCE

### Guaranteed Program Admission Agreement

Students who complete the prescribed curriculum and meet the criteria below are guaranteed admission into Virginia Tech and directly into the Mechanical 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.
- Register your intent in the Transfer Virginia Portal to use this guarantee after the completion of 15 credit hours and prior to the completion of 30 hours.
- 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>
- **Register Intent to Transfer:** By completion of 30 hours at [www.TransferVirginia.org](http://www.TransferVirginia.org)
- **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 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 Mechanical Engineering is accredited by [ABET](#).
- Students can choose among three majors: Mechanical, Automotive Engineering, and Robotics Engineering
- The ME department at Virginia Tech has one of the largest and most active ASME (American Society of Mechanical Engineers) student sections in the United States. The department offers opportunities for students to attend professional conferences and internships, as well as attend professional development courses offered through the VT Graduate School's Transformative Graduate Education program.
- 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 the community college post high-school graduation.
- **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 (129) towards a ME 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?

- Virginia Tech's ME degree will prepare engineers for successful careers in industry, government, and academia. We emphasize engineering principles, hands-on projects, open-ended problem solving, and the essential skills of teamwork, communication, and ethics, and integrate these into the education of each of our students.
- 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

- Virginia Tech's ME program is ranked #4 in the US for Bachelor's degrees in ME awarded (source ASEE)
- 75% of undergraduate ME students expect full-time employment upon graduation
- The median starting salary of 20/21 AOE graduates was \$68,000 (with a median bonus of \$5,000)

#### 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