#### MIDFIELD

# Virginia Tech 1987-2019

Thomas Cody, Cathy Brawner, Hossein EbrahimiNejad, Nichole Ramirez

06/11/2019



#### **About the University**

Virginia Tech is a public university founded in 1872 with a prominent engineering program. Robert C. Michelson is a prominent alumnus from Virginia Tech most widely known for inventing the entomopter. He is the recipient of the 1998 AUVSI Pioneer Award and the 2001 Pirelli Award. Virginia Tech is located in Blacksburg, Virginia.

#### **Table of Contents**

Term type
Admissions, Engineering, 1 <sup>st</sup> Year 2
Admissions, Engineering, Transfer 2
Admissions, International
Engineering Matriculation Model 4
Readmission for Students in Good Academic Standing5
Grading Policies5
Academic Progress - Engineering7
Engineering Degree Progression9
Financial Aid11
Policies for Students with Disabilities12
Miscellaneous

#### Overview

This summary goes through the years 1987-2019. All catalogs are in one-year increments, save for 2002-2004. Policies are in specific bullet points, and if the policy remains constant throughout the years there is no date in front of the description of the policy. If the policy is only active for a certain amount of time, then there is the range of dates that it was active. In 1987, Virginia Tech was in a quarter system, so many policies are only active for this year and are denoted as such.

## **Term type**

- Virginia tech has a Semester schedule. Ex. Fall, Spring, Summer. Two summer sessions are offered for students.
  - 1987: The academic terms are split into quarters.
  - 2018-2019: Students may take courses during a single winter session.

## Admissions, Engineering, 1st Year

#### **Preferred Admissions**

- After 1991, the required GPA for space-restricted majors is higher.
  - 1994-2000: Applicants should have a B to B+ average.
  - **2000-2002**: Applicants should have a B+ average.
  - 2002-2006: Applicants should have a B+ to A average.
  - 2006-2010: No specific average is listed.
  - 2013-2019: Applicants should have a B to A average.

#### **General Admissions Policies**

- 14-18 units must be categorized as four English credits, Three Math Credits including algebra ll and geometry. Admissions preference will be given to those who complete math beyond algebra ll, Social Science two units one must be in history, Laboratory Science (biology, chemistry, physics) two units required (three for engineering), Additional units three these may be chosen from English, natural sciences, social sciences, history, mathematics, computer science, language studies, and fine arts. These courses must be comparable in content and purpose to other required academic or college preparatory courses, the remaining four may be used on any course the high school grants credit toward meeting graduation requirements.
  - 1994-2019: A fifth unit, in calculus, is recommended for engineering students in these programs of study.
  - 1996-1999: A student must do a fourth unit of math and that credit must include one-half unit of trigonometry and one-half unit of advanced algebra of higher mathematics.
  - 2013-2019: No GPA requirements is listed.

## Admissions, Engineering, Transfer

#### **Articulation Agreements**

• Virginia Tech has a transfer agreement with the Virginia Community College System and the Richard Bland College. A specific engineering articulation

program is also available to students. <u>This program</u> allows students to earn two degrees, one from each institution. The institutions are: Bridgewater College, Elon University, Longwood University, Radford University, Roanoke College, Sweet Briar College, and West Virginia Wesleyan College.

- VCCS students who complete the Associate Degree in Engineering with a minimum 3.0 grade-point-average and who complete a specific list of academic courses are guaranteed admission to the College of Engineering.
  - 1993-2010: Piedmont College offers a program to allow students to earn a specific engineering Associate's Degree.
  - 2012-2015: Students must earn a "B" or better in all engineering, math, and science courses.
  - 2015-2019: Students must earn an average GPA of 3.20.

#### **Preferred Admissions**

- Offers are made to applicants with the strongest academic record.
  - 2005-2019: The most competitive factors for applicants is a 3.00 GPA and completed units in freshman English, math, and science.
  - 2008-2019: Engineering is not listed as a space-restricted major.
  - 2013-2019: Competitive applicants achieve mostly B's or better. Applicants are accepted on a space-available basis.

#### **Requirements to transfer**

- Transfer applicants that have not taken the required engineering courses at another university will be placed in General Engineering.
- Only grades of "C" or higher will transfer. In majors where transfer applications exceed available space, the GPA required for admission may be considerably higher than the minimum "C" level. Applicant must be in good standing with the previous institution which they are transferring from. Applicant should have a 2.00 GPA.
  - o 1988-2019: Veteran applicants must submit a discharge certificate.
  - **2018-2019**: The required GPA is a 2.50.

## **Admissions**, International

#### Requirements

- International applicants need to submit SAT/ACT scores and proof of English proficiency.
  - 1987: Applicants may submit either a TOEFL score of 550 (written) or a SAT verbal of 400.

- 1988-1999: Applicants may only submit a TOEFL score of 550 (written).
- 1992-2019: If the applicant is from a country in which education is taught in English, the applicant does not need to submit a score to show English proficiency.
- 1997-2005: Transfer applicants must submit a syllabus of their past curriculum.
- 1999-2007: Applicants may also submit a score of 207 for the TOEFL (computer).
- 2007-2013: Applicants may also submit a score of 80 (with no sub-score below a 16) for the TOEFL (internet).
- 2013-2018: Applicants may only submit a score of 90 (with no sub-score below 20) for the TOEFL (internet) or a score of 7.0 for the IELTS.
- 2018-2019: Applicants may only submit a score of 80 (with no sub-score below 20) for the TOEFL (internet) or a score of 6.5 for the IELTS. International applicants are required to have 3 units of math, 2 units of a laboratory science, and additional academic units.

## **Engineering Matriculation Model**

#### **Direct to College or School (FYE)**

- At the end of the student's second semester, the student transitions from General Engineering to their specific major.
  - 1996-2019: Students with a 3.40+ GPA can apply for their first choice major after their first semester.
  - 1998-2000: Students may be admitted into Provisional General Engineering.
  - 1999-2019: Students must earn at least a "C-" in any engineering course in order to transition into their major of choice.
  - 2004-2019: Computer Science is considered an engineering major.

#### **Special Placement or Programs for Less Qualified Students**

• 1994-2013: Students may be admitted to "University Studies". Students in this major may not earn a degree, but it provides time to let the student decide their major. Students must enter a specific degree by the time they have earned 60 credits towards graduation or attempted 72 credits.

## **Readmission for Students in Good Academic Standing**

- 1987-1992: Students must apply to be readmitted in the spring semester, and if completed afterwards, must go through a formal reapplication process.
- 1987-2004: If a student resigns in the fall, they may reapply for the spring semester to be readmitted automatically.
- 1992-2019: Students must have a 2.0 QCA to be readmitted automatically. If the QCA is lower, then approval from the academic dean is needed.

## **Grading Policies**

#### Audit

• Courses may be audited with permission of the advisor and instructor. Courses cannot be taken for credit if they are audited.

#### **Course Repeat policy**

- In order to repeat a class for a better grade the grade the student received first must be lower than a "C".
  - 1987-2000: The Freshman Rule is introduced as a way for students to drop six unwanted credits within their first year.
  - 1988-2019: A grade of "P" is recorded when a course is repeated that had a "C" or better.
  - 2016-2019: Students may only attempt a course three times. Repeating a course may affect financial aid.

#### **Credit without grades**

- Virginia Tech recognizes International Baccalaureate (IB) diploma or individual IB courses with advanced standings if the student scores at least a four on the IB higher-level examinations.
- Credit without grades policy Virginia Tech recognizes and accepts courses with a "C" grade or better for transfer.
- Credit can be earned through examinations up to 12 credit hours.
  - 1987: Students can earn up to 18 quarter hours in credit.
- AP credit can be earned up to 38 credit hours.
  - 1987: Students can earn up to 57 quarter hours.
  - 1993-2019: A large table is included on required scores for exams.

#### Drop and Withdrawal

- Withdraws may be made from a course or from the university for a prorated refund.
  - 1990-2019: A clause is added for students withdrawing for medical leave.
  - 2000-2019: A section on course withdrawals is added, stating that a max of 6 credit hours may be dropped after the 6 week drop deadline. A "W" is assigned and does not affect the student's GPA. The student's decision may not be revoked for any reason.
  - **2010-2019**: There are no refunds after a withdrawal.

Grade	Considered	Weight
А	Excellent	4.00-3.80
A-		3.70-3.40
B+		3.30-3.10
В	Good	3.00-2.80
B-		2.70-2.40
C+		2.30-2.10
С	Fair	2.00-1.80
C-		1.70-1.40
D+		1.30-1.10
D	*Barely Passing	1.00-0.80
D-		0.70-0.10
F	Failure	0.00

#### Grade Weights and Grading Scale

\*In 1993, this indication moves to the D-

#### Incompletes

- The incomplete grade or "I" is the prerogative of the instructor.
- To remove an "I" grade, lecture course requirements must be satisfied during the student's first subsequent term of enrollment, and laboratory course requirements must be satisfied prior to the end of the first term during which the course is offered and the student is enrolled.

- "Incomplete (I) and "X" grades are automatically converted to "F" if requirements are not fully satisfied at the discretion of the instructor."
  - o 1992-2019: The QCA is unaffected by an "I".

#### **Independent Study**

- Independent study courses are offered for students who want to go more indepth with a subject.
  - 1988-1997: The course number changes from X970 to X974.

#### Miscellaneous other grade

- I (Incomplete), P (Passing), X (Continuing Course)
  - o 1989-2019: Added NG (No Grade)
  - 2000-2019: Added NR (Not Reported), RP (Repeated Course), S (Satisfactory/credits only), and W (Course Withdrawn)

#### Pass fail

- Only available to those students who have 30 credit hours at Virginia Tech and have a cumulative Quality Credit Average (QCA) of 2.50 or above. Can only earn up to 30 credit hours. Pass/fail may only be used for courses that are neither required nor are part of the core curriculum. A student is only permitted to take up to 10 percent of the requirements for graduation completed at Virginia Tech under the P/F grading system option. Students may not take more than two courses per term. Also can't take physical education activity courses for pass/fail.
  - 1987: Pass-fail available to be earned is 45 quarter hours.
  - **2000-2019**: The GPA requirement changes to 2.00.
  - 2011-2019: Only 12 credit hours may be pass/fail.

## **Academic Progress - Engineering**

#### Academic Good Standing 1987-1997

Hours Attempted (Including Pass/Fail and transferred credit)	<b>Required Cumulative QCA at the End of Each Academic Year</b>
0-37	1.50
37-70	1.75
71+	2.00

• 1997-2019: The good standing QCA universally becomes 2.00.

#### **Consequences of not meeting required performance**

- Warning
  - 1987-1997: A student is placed on academic warning when their cumulative or term GPA falls below a 2.00.
  - 1997-2012: There is no mention of Academic Warning.
  - 2012-2019: A student goes on warning when the semester GPA goes below a 2.00 but the cumulative GPA stays above a 2.00. This does not go on the student's transcript.
- Probation
  - 1995-1997: Any time when a student's cumulative or term QCA falls below the 2.00 average required for graduation. Must enroll in a summer session.
  - 1997-2019: May take no more than 16 credits a semester; may be required to consult with an advisor and to sign an academic contract acknowledging his/her performance is not meeting university standards.
- Suspension
  - 1995-1997: Students are dropped at the end of the academic year, unless extreme circumstances require that an academic dean declares that they cannot return at the end of the semester. The student may return the following fall semester if they enroll in summer session and rectify their grades. If the grades are not brought back up, then the student must wait for 12 months to re-enroll. Second suspension is identical to the first.
  - 1992-1997: The conditions to be on second academic suspension is clarified to be after serving the twelve-month suspension. Reinstatement can be in the summer or fall, and if the student fails they cannot reapply for 2 years.
  - 1994-1997: Students suspended a second time must enroll in a summer or fall session.
  - 1997-2019: First suspension is imposed if one of the following occurs: the student has a cumulative QCA less than 2.00 for 3 academic semesters, a student has 2 consecutive semesters with a QCA of less than a 2.00, or a student under academic review has not fulfilled their academic contract. The student on suspension is on suspension through the next academic term. Once back, the student must earn a minimum of 2.00 QCA on the first semester back and raise the cumulative QCA to at least 2.00 by the end of the second semester back, or earn a 2.50 QCA for every semester back until the cumulative QCA is above a 2.00. The terms for second suspension is failing to meet the requirements to stay from the first

suspension. The student is suspended for a full academic year. The required performance is the same for after a first suspension.

- 1999-2019: Academic review is no longer a reason to be suspended.
- Expulsion
  - Failure to meet requirements after the 2<sup>nd</sup> suspension will result in expulsion.
  - 1995-1996: You can appeal to be readmitted.
  - 1996-2019: There is no immediate appeal process after expulsion.

#### **Clean Slate Policy**

• Starting in 1996, students that have been away for 5 years or longer may request in writing to have their transcript evaluated. Only credits in which a "C" or higher was earned will remain a part of the student's GPA calculation.

#### **Classification Hours**

- 1995-1996: Freshman 0-27, Sophomore 28-59, Junior 60-95, Senior 96+
- 1996-2019: Freshman 0-29, Sophomore 30-59, Junior 60-89, Senior 90+

### **Engineering Degree Progression**

#### **Common Introduction to Engineering**

• All engineering students take chemistry, English, calculus, introductory engineering, and electives. These change frequently depending on the major of interest of the student.

Typical Engineering Core					
First Semester		Second Semester			
Course	Credits	Course	Credits		
General Chemistry I	3	*General Chemistry II	3		
General Chemistry I Lab	1	*General Chemistry II Lab	1		
Introductory Engineering	2	Introductory Engineering	3		
Freshman English I	3	Engineering Science	3		
**Calculus I	5	Freshman English II	3		
Humanities/Social Science Elective	3	**Calculus II	5		

\*Not required after 1999 for all students.

\*\*From 1993-2014, these math courses were split up into Calculus I and Linear Algebra I in the first semester, and Calculus II and Vector Geometry in the second semester. After this, both courses return to 4 credits of Calculus.

• The Introductory Engineering course changes throughout the years following the pattern below:

Years	Course Code	Course Title
1988-1998	EF 1005-1006	Introduction to Engineering
1998-2004	EF 1015-1016	Introduction to Engineering I & II
2004-2015	ENGE 1024 and ENGE	Engineering Exploration and
	1114 or ENGE 1104	Exploration of the Digital Future or
		Exploration of Engineering Design
2015-2019	ENGE 1215-1216	Foundations of Engineering

#### **Engineering Co-Op**

- Must have a 2.00 (engineering must have a 2.50). Must be a sophomore. Students must arrange co-op by themselves. Can co-op for a max of 18 months.
  - 1991-2019: Only 3 working sessions are required instead of 4.
  - 1997-2002: Students must have a 2.00 GPA in the term before their work session and overall before the freshman rule is applied (see Course Repeat Policy).
  - 2002-2018: The co-op must be a full-time employment. Transfer students must be on campus for one semester before doing a working session instead of two semesters.
  - 2018-2019: Work can be part-time or full-time and may be paid or unpaid. There is no listed policy for transfer students.

#### Progress in Engineering Major

- To graduate, students must earn 204 quarter credits and a 2.00 GPA to graduate. Senior year must be completed in residence.
  - 1988-1997: A student must have at least 136 semester credits and a QCA of 2.00 is required to graduate.
  - 1989-2019: Students must complete 12 liberal arts credits instead of 24.
  - 1997-2004: The requirement drops to 128-136 semester credits.
  - 2004-2014: The requirement drops to 120-136 semester credits.
  - 2014-2019: The requirement increases to 123-136 semester credits.
- All students must make progress towards earning a "C" or higher in each course and maintain at least a 2.00 GPA.
- Students must have a 2.00 GPA in order to transfer to a major. Specific departments may set their own requirements.

- 2002-2012: Biological Systems Engineering, Chemical Engineering, Computer Engineering, Electrical Engineering, Industrial and Systems Engineering, and Mechanical Engineering all list specific (higher than 2.0) requirements to transfer in.
- 2004-2012: Computer Science is added as an engineering major and has specific requirements listed.
- 2012-2014: Specific departmental requirements reduce to just entry into Chemical Engineering, Computer Science, and Construction Engineering and Management. Any student with a 3.00 GPA or higher is guaranteed admission into their engineering major of choice. Students in General Engineering must have a 2.00 GPA.
- 2014-2016: Specific departmental requirements reduce down to just Construction Engineering and Management. Students in General Engineering must have a 3.00 GPA.
- 2016-2019: All transfers are on a space-available basis.

## **Financial Aid**

#### Does/does not meet full demonstrated need

• Starting in 1999, the College of Engineering gives out scholarships to students. The amount of scholarships and award amounts change each year.

#### Standards for retaining

- A student must take and complete 24 credit hours a year and meet unlisted GPA requirements.
  - 1987: Students must successfully complete 38 quarter hours.
  - 1989-2019: Full-time enrollment is needed for financial aid in many cases.

#### State merit scholarship program

- The state of Virginia had a grant named "Virginia Scholars Program" until 1997 that awarded \$3,000 per year. It was available to any high school student going into college that shows academic merit.
  - 1998-2019: The Virginia Scholars Program is not listed as an accepted scholarship program in the catalog.
- Academic scholarships are available to students who show academic merit.
  - 1995-2019: A separate application is needed for scholarships.
  - 2017-2018: The deadline to apply for the academic scholarship moved from February 15<sup>th</sup> to December 1<sup>st</sup>.

- 2018-2019: The deadline to apply for the academic scholarship moved from December 1<sup>st</sup> to January 22<sup>nd</sup>.
- Starting in 2012, the Two-Year College Transfer Grant is available to students transferring in from a VCCS institution. Rewards vary up to \$1000. Students must maintain a 3.00 GPA.
  - **2015-2019**: There is no stated funding level.

## **Policies for Students with Disabilities**

#### Accessing accommodations

- Students should reach out to get assessed for accommodations.
  - 1992-1994: Students should reach out to the Dean of Disabled Students.
  - 1994-2000: Students should reach out to the Assistant Dean of Disabled Students.
  - 2000-2019: Students should provide the SSD with documentation. The general rule to follow is "...the less obvious the disability, the more information is required to assess a student's needs and make accommodation recommendations".

#### Name of offices

• The office is named Services for Students with Disabilities (SSD).

#### Position in academic hierarchy

- 1992-2004: The SSD reports to the Dean of Students.
- 2004-2012: There is no specification to where the SSD reports to.
- 2012-2019: The SSD reports to the Office of Equity and Access.

#### Services offered

• The university makes reasonable accommodations and has a variety of mental health services.

## Miscellaneous

- Engineering students must have a laptop for solving and modeling problems.
- Starting in 1995, Virginia Tech focuses on teaching engineering students about "Green Engineering" within the engineering program.