ADVANCE AGREEMENT

To maintain my enrollment in the ADVANCE/NOVA- MASON partnership, I acknowledge that I will:

- Enroll in a minimum of six credits approved for my Advance pathway each fall semester and each semester.
- Complete ENG 111, ENG 125 and the required math for my Advance pathway with grades of A, B, or C in each course within my first 30 credits of enrollment at NOVA.
- Earn grades of A, B or C in all courses.
- Maintain a minimum 2.5 cumulative grade point average each semester at NOVA.
- Maintain communication with my ADVANCE Success Coach each semester to insure that I am enrolled in the courses leading to completion of my associate's degree.
- Read and comply with the NOVA and MASON Codes of Student Conduct at: nvcc.edu/students/handbook/conduct.html and studentconduct.gmu.edu
- Adhere to the Mason Honor Code: To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University Community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set for this Honor Code: Student Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.
- Be responsible for responding to emails sent to my NOVA and MASON email accounts
- Graduate from NOVA with the applicable Associate of Arts, Associate of Science or Associate of Applied Science degree.

Administration of ADVANCE

Advance students with 63 or fewer credits are guided by the academic policies of NOVA. Advance students with 64 or more credits are guided by the academic policies of MASON.

Violations of student behavioral codes may be addressed by one or both institutions. The applicable code will be based on location of the incident(s), severity, as well as in collaboration between the conduct offices at both institutions. Additionally, a student may be charged by both institutions if a possible outcome is suspension or dismissal (expulsion).

Referrals for possible violations of Academic Integrity will be addressed according to the host institution of a particular class. This will be determined by the course listing (i.e. either NOVA or MASON) as well as the affiliation of the faculty member instructing the course.

Enrollment and Financial Aid

With the written approval of the Success Coach, ADVANCE students may co-enroll in a maximum of 9 credits at Mason during the first 63 credits of NOVA enrollment. Each lower-level course must be designated 100-299 and be approved to fulfill an associate's degree pathway requirement.

Advance students recognize that academic, registration and payment policies are different at NOVA and MASON. Additionally, the academic calendars of both institutions vary. Students are expected to comply with the deadlines, policies and procedures at the institution where they are taking courses.

For purposes of awarding financial aid, NOVA will be the home school until the student has completed 63 credits toward their associate's degree in the Advance Program at NOVA, and Mason will be the host school. Upon completion of 63 credits toward their associate's degree in the Advance Program at NOVA, Mason will become the home school, and NOVA will be the host school.

FERPA and Student Records

NOVA and MASON will share academic and financial aid information about ADVANCE students under the terms of the Family Educational Rights and Privacy Act of 1974 (FERPA). FERPA protections go into effect on the first day of classes of the student's first term of enrollment.

| I agree to abide by the information provided in the ADVANCE Agreement. |
|--|
| Name: |
| EMPL ID: |
| Date: |



A.S. Engineering/B.S. Computer Engineering

2019-20

A.S. Engineering Pathway

2019-2020

ADVANCE Program Milestones

- 1. Students must take SDV 100 or SDV 101 in the first semester at NOVA.
- 2. Students must begin Developmental coursework in the first semester in ADVANCE at NOVA.
- 3. Students must take first college-level MTH course and ENG 111 in the semester immediately following the completion of any MTE or ENF courses (excluding summer).
- 4. In the first 30 credits, students must:
 - a. Complete ENG 111 and ENG 112 with a C or better.
 - b. Complete the first college-level MTH course with a C or better.
 - c. Engineering students must begin the calculus sequence and complete Calculus I and II with a B or better.
- 5. Students must complete at least six degree-applicable credits with a C or better each fall and spring semester.
- 6. Students must maintain a 2.5 cumulative GPA.
- 7. Students must apply for NOVA graduation and complete their Associate's degree.

| | NOVA DEGREE REQUIREMENT SEQUENCE | Credits | Courses | MASON TRANSFER EQUIVALENT | MASON CORE/DEGREE EQUIVALENT | |
|-----------------------------------|-------------------------------------|---------|---|--|------------------------------------|--|
| 1 | SDV Course | 1 | SDV 100 College Success Skills OR SDV 101 Orientation to Engineering | UNIV 100 | ELECTIVE | |
| 2 | ENG 111 | 3 | ENG 111 College Composition I | ENGH 101 | Written Comm | |
| 3 | Social/Behavioral Sciences #1 | 3 | HIS 101 History of Western Civilization I OR HIS 102 History of Western Civilization II OR HIS 112 History of World Civilization II | HIST 101 HIST 102 HIST 125 | Western Civ | |
| 4 | MTH 263 | 4 | MTH 263 Calculus I | MATH 113 | Quantitative Reasoning | |
| 5 | EGR 121 | 2 | EGR 121 Foundations of Engineering | ENGR 107 | DEGREE | |
| 6 | CST Course | 3 | CST 100 Principles of Public Speaking OR CST 110 Introduction to Communication | COMM 100 COMM 101 | Oral Comm | |
| 7 | Technical Elective #1 | 4 | CSC 201 Computer Science I | CS 112 | DEGREE | |
| 8 | ENG 112 | 3 | ENG 112 College Composition II | ENGH XXX | Elective | |
| 9 | MTH 264 | 4 | MTH 264 Calculus II | MATH 114 | DEGREE | |
| 10 | Humanities/Fine Arts #1 | 3 | ART 101 History and Appreciation of Art I OR ART 102 History and Appreciation of Art II OR CST 130 Introduction to Theatre OR CST 151 Film Appreciation I OR MUS 121 Music Appreciation I | ARTH 200 ARTH 201 THR 101 ENGH L372 MUSI 101 | Arts | |
| 11 | Social/Behavioral Sciences #2 | 3 | ECO 202 Principles of Microeconomics | ECON 103 | Soc/Behav | |
| 12 | MTH 265 | 4 | MTH 265 Calculus III | MATH 213 | DEGREE | |
| 13 | Technical Elective #2 | 4 | CSC 202 Computer Science II | CS 211 | DEGREE | |
| 14 | Technical Elective #3 | 3 | ECE 101 Intro to Electrical and Computer Engineering | ECE 101 | DEGREE | |
| 15 | PHY 231 | 5 | PHY 231 General University Physics I | PHYS 160-161- 266 | NAT SCIENCE | |
| 16 | Humanities/Fine Arts #2 | 3 | REL 100 Introduction to the Study of Religion OR REL 231 Religions of the World I | RELI 100 RELI 212 | Global | |
| 17 | Technical Elective #4 | 3 | EGR 251 Basic Electric Circuits | See #20 | DEGREE | |
| 18 | PHY 232 | 5 | PHY 232 General University Physics II | PHYS 260-261- XXX | NAT SCIENCE | |
| 19 | Technical Elective #5 | 3 | EGR 252 Basic Electric Circuits II | See #20 | DEGREE | |
| 20 | Technical Elective #6 | 1 | EGR 255 Electric Circuits Laboratory | ECE 285 & ECE 286 & ECE XXX | DEGREE | |
| 21 | MTH 267 | 3 | MTH 267 Differential Equations | MATH 214 | DEGREE | |
| A. S. ENGINEERING DEGREE TOTAL 67 | | | | | | |

Students must choose one of the four technical specializations:

Robotics, Embedded Systems, Computer Networks, Internet of Things, Hardware and System Security **Note: Concentration requirements may also meet some or all of the Technical Elective requirements.**

| | MASON DEGREE REQUIREMENT SEQUENCE | Credits | Course | MASON CORE/DEGREE EQUIVALENT |
|------|--|---------|---|------------------------------------|
| 22 | Computer Science | 3 | CS 222 Computer Programming for Engineers | DEGREE |
| 23 | Gen Ed: Literature | 3 | Approved Literature course** | Literature |
| 24 | Mathematics and Statistics | 3 | MATH 125 Discrete Math | DEGREE |
| 25 | Mathematics and Statistics | 3 | MATH 203 Linear Algebra | DEGREE |
| 26 | Computer Engineering | 3 | ECE 201 Intro to Signal Analysis | DEGREE |
| 27 | Computer Engineering | 4 | ECE 331 Digital System Design AND ECE 332 Digital Electrical and Logic Design Lab | DEGREE |
| 28 | Gen Ed: Written Communication (UL) | 3 | ENGH 302 Advanced Composition (Natural Science Section) | Written Comm |
| 29 | Computer Engineering | 3 | ECE 350 Embedded Systems and Hardware Interfaces | DEGREE |
| 30 | Computer Engineering | 3 | ECE 445 Computer Organization | DEGREE |
| 31 | Computer Engineering | 3 | ECE 220 Continuous-Time Signal and Systems | DEGREE |
| 32 | Computer Science | 3 | CS 310 Data Structures | DEGREE |
| 33 | Mathematics and Statistics | 3 | STAT 346 Probability for Engineers | DEGREE |
| 34 | Computer Science | 3 | CS 471 Operating Systems | DEGREE |
| 35 | Physics | 4 | ECE 333 Linear Electronics I AND ECE 334 Linear Electronics Lab I | Writing Intensive |
| 36 | Computer Engineering | 4 | ECE 448 FPGA and ASIC Design w/ VHDL | DEGREE |
| 37 | Technical Electives | 3 | Technical Elective*** | DEGREE |
| 38 | Computer Engineering | 4 | ECE 447 Single-Chip Microcomputers | DEGREE |
| 39 | Computer Engineering | 1 | ECE 491 Engineering Seminar | DEGREE |
| 40 | Gen Ed: Synthesis/Computer Engineering | 1 | ECE 492 Senior Advanced Design Project I | Synthesis |
| 41 | Technical Electives | 3 | Technical Elective*** | DEGREE |
| 42 | Technical Electives | 3 | Technical Elective*** | DEGREE |
| 43 | Gen Ed: Synthesis/Computer Engineering | 2 | ECE 493 Senior Design Project II | Synthesis |
| 44 | Computer Engineering | 3 | ECE 465 Computer Networking Protocols | DEGREE |
| B.S. | COMPUTER ENGR DEGREE TOTAL | 135 | | · |

Denotes a course that must be taken at George Mason University. Please see your Success Coach to enroll.

For academic policies and procedures, please see Mason catalog - https://catalog.gmu.edu/policies/

Students seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements

^{*}All associated lab courses must be "in-person". Hybrid or online formats will not be accepted.

^{**}For approved Mason Core courses, please visit - https://catalog.gmu.edu/mason-core/

^{***}For approved Technical Electives, please visit - https://catalog.gmu.edu/colleges-schools/engineering/electrical-computer/computer-engineering-bs/#requirementstext