ADVANCE
A NOVA | MASON PARTNERSHIP

A.A.S. Information Systems Technology: Cloud Computing Specialization /
B.A.S. Applied Science - Cloud Computing Concentration: Cloud Technology Track Pathway
2020-2021

A.A.S. Information Systems Technology: Cloud Computing Specialization

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 MTT or ENF courses (excluding summer).
4. In the first 30 credits, students must:
   a. Complete ENG 111 with a C or better.
   b. Complete MTH 161 with a C 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.

BAS degrees are designed for adult learners who have some work experience in their field of choice, but the degree is open to students of all ages. Further, BAS degrees are often considered terminal degrees (i.e. they may not lead to advanced study in master's degree or doctoral programs). Students who are interested in advanced study are encouraged to contact master's programs early to determine if the BAS program fits their requirements.

	NOVA DEGREE REQUIREMENT	Credits	Courses	MASON TRANSFER EQUIVALENT	MASON CORE/DEGREE EQUIVALENT
1	SDV Course	1	SDV 101 Orientation to Information Technology	UNIV 100	Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	ITE 119	3	ITE 119 Information Literacy	IT 104	Info Tech
4	ITP 100	3	ITP 100 Software Design	IT---	Major
5	MTH 154 or higher	3	MTH 161 Pre-Calculus I	None	Prerequisite
6	Social/Behavioral Sciences #1	3	ECO 201 Principles of Macroeconomics **OR** ECO 202 Principles of Microeconomics **OR** GEO 210 Introduction to Cultural Geography **OR** HIS 121 United States History I **OR** HIS 122 United States History II **OR** PLS 135 American National Politics **OR** PLS 211 United States Government I **OR** PSY 200 Principles of Psychology **OR** PSY 230 Developmental Psychology **OR** SOC 200 Principles of Sociology **OR** SOC 211 Principles of Anthropology I	ECON 104 ECON 103 GGS 103 HIST 121 HIST 122 GOVT 103 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 114	Soc/Behav
7	Humanities/Fine Arts	3	ART 100 Art Appreciation **OR** 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 101 ARTH 200 ARTH 201 THR 101 ENGH L372 MUSI 101	Arts
8	ITN 101	3	ITN 101 Introduction to Network Concepts	IT XXX	Major
9	ITN 257	3	ITN 257 Cloud Computing: Infrastructure and Services	BAS---	Major
10	ITP Programming Elective	4	ITP 120 Java Programming I **OR** ITP 150 Python Programming	IT 106 IT 109	Major
11	ITD 256	3	ITD 256 Advanced Database Management	IT---	Major
12	CST Elective	3	CST 100 Principles of Public Speaking **OR** CST 110 Introduction to Communication	COMM 100 COMM 101	Oral Comm
13	ITN 107	3	ITN 107 Personal Computer Hardware and Troubleshooting	IT XXX	Major
14	ITN 170	3	ITN 170 Linux System Administration	BAS---	Major

		Credits	Course		
15	ITN 213	3	ITN 213 Information Storage and Management*	BAS---	Major
16	IT Electives	3	ITN 106 Microcomputer Operating Systems **OR** ITN 290 Coordinated Internship **OR** ITN 295 Topics In---	BAS---	Major
17	Social/Behavioral Sciences #2	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
18	ITD 110	3	ITD 110 Web Page Design I	IT---	Major
19	ITN 200	3	ITN 200 Administration of Network Resources	BAS---	Major
20	ITD 254	4	ITD 254 Virtual Infrastructure: Installation & Configuration	BAS---	Major
21	ITN 260	3	ITN 260 Network Security Basics	IT---	Major

A.A.S. IST CLOUD DEGREE TOTAL	63

B.A.S. Applied Science Cloud Computing Concentration: Cloud Technology Track

This pathway only applies to the Cloud Technology track within the Cloud Computing Concentration.

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
22	Concentration Requirements	3	MATH 108 Introductory Calculus with Business Applications	Quantitative
23	Concentration Requirements	3	IT 102 Discrete Structures	Major
24	Concentration Requirements	3	IT 105 IT Architecture Fundamentals	Major
25	Core Program Requirements	3	BAS 300 Building Professional Competencies	Major
26	Mason Core: Literature	3	Any approved Literature course* (Upper-Level)	Literature
27	General Electives	3	Any General Elective course (Upper-level)	Elective
28	Concentration Requirements	3	IT 300 Modern Telecommunications	Major
29	Mason Core: Written Communication (Upper-Level)	3	ENGH 302 Advanced Composition	Written Comm
30	Mason Core: Natural Science without Lab	3	Any approved Natural Science without Lab course*	Nat Science
31	Mason Core: Global Understanding	3	Any approved Global Understanding course* (Upper Level)	Global
32	Concentration Requirements	3	IT 341 Data Communication and Network Principles	Major
33	Concentration Requirements	3	IT 343 IT Project Management	Major & Writing Intensive
34	Concentration Requirements	3	IT 451 Cloud Services Management	Major
35	Concentration Requirements	3	IT 461 Application Development in Cloud	Major
36	Core Program Requirements	3	BAS 490 Introduction to Research Methods	Major
37	Concentration Requirements	3	IT 442 Cloud Infrastructure	Major
38	Concentration Requirements	3	IT 471 Big Data on Cloud Systems	Major
39	Concentration Requirements	3	IT 481 Cloud Security	Major
40	Mason Core: Natural Science with Lab	4	Any approved Natural Science with Lab course*	Nat Science
41	Core Program Requirements	3	BAS 491 Applied Sciences Capstone	Synthesis

B.A.S. APPLIED SCIENCE - CLOUD COMPUTING DEGREE TOTAL	124

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

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

Students in this pathway will receive credit for all of the above courses at Mason if the grade earned is C or better.

General Note: If English is not your first language or you have completed ESL coursework, you must complete ENG 111 and ENG 112 prior to matriculating to George Mason University to meet the English Language Proficiency requirement.

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