Cloud Computing
AAS → BAS Pathway
Four-Year Plan

Montgomery College
Associate of Applied Science- Cloud Computing Specialization
Years 1-2

Semester 1

MC Course	Course Title	Cr.	Mason Equivalent
ENGL 101 **or** NWIT/CMSC/TECH/DATA elective	Introduction to College Writing **or** Networking and Information Technology/Computer Science/Media Art and Technology/Data Science Elective [TECH272 recommended]	3 or 4	BAS ---- or ENGH ----
CMSC 110 **or** NWIT101	Computer Concepts **or** Introduction to Internet of Things	3	BAS ----
NWIT 105	Introduction to Cloud Computing	3	BAS ----
MATH 150 **or** MATH 181	Elementary Applied Calculus I **or** Calculus I	4	MATH 108 or MATH 113 (Mason Core Quant Reasoning)
NWIT 127	Microcomputer Essentials	3	IT 104 (Mason Core Info Technology)

Semester 2

MC Course	Course Title	Cr.	Mason Equivalent
ARTD or HUMD	Humanities or Fine Arts Elective*	3	Mason Core Art
CMSC 135 or CMSC 140	Introduction to Scripting or Introduction to Programming	3	CS ---- or BAS ----
NWIT 151	Introduction to Networking	3	BAS ----
ENGL 102	Critical Reading, Writing, and Research	3	Mason Core Written Communication
NWIT 170	Network Operating Systems	3	BAS ----

Semester 3

MC Course	Course Title	Cr.	Mason Equivalent
COMM 108	Foundation of Human Communication	3	Mason Core Oral Communication
NWIT 173	Network Security	3	BAS ----
NWIT 203	Microsoft Windows Server	3	BAS ----
CMSC 253	Unix/Linux System Admin	4	BAS ----
BSSD	Behavioral and Social Sciences	3	Mason Core Social/Behavioral Sciences

Semester 4

MC Course	Course Title	Cr.	Mason Equivalent
NWIT 204	Network Visualization	4	BAS ----
NSLD	Natural Science with Lab*	4	Mason Core Natural Science w/lab
CMSC246	Introduction to SQL Using oracle	3	CS ----
CMSC201 or CMSC206	Java Programming **or** Python Programming	3 or 4	CS ----

Total MC Credits: 61 - 63

NOTES:
- Students in the AAS→BAS pathway will receive credit for all of the above courses at Mason if the grade earned is C or better.
- Mason courses CS----, IT ---- and BAS ---- are applicable to the BAS-Cloud program. Since Mason does not have an equivalent courses, the ---- designation is utilized.
- In order to receive Mason Core credit for * courses, students must select from approved list of courses.

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George Mason University
Bachelor of Applied Science - Cloud Computing Concentration
Years 3-4

Semester 5

Mason Course	Course Title	Credits	Requirement Fulfilled
IT 102	Discrete Structures	3	Major: Concentration
IT 105	IT Architecture Fundamentals	3	Major: Concentration
BAS 300	Building Professional Competencies	3	Major: Core
-----	Mason Core: Literature	3	Mason Core
-----	Mason Core: Western Civilization*	3	Mason Core

Semester 6

Mason Course	Course Title	Credits	Requirement Fulfilled
IT 109	Introduction to Computer Programming	3	Major: Concentration
IT 300	Modern Telecommunications	3	Major: Concentration
ENGH 302	Advanced Composition	3	Mason Core
----	Mason Core: Global Understanding*	3	Mason Core
-----	Mason Core or Elective	3	Mason Core

Semester 7

Mason Course	Course Title	Credits	Requirement Fulfilled
IT 341	Data Communications and Network Principles	3	Major: Concentration
IT 343	IT Project Management	3	Major: Concentration
IT 451	Cloud Services Management	3	Major: Concentration
IT 461	Application Development in Cloud	3	Major: Concentration
BAS 490	Introduction to Research Methods	3	Major: Core

Semester 8

Mason Course	Course Title	Credits	Requirement Fulfilled
IT 442	Cloud Infrastructure	3	Major: Concentration
IT 471	Big Data on Cloud Systems	3	Major: Concentration
IT 481	Cloud Security	3	Major: Concentration
----	Mason Core: Science without Lab*	4	Mason Core
BAS 491	Applied Sciences Capstone	3	Major: Core

Total Mason Credits: 61

Total AAS→BAS Credits: 125

NOTE:
- In order to meet the Upper-Division requirement, students should select upper-level courses for those designated *. Otherwise, students will need to select upper-level electives.