Applied Science, BAS

Banner Code: UN-BAS-APLS

Administration

- Janette Kenner Muir, PhD, Academic Director and Vice Provost for Academic Affairs
- Krystal Dains, Director
- Marcy Lewis Glover, Curriculum Coordinator
- Kelly Dunne, Coordinator, School of Integrative Studies concentration
- Brian Gillette, Coordinator, College of Public Health concentration
- Jane Walker, Coordinator, Jimmy and Rosalynn Carter School for Peace and Conflict Resolution concentration

The Bachelor of Applied Science (BAS) is an undergraduate liberal arts degree program for students who hold an Associate of Applied Science (AAS) degree. It is designed primarily to deepen student knowledge in an academic area and foster critical thinking, analytic reasoning, and an ability to synthesize information.

An Associate of Applied Science (AAS) degree is required for admission, providing a streamlined path to completion of traditional academic requirements leading to the baccalaureate degree. BAS meets students' professional and personal goals while developing a depth of knowledge and proficiency of skill that translates well to the workplace. Several concentrations offer Bachelor's/Accelerated Master's options.

Admissions & Policies

Admissions

As a prerequisite to enrollment in the BAS, students must have received an Associate of Applied Science (AAS) degree from an accredited two-year institution in an approved area of specialization. Students should review specific Admissions details on the program's website. (http://bas.gmu.edu)

Policies

For policies governing all undergraduate degrees, see APS Undergraduate Policies (http://catalog.gmu.edu/policies/academic/undergraduate-policies/).

Change of Major

Mason students considering a change of major to BAS must hold an Associate of Applied Science (AAS) degree related to the BAS concentration of choice, and must have a Mason GPA of 2.50 or higher. Students who have been terminated from a College of Engineering and Computing (CEC) or School of Business major may be unable to declare BAS as a major, since terminated students are not eligible to take CEC/School of Business courses.

Program Requirements

BAS students must fulfill all requirements for bachelor's degrees including Mason Core (http://catalog.gmu.edu/mason-core/) requirements, to include 45 credits of upper-level coursework. All Mason Core (http://catalog.gmu.edu/mason-core/) requirements must be met with either George Mason courses or transferrable equivalents.

The minimum credit requirement for a bachelor's degree is 120 credits; however, while there is some variation between concentration areas, fulfilling all Mason Core (http://catalog.gmu.edu/mason-core/) requirements and an academic concentration is likely to require most BAS students to complete at least 63-66 credits at George Mason, which may lead to over 120 credits of coursework in order to receive the degree.

Admitted BAS students will be academically advised by the appropriate BAS Program concentration advisor to plan their course of study including completion of the Mason Core (http://catalog.gmu.edu/mason-core/), the BAS concentration, and any remaining requirements. See (http://bas.gmu.edu) the website (http://bas.gmu.edu) for more information.

The degree plan outlined is based on a student who transfers in a minimum of 30 credits from a completed AAS degree. Some of these credits may count only towards the elective requirement within the BAS degree.

Specific concentrations may have additional policies indicated in the Requirements tab.

Requirements

Degree Requirements

Total credits: 120-126

Concentrations are intended to provide focus for the BAS curriculum in an area relevant to the student's AAS degree while allowing for the breadth of study associated with a liberal arts baccalaureate degree. Please note that determination of current transfer work for these concentrations may impact course requirements.

In addition to satisfying all Mason Core (http://catalog.gmu.edu/mason-core/) requirements, students must satisfy the requirements for one of the eight concentrations.

Concentrations

- Concentration in Applied Conflict Analysis and Resolution (ACAR)
- Concentration in Cyber Security (CYBS)
- Concentration in Cloud Computing (CCG)
- Concentration in Data Analytics (DNIC)
- Concentration in Health, Wellness and Social Services (HWSS)
- Concentration in Legal Studies (LGLS)
- Concentration in Managerial Leadership (MGL)
- Concentration in Technology and Innovation (TCNV)

Concentration in Applied Conflict Analysis and Resolution (ACAR)

This concentration is in collaboration with the Jimmy and Rosalynn Carter School for Peace and Conflict Resolution (http://catalog.gmu.edu/colleges-schools/peace-conflict-resolution/).

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BAS 300</td>
<td>Building Professional Competencies</td>
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</tr>
</tbody>
</table>
CON 101  Conflict and Our World (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
CON 301  Research and Inquiry in Conflict Resolution 3
CON 302  Culture, Identity, and Conflict 3
Select one of the following 3
  CONF 320  Interpersonal Conflict Analysis and Resolution
  CONF 330  Community, Group, and Organizational Conflict Analysis and Resolution
  CONF 340  Global Conflict Analysis and Resolution (Mason Core) (http://catalog.gmu.edu/mason-core/)

Applied Coursework
CONF 300  Conflict Resolution Techniques and Practice 3

Choose three credits of Skills Coursework from: 3
  CONF 325  Dialogue and Difference
  CONF 370  Internship Field Experience
  CONF 385  International Field Experience
  CONF 398  Special Topics in Advanced Techniques and Practices
  CONF 425  Mediating Conflict or foreign language completed at the 202 level.
CONF 490  RS: Integration (Mason Core) (http://catalog.gmu.edu/mason-core/) 3

Electives
In consultation with their advisor, students are required to take 18 credits of concentration coursework; at least 9 credits must be from the CONF department. The concentration list can be found in the catalog or on our website. 18

Total Credits 42

Electives (variable)
All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

Concentration in Cyber Security (CYBS)
This concentration is in collaboration with the College of Engineering and Computing (https://cec.gmu.edu/) and is only available to students who graduate with an AAS degree in Cyber Security from a partner school. Full admissions requirements can be viewed on the program website (http://bas.gmu.edu).

Students must have a C or better in any course that satisfies a prerequisite for an IT course. To graduate with the BAS with a Cyber Security concentration, students must have a C or better in their core, concentration, and technical focus courses.

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<tr>
<td>or BAS 492</td>
<td>Capstone Development</td>
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BAS 491  Applied Sciences Capstone (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
or BAS 493  BAS Capstone (Mason Core) (http://catalog.gmu.edu/mason-core/) 3

Concentration Requirements
IT 104  Introduction to Computing (Mason Core) 3
IT 105  IT Architecture Fundamentals 3
IT 223  Information Security Fundamentals 3
IT 304  IT in the Global Economy 3
IT 343  IT Project Management (Fulfills writing intensive requirement) 3
IT 353  Information Defense Technologies 3
IT 357  Computer Crime, Forensics, and Auditing 3
IT 429  Security Accreditation of Information Systems 3

IT & Cyber Security Transfer Courses 21-36
Specific courses taken at the community college fulfill this requirement. Students should consult with their advisor. The credits awarded vary, depending on coursework taken at the community college.

Technical Focus
Select 15 credit hours of required IT, MBUS, MIS, or other approved coursework from the following. Courses not listed here may be selected in consultation with the advisor. Not all Technical Focus courses listed here are offered online. Students pursuing CYBS online should meet with their advisor to select courses that are offered online. Note: Enrolled undergraduate students who are not declared in a School of Business major are limited to 9 credits of MIS courses.

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<tr>
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</table>
In order to complete the Cloud Computing Concentration, students must have a C or better in their core and concentration courses.

**Concentration in Cloud Computing (CCG)**

This concentration is in collaboration with the School of Business (http://catalog.gmu.edu/colleges-schools/business/) and the College of Engineering and Computing (http://catalog.gmu.edu/colleges-schools/engineering-computing/) and is only available to students who graduate with an AAS degree in a related field. Full admissions requirements can be viewed on the program website (http://bas.gmu.edu).

To graduate with the BAS with a Cloud Computing concentration, students must have a C or better in their core and concentration courses.

**Electives (variable)**

All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

**Applied Science, BAS**

**Table 1: Core Requirements**

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**Total Credits**

9

**Table 2: Additional Concentration Requirements**

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<tbody>
<tr>
<td>MATH 108</td>
<td>Introductory Calculus with Business Applications (Mason Core) (<a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a>)</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 113</td>
<td>Analytic Geometry and Calculus I (Mason Core) (<a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a>)</td>
<td>3</td>
</tr>
<tr>
<td>IT 102</td>
<td>Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Discrete Mathematics I (Mason Core) (<a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a>)</td>
<td>3</td>
</tr>
<tr>
<td>IT 104</td>
<td>Introduction to Computing (Mason Core)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits**

36

**Table 3: Cloud System Management**

<table>
<thead>
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<tr>
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<td>Introduction to Business Information Systems (Mason Core) (<a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a>)</td>
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</tr>
</tbody>
</table>

**Applied Coursework**

Students pursuing Cloud System Management must select 15 credit hours of upper-level coursework from the following. Courses not listed here may be selected in consultation with the advisor. Students must meet the prerequisite requirements for their selected classes.

- IT 343 | IT Project Management
- IT 442 | Cloud Infrastructure
- IT 451 | Cloud Services Management
- IT 461 | Application Development in Cloud
- IT 471 | Big Data on Cloud Systems
- IT 481 | Cloud Security
- MBUS 300 | Accounting in a Global Economy
- MBUS 304 | Entrepreneurship: Starting and Managing a New Enterprise
- MBUS 305 | Introduction to International Business (Mason Core) (http://catalog.gmu.edu/mason-core/)
- MBUS 306 | Managing Projects and Operations
- MBUS 308 | Corporate Finance and Investments in a Global Economy
- MGMT 303 | Principles of Management
- MIS 320 | Networks and Security
- MIS 410 | Advanced Database Systems
- MIS 415 | Information Systems Audit and Control
- MIS 420 | Information Security and Assurance
- MIS 430 | Data Warehousing
- MIS 431 | Data Mining for Business Applications
- MIS 432 | Advanced Data Mining
- MIS 433 | Programming for Analytics
### Electives (variable)
All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

### Concentration in Data Analytics (DNIC)
This concentration is in collaboration with the College of Engineering and Computing (http://catalog.gmu.edu/colleges-schools/engineering-computing/). Full admissions requirements can be viewed on the program website (http://bas.gmu.edu).

Students must have a C or better in any course that satisfies a prerequisite for an IT course. To graduate with the BAS with a Data Analytics concentration, students must have a C or better in their core, concentration, and applied coursework courses.

#### Concentration Requirements
- **Core Requirements**
  - BAS 300 Building Professional Competencies 3
  - BAS 490 Introduction to Research Methods 3
  - BAS 491 Applied Sciences Capstone (Mason Core) (http://catalog.gmu.edu/mason-core/) 3

#### Concentration Requirements
- **MATH 108** Introductory Calculus with Business Applications (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
- or **MATH 113** Analytic Geometry and Calculus I (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
- **STAT 250** Introductory Statistics I (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
- **STAT 350** Introductory Statistics II (http://catalog.gmu.edu/mason-core/) 3
- **STAT 362** Introduction to Computer Statistical Packages 3
- **STAT 463** Introduction to Exploratory Data Analysis 3
- **IT 102** Discrete Structures 3
- **IT 109** Introduction to Computer Programming 3
  - or **IT 106** Introduction to IT Problem Solving Using Computer Programming 3
- **IT 209** Introduction to Object Oriented Programming 3
  - or **IT 206** Object Oriented Techniques for IT Problem Solving 3
- **IT 309** Data Structures and Algorithms in Python 3
  - or **IT 306** Data Structures and Algorithms in Java 3
- **IT 343** IT Project Management 3

#### Applied Coursework
Select 9 credit hours of applied coursework from the following. Courses not listed may be selected in consultation with the advisor.

- **CDS 301** Scientific Information and Data Visualization
- **CDS 302** Scientific Data and Databases
- **STAT 355** Experimental Design
- **STAT 456** Applied Regression Analysis
- **STAT 460** Introduction to Biostatistics
- **STAT 462** Applied Multivariate Statistics
- **STAT 465** Nonparametric Statistics and Categorical Data Analysis
- **STAT 474** Introduction to Survey Sampling
- **SYST 469** Human Computer Interaction

### Concentration in Health, Wellness and Social Services (HWSS)
This concentration is in collaboration with the College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/).

To enroll in this concentration, students must have an AAS in one of the following areas:
- Health Information Management
- Hospitality Management, Nutrition Management specialization
- Nursing
- Physical Therapist Assistant
- Respiratory Therapy

#### Concentration Requirements
- **BAS 300** Building Professional Competencies 3
- **SOCW 200** Introduction to Social Work (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
- **GCH 205** Global Health (Mason Core) (http://catalog.gmu.edu/mason-core/) 3
- **NURS 434** Vulnerable Populations 3
- **BAS 490** Introduction to Research Methods 3
- **BAS 491** Applied Sciences Capstone (Mason Core) (http://catalog.gmu.edu/mason-core/) 3

#### Additional Concentration Requirements
To complete the Health, Wellness and Social Services concentration, students must complete one of the following areas:

#### Health Care Administration
- **HAP 301** Health Care Delivery in the United States 3
- **HAP 360** Introduction to Health Information Systems 3
- **HAP 442** Introduction to Health Care Politics and Policy 3
- **SOCW 380** Changing Social Policies and Systems 3

#### Physical and Mental Health Care Delivery
- **HAP 301** Health Care Delivery in the United States 3
- **NUTR 295** Introduction to Nutrition (Mason Core) (http://catalog.gmu.edu/mason-core/) 3

Select one from the following: 3
**Concentration in Legal Studies (LGLS)**

This concentration is in collaboration with School of Integrative Studies (http://catalog.gmu.edu/colleges-schools/humanities-social-sciences/integrative-studies/), College of Humanities and Social Sciences (http://catalog.gmu.edu/colleges-schools/humanities-social-sciences/), and Schar School of Policy and Government (http://catalog.gmu.edu/colleges-schools/policy-government/).

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**Concentration Requirements**

- **Required Courses:**
  - INTS 300 | Law and Justice (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |

**Additional Courses (minimum 18 credits):**

- BULE 303 | Legal Environment of Business | 3 |
- CLAS 330 | Roman Law and Society        | 3 |
- COMM 230 | Case Studies in Persuasion   | 3 |
- COMM 403 | Persuasion                  | 3 |
- COMM 475 | Journalism Law              | 3 |
- CONF 425 | Mediating Conflict          | 3 |
- CRIM 100 | Introduction to Criminal Justice (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- CRIM 220 | Introduction to Law and Society                                     | 3 |
- CRIM 301 | Public Law and the Judicial Process                                  | 3 |
- CRIM 405 | Law and Justice around the World (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- CRIM 406 | Family Law and the Justice System                                    | 3 |
- CRIM 407 | Advanced Topics in Law and Society                                   | 3 |
- CRIM 422 | Controversial Legal Issues                                           | 3 |
- CRIM 423 | Constitutional Law: Civil Rights and Liberties                       | 3 |
- or GOVT 423 | Constitutional Law: Civil Rights and Liberties                   | 3 |

**Total Credits**

- 33

1

Other relevant courses may be selected with advisor approval.

**Electives (variable)**

All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

**Concentration in Managerial Leadership (MGL)**

This concentration is in collaboration with School of Business (http://catalog.gmu.edu/colleges-schools/business/), College of Humanities and Social Sciences (http://catalog.gmu.edu/colleges-schools/humanities-social-sciences/), and Jimmy and Rosalynn Carter School for Peace and Conflict Resolution (http://catalog.gmu.edu/colleges-schools/peace-conflict-resolution/).

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAS 300</td>
<td>Building Professional Competencies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Core Requirements**

- CRIM 424 | Constitutional Law: Criminal Process and Rights                     | 3 |
- CRIM 430 | Criminal Law                                                          | 3 |
- ECON 415 | Law and Economics                                                     | 3 |
- GOVT 103 | Introduction to American Government (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- GOVT 407 | Law and Society                                                       | 3 |
- GOVT 443 | Law and Ethics of War                                                 | 3 |
- GOVT 446 | International Law and Organization                                   | 3 |
- GOVT 452 | Administrative Law and Procedures                                    | 3 |
- HAP 312 | Healthcare Law                                                        | 3 |
- HDFS 401 | Family Law and Public Policy                                         | 3 |
- INTS 202 | Public Speaking and Critical Thinking Skills (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- INTS 304 | Social Movements and Community Activism (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- INTS 305 | Conflict Resolution and Transformation                               | 3 |
- INTS 336 | Poverty, Wealth and Inequality in the US (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- INTS 362 | Social Justice and Human Rights (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- INTS 416 | Refugee and Internal Displacement (Mason Core) (http://catalog.gmu.edu/mason-core/) | 3 |
- INTS 417 | Human Trafficking and Smuggling                                      | 3 |
- PHIL 311 | Philosophy of Law                                                    | 3 |
- RELI 364 | Religion and Law in the United States                                | 3 |
- SOCI 301 | Criminology                                                          | 3 |
- SOCI 302 | Sociology of Delinquency                                             | 3 |

**Total Credits**

- 18

Other relevant courses may be selected with advisor approval.
BAS 490  Introduction to Research Methods  3
BAS 491  Applied Sciences Capstone (Mason Core)  3

Concentration Requirements
MBUS 306  Managing Projects and Operations  3
MGMT 303  Principles of Management  3
INTS 404  Ethics and Leadership  4
INTS 435  Leadership in a Changing Environment  4
CONF 300  Conflict Resolution Techniques and Practice  3
CONF 302  Culture, Identity, and Conflict  3
CONF 320  Interpersonal Conflict Analysis and Resolution  3
COMM 320  Business and Professional Communication  3
COMM 401  Interpersonal Communication in the Workplace  3

Total Credits  38

Electives (variable)
All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

Concentration in Technology and Innovation (TCNV)
This concentration is in collaboration with the School of Business (http://catalog.gmu.edu/colleges-schools/business/) and the College of Engineering and Computing (http://catalog.gmu.edu/colleges-schools/engineering-computing/).

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<td>BAS 300</td>
<td>Building Professional Competencies</td>
<td>3</td>
</tr>
<tr>
<td>BAS 490</td>
<td>Introduction to Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BAS 491</td>
<td>Applied Sciences Capstone (Mason Core)</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Requirements 1
IT 105  IT Architecture Fundamentals  3
IT 213  Multimedia and Web Design 2  3
IT 214  Database Fundamentals 2  3
IT 223  Information Security Fundamentals  3
IT 304  IT in the Global Economy  3
IT 343  IT Project Management  3
MBUS 300  Accounting in a Global Economy  3
MBUS 305  Introduction to International Business (Mason Core) (http://catalog.gmu.edu/mason-core/)  3
MGMT 303  Principles of Management  3
MIS 303  Introduction to Business Information Systems (Mason Core) (http://catalog.gmu.edu/mason-core/)  3
MKTG 303  Principles of Marketing  3

Total Credits  42

1 All courses for this concentration are available in an online format with most offered as asynchronous delivery.
2 The Information Sciences and Technology department offers 1-credit, self-paced, online review courses; ending with an in-class final exam. Students who register for a 1-credit course and successfully pass will receive credit (not a waiver) for the corresponding 3-credit course. Students who are not successful must take the respective course at Mason to meet their degree requirements. Review courses are available as follows:
• for IT 213 Multimedia and Web Design: IT 193 Review of Multimedia and Web Design
• for IT 214 Database Fundamentals: IT 194 Review of Database Fundamentals

Electives (variable)
All BAS students are required to complete a minimum of 120 credit hours of coursework. Students will work with their advisor to determine how to fulfill their outstanding credit hours to ensure they have met all major and university requirements. The number of elective credits that a BAS student may have available will vary by concentration and the amount of applicable transfer coursework the student has been awarded.

Accelerated Master’s

Applied Science, BAS (Cyber Security Concentration)/Applied Information Technology, Accelerated MS

Overview
Highly-qualified students in the Applied Science, BAS, Cyber Security Concentration have the option of obtaining an accelerated Applied Information Technology, MS (http://catalog.gmu.edu/colleges-schools/engineering/information-sciences-technology/applied-information-technology-ms/).

For more detailed information, see AP.6.7 Bachelor’s/Accelerated Master’s Degrees (http://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7). For policies governing all graduate degrees, see AP6 Graduate Policies (http://catalog.gmu.edu/policies/academic/graduate-policies/).

Admission Requirements
Students in the Applied Science, BAS, Cyber Security Concentration program may apply to this option if they have earned 60 undergraduate credits with an overall GPA of at least 3.30. They may begin taking graduate-level courses once they have earned 75 undergraduate credits. Criteria for admission are identical to criteria for admission to the Applied Information Technology, MS program.

Accelerated Option Requirements
Students must complete all credits that satisfy requirements for the BAS and MS programs, with up to 12 credits overlapping from the following courses:

- BAS 490  Introduction to Research Methods  3
- BAS 491  Applied Sciences Capstone (Mason Core)  3
- MBUS 300  Accounting in a Global Economy  3
- MBUS 305  Introduction to International Business (Mason Core) (http://catalog.gmu.edu/mason-core/)  3
- MGMT 303  Principles of Management  3
- MIS 303  Introduction to Business Information Systems (Mason Core) (http://catalog.gmu.edu/mason-core/)  3
- MKTG 303  Principles of Marketing  3
### Accelerated Option Requirements

Students must complete all credits that satisfy requirements for the BAS and MS programs, with up to 12 credits overlapping from the following courses:

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<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>DFOR 510</td>
<td>Digital Forensics Analysis</td>
<td>3</td>
</tr>
<tr>
<td>DFOR 660</td>
<td>Network Forensics</td>
<td>3</td>
</tr>
<tr>
<td>DFOR 661</td>
<td>Digital Media Forensics</td>
<td>3</td>
</tr>
<tr>
<td>DFOR 663</td>
<td>Operations of Intrusion Detection for Forensics</td>
<td>3</td>
</tr>
<tr>
<td>DFOR 664</td>
<td>Incident Response Forensics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Degree Conferral

Students must apply the semester before they expect to complete the BAS requirements to have the BAS degree conferred. In addition, at the beginning of the student’s final undergraduate semester, students must complete a Bachelor’s/Accelerated Master’s Transition form that is submitted to the Office of the University Registrar and the VSE Graduate Admissions Office. At the completion of MS requirements, a master’s degree is conferred.

### Applied Science, BAS (Data Analytics Concentration)/Applied Information Technology, Accelerated MS

#### Overview

Highly-qualified students in the Applied Science, BAS, Data Analytics Concentration have the option of obtaining an accelerated Applied Information Technology, MS (http://catalog.gmu.edu/colleges-schools/engineering/information-sciences-technology/applied-information-technology-ms/).

For more detailed information, see AP.6.7 Bachelor’s/Accelerated Master’s Degrees (http://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7). For policies governing all graduate degrees, see AP.6 Graduate Policies (http://catalog.gmu.edu/policies/academic/graduate-policies/).

#### Admission Requirements

Students in the Applied Science, BAS Data Analytics concentration may apply to this option if they have earned 60 undergraduate credits with an overall GPA of at least 3.30. Students may begin taking the master’s level courses once they have earned 75 undergraduate credits.

### Accelerated Option Requirements

Students must complete all credits that satisfy requirements for the BAS and MS programs. Students may select up to 12 credits to overlap from the following options. Students should consult with both the BAS and MSAIT advisors.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>AIT 512</td>
<td>Algorithms and Data Structures Essentials</td>
<td>3</td>
</tr>
<tr>
<td>or AIT 580</td>
<td>Analytics: Big Data to Information</td>
<td></td>
</tr>
<tr>
<td>AIT 524</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>AIT 542</td>
<td>Fundamentals of Computing Platforms</td>
<td>3</td>
</tr>
<tr>
<td>AIT 664</td>
<td>Information: Representation, Processing and Visualization</td>
<td>3</td>
</tr>
</tbody>
</table>

1 This course is only applicable to the CYBR and ITMG concentrations in the MSAIT. Students planning to pursue CBHS or DAIN should select a different course.
1 When selecting between AIT 512 and AIT 580, students should select the course that aligns with the MSAIT concentration they intend to pursue.

Applied Science, BAS (Data Analytics Concentration)/Data Analytics Engineering, Accelerated MS

Overview
Highly-qualified students in the Applied Science, BAS, Data Analytics Concentration have the option of obtaining an accelerated Data Analytics Engineering, MS. (http://catalog.gmu.edu/colleges-schools/engineering/data-analytics-engineering-ms/#text)

For more detailed information, see AP.6.7 Bachelor’s/Accelerated Master’s Degrees (http://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7). For policies governing all graduate degrees, see AP.6 Graduate Policies (http://catalog.gmu.edu/policies/academic/graduate-policies/).

Admission Requirements
Students in the Applied Science, BAS Data Analytics concentration may apply to this option if they have earned 60 undergraduate credits with an overall GPA of at least 3.30. Students may begin taking the master’s level courses once they have earned 75 undergraduate credits.

Accelerated Option Requirements
Students must complete all credits that satisfy requirements for the BAS and MS programs. The following six credits may overlap:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 580</td>
<td>Analytics: Big Data to Information</td>
<td>3</td>
</tr>
<tr>
<td>CS 504</td>
<td>Principles of Data Management and Mining</td>
<td>3</td>
</tr>
<tr>
<td>or CS 584</td>
<td>Theory and Applications of Data Mining</td>
<td></td>
</tr>
<tr>
<td>OR 531</td>
<td>Analytics and Decision Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or OR 541</td>
<td>Operations Research: Deterministic Models</td>
<td></td>
</tr>
<tr>
<td>STAT 515</td>
<td>Applied Statistics and Visualization for Analytics</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 554</td>
<td>Applied Statistics I</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the six credits above, students may select up to 6 additional credits to overlap. These credits must be selected in consultation with both the BAS and DAEN advisors. Credits selected will depend on which DAEN concentration the student intends to pursue.