

# Associate of Applied Science Degree in Information Systems Technology

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**AREA:** Information Systems Technology

**DEGREE:** Associate of Applied Science Degree

**LENGTH:** Four semesters (two-year) program

**PURPOSE:** The associate of applied science degree program (AAS) in (IST) is designed for students who seek employment or professional development as a generalist in the area of information technology (IT), with specific knowledge in various areas such as Web design/development, computer network design and administration and database administration. These specialized areas are gained by completing one or more career studies certificates which can be applied as the approved IT electives in the IST degree program.

**OCCUPATIONAL OBJECTIVES:** The associate of applied science degree curriculum in information systems technology prepares students for employment with business, industry and government organizations as entry-level Web applications developers, network engineers or database administrators, depending on degree specialization.

**TRANSFER GUIDELINES:** Transfer opportunities for associate of applied science degrees, if existing, are very specific in nature. Students enrolling in an applied science degree with plans to transfer to a four-year college or university should explore opportunities with their advisor.

**PROGRAM REQUIREMENTS:** A student who studies topics in IT must possess general knowledge in systems analysis and design, software design and development, Web markup languages, Internet and network foundations and database fundamentals. Additionally, students must possess sound analytical and problem-solving skills, strong written and verbal communications skills and must have good interpersonal skills. These skills are an integral part of the information system technology (IST) curriculum. The curriculum includes technical courses in information technology, business-related areas, general education and electives. Instruction is centered on theoretical concepts and practical, hands-on applications key to success in the information technology field. Students are strongly encouraged to consult with their advisor in planning their programs and selecting electives. Upon satisfactory completion of the program the graduate will be awarded the associate of applied science degree with a major in information system technology.

**SPECIAL NOTE (BRIDGE COURSES):** This program is designed for those students who have completed a variety of keyboarding and introductory computer applications courses at the high school level. A student who has not completed the recommended high school courses may enroll in the IST program by taking courses designed to

bridge the gap. These courses are to be selected by consulting with an IST advisor and may include one or more of the following:

|         |   |           |
|---------|---|-----------|
| AST 101 | Keyboarding                                 | 3 credits |
| ITE 115 | Intro to Computer Applications and Concepts | 3 credits |

| Course#                | Title  | Credits   |
|------------------------|--|-----------|
| <b>First Semester</b>  |  |           |
| ENG 111                | College Composition I                          | 3         |
| ITD 110                | Web Page Design I                              | 3         |
| ITD 130                | Database Fundamentals                          | 3         |
| ITN 100                | Introduction to Telecommunications             | 3         |
| MTH 154                | Quantitative Reasoning                         | 3         |
| SDV 101/100            | Orientation to the IT Professions              | 1         |
|                        | <b>Total</b>                                   | <b>16</b> |
| <b>Second Semester</b> |  |           |
| ENG 112                | College Composition II                         | 3         |
| ITE 120                | Principles of Information Systems              | 3         |
| ITN 107                | Personal Computer Hardware and Troubleshooting | 3         |
| ITP 100                | Software Design                                | 3         |
| MTH 155                | Statistical Reasoning                          | 3         |
| PED/HLT                | Physical Education or Health                   | 1         |
|                        | <b>Total</b>                                   | <b>16</b> |
| <b>Third Semester</b>  |  |           |
| ECO 201/202            | Principles of Macro/Microeconomics             | 3         |
| ENG 115                | Technical Writing <sup>1</sup>                 | 3         |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
|                        | Approved Social Science Elective <sup>2</sup>  | 3         |
|                        | <b>Total</b>                                   | <b>18</b> |
| <b>Fourth Semester</b> |  |           |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
|                        | Approved IT Elective <sup>3</sup>              | 3         |
| ITP 251                | Systems Analysis and Design                    | 4         |
|                        | Approved Humanities Elective <sup>4</sup>      | 3         |
|                        | <b>Total</b>                                   | <b>16</b> |
|                        | <b>Program Total</b>                           | <b>66</b> |

<sup>1</sup>“Or CST 110” (applies to Cybersecurity and Computer Science degrees)

<sup>2</sup>Students may select social science from approved list of electives on Page 42. Students pursuing the Bachelor of Applied Science degree at George Mason University are encouraged to take an approved HIS LFCC social science elective.

<sup>3</sup>Students are encouraged to satisfy the Approved IT Electives by completing one or more Career Studies Certificates (CSC). The following Career Studies Certificates are available: Cyber Security, Database Administration Specialist, Networking Specialist, Software Development, Information Technology Foundations and Web Design and

Applications Development. See the list for specific courses within the CSCs in consultation with your advisor.

Students must also formally complete an "Application for Graduation" for both the degree and applicable Career Studies Certificates upon graduation. Students pursuing the Bachelor of Applied Science degree at George Mason University are encouraged to take ITN 260 and ITN 266 to satisfy GMU's IT 223 requirement.

<sup>4</sup>Students may select humanities from approved list of electives on page 42.