INFORMATION TECHNOLOGY SPECIALIST AAS (92 CREDITS)

Bates Technical College
2023-24 Catalog Addendum
AAS, AAST and CoC
INFO 122 can replace HREL 111

The Information Technology Specialist Associate in Applied Science (AAS) is a six-quarter program. It offers a mix of course modalities (in-person, hybrid, and online). Most classes are hybrid (required in-person attendance and online access using the Canvas learning management platform). This modality supports industry skills and knowledge mastery through instructor-guided, hands-on learning and online engagement. The program typically enrolls in the Fall and Spring quarters. Students use various computer equipment, networking devices, and servers. Students are responsible for purchasing textbooks, virtual lab simulations, computer toolkits, basic networking tools, and USB drives. Laptops are available for student checkout on a first-come, first-served basis.

The program's technical core provides hands-on skills in information systems, networking, mobile devices, cloud and virtualization technologies, and security concepts. Graduates demonstrate proficiency in information technology, effective verbal, and written communications skills, and identify and summarize assumptions to draw logically valid conclusions. Core-related training relates to business, project, and team communication skills. Much of the curriculum is aligned with in-demand industry certifications through Computing Technology Industry Association (CompTIA), Microsoft, or Amazon Web Services.

Technology is a vital force in today's business and will continue to experience exponential changes in the future. As such, job opportunities in this field remain strong. Graduates prepare for various information technology (IT) computer and networking careers, including Desktop Support Specialist, Computer Support Specialist, Technical Support Specialist, IT Specialist, IT Support Specialist, Help Desk Technician, and Network Support Analyst.

CIP: 11.0901

EPC: 527

Required Courses

Technical Core (77 Credits)

CCNT 110	Fundamentals of Linux	4
CCNT 120	Cloud Computing	4
CCNT 130	Server Administration	4
CCNT 140	Cisco Networking Fundamentals	4
CCNT 150	Server I	4
CCNT 160	Cisco Routing & Switching	4
CCNT 210	Server II	4
HREL 111	Interviewing and Career Success or INFO 122 User Support Fundamentals 5 Credits	5
INFO 102	IT Applications	4
INFO 104	IT Systems I	5
INFO 105	IT Systems II	5
INFO 116	Modern Desktop Support I	4
INFO 117	Modern Desktop Support II	4
INFO 118	Cloud & Virtualization Technologies	4
INFO 205	Security I	5
INFO 206	Security II	5
INFO 220	Microsoft Services	4
INFO 290	Independent Projects	4
Total Credit Hours:		**77**

General Education Requirements (15 Credits)

Choose 5 credits from each of the following areas:

- Communications
- Quantitative
- Humanities/Social Science

Communications (5 Credits)

ENGL 175	Professional Writing	5
ENGL& 101	English Composition I	5
ENGL& 235	Technical Writing	5
Total Credit Hours:		**5**

Quantitative (5 Credits)

MATH 171	Technical Math	5
MATH 172	Business Math	5
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 146	Statistics	5
MATH& 151	Calculus	5
MATH& 152	Calculus II	5
MATH& 153	Calculus III	5
Total Credit Hours:		**5**

Humanities or Social Science (5 Credits)

Choose 5 total credits from options in the Humanities or Social Science categories.

Humanities

CMST 152	Intercultural Communication	5
CMST& 102	Introduction to Mass Media	5
CMST& 210	Interpersonal Communication	5
CMST& 220	Public Speaking	5
CMST& 230	Small Group Communications	5
CMST& 240	Culture & Diversity in Health Care	5
HIST 101	A History of Science and Technology	5
HIST& 146	United States History I	5
HIST& 147	United States History II	5
HIST& 148	United States History III	5
HUM &101	Introduction to Humanities	5

Social Science

BUS& 101	Introduction to Business	5
BUS& 201	Business Law	5
ECON& 201	Microeconomics	5
ECON& 202	Macroeconomics	5
PSYC& 100	General Psychology	5

PSYC& 200	Lifespan Psychology	5
SOC& 101	Introduction to Sociology	5
Total Credit Hours:		**5**

TOTAL CREDIT HOURS: 92

INFORMATION TECHNOLOGY SPECIALIST AAS-T (102 CREDITS)

The Information Technology Specialist Associate in Applied Science Transfer (AAS-T) is a six-quarter program. It offers a mix of course modalities (in-person, hybrid, and online). Most classes are hybrid (required in-person attendance and online access using the Canvas learning management platform). This modality supports industry skills and knowledge mastery through instructor-guided, hands-on learning and online engagement. The program typically enrolls in the Fall and Spring quarters. Students use various computer equipment, networking devices, and servers. Students are responsible for purchasing textbooks, virtual lab simulations, computer toolkits, basic networking tools, and USB drives. Laptops are available for student checkout on a first-come, first-served basis.

The program's technical core provides hands-on skills in information systems, networking, mobile devices, cloud and virtualization technologies, and security concepts. Graduates demonstrate proficiency in information technology (IT), effective verbal, and written communications skills, and identify and summarize assumptions to draw logically valid conclusions. Core-related training relates to business, project, and team communication skills. Much of the curriculum is aligned with in-demand industry certifications through Computing Technology Industry Association (CompTIA), Microsoft, or Amazon Web Services.

Technology is a vital force in today's business and will continue to experience exponential changes in the future. As such, job opportunities in this field remain strong. Graduates prepare for various information technology computer and networking careers, including Desktop Support Specialist, Computer Support Specialist, Technical Support Specialist, IT Specialist, IT Support Specialist, Help Desk Technician, and Network Support Analyst.

CIP: 11.0901

EPC: 527

Information Technology Specialist AAS-T (102 credits)

Technical Core (77 Credits)

CCNT 110	Fundamentals of Linux	4
CCNT 120	Cloud Computing	4
CCNT 130	Server Administration	4
CCNT 140	Cisco Networking Fundamentals	4
CCNT 150	Server I	4
CCNT 160	Cisco Routing & Switching	4
CCNT 210	Server II	4
HREL 111	Interviewing and Career Success **or INFO 122 User Support Fundamentals 5 credits**	5
INFO 102	IT Applications	4
INFO 104	IT Systems I	5
INFO 105	IT Systems II	5
INFO 116	Modern Desktop Support I	4
INFO 117	Modern Desktop Support II	4
INFO 118	Cloud & Virtualization Technologies	4
INFO 205	Security I	5
INFO 206	Security II	5
INFO 220	Microsoft Services	4
INFO 290	Independent Projects	4
Total Credit Hours:		**77**

General Education Requirements (25 Credits)

A total of 30 credits are required in the following General Education categories:

- 10 credits in Communication
- 5 credits in Quantitative
- 10 credits in Humanities, Natural Science, or Social Science

Communications (10 Credits)

ENGL& 101	English Composition I	5
ENGL& 235	Technical Writing	5
Total Credit Hours:		**10**

Quantitative (5 Credits)

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 146	Statistics	5
MATH& 151	Calculus	5
MATH& 152	Calculus II	5
MATH& 153	Calculus III	5
Total Credit Hours:		**5**

Humanities, Natural Science, or Social Science (10 Credits)

Choose 10 total credits from options in the Humanities, Natural Science, and/or Social Science categories.

Humanities

CMST& 102	Introduction to Mass Media	5
CMST& 152	Intercultural Communication	5
CMST& 210	Interpersonal Communication	5
CMST& 220	Public Speaking	5
CMST& 230	Small Group Communications	5
CMST& 240	Culture & Diversity in Health Care	5
HIST& 146	United States History I	5
HIST& 147	United States History II	5
HIST& 148	United States History III	5
HUM &101	Introduction to Humanities	5

Natural Science

BIOL& 160	General Biology	5
BIOL& 175	Human Biology with Lab	5
BIOL& 241	Human Anatomy and Physiology I	5
BIOL& 242	Human Anatomy and Physiology II	5
BIOL& 260	Microbiology	5
CHEM &121	General Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
NUTR& 101	Intro to Nutrition	5
PHYS& 114	Introductory Physics I (Algebra based Physics)	5

PHYS& 221	Engineering Physics I w/LAB	5
PHYS& 222	Engineering Physics II w/LAB	5
PHYS& 223	Engineering Physics III w/LAB	5

Social Science

BUS& 101	Introduction to Business	5
BUS& 201	Business Law	5
ECON& 201	Microeconomics	5
ECON& 202	Macroeconomics	5
POLS& 101	Introduction to Political Science	5
PSYC& 100	General Psychology	5
PSYC& 200	Lifespan Psychology	5
SOC& 101	Introduction to Sociology	5
Total Credit Hours:		**10**

TOTAL CREDIT HOURS: 102

INFORMATION TECHNOLOGY SUPPORT CERTIFICATE OF COMPETENCY (67 CREDITS)

The Certificate of Competency in Information Technology Support is a four-quarter program. It offers a mix of course modalities (in-person, hybrid, and online). Most classes are hybrid (required in-person attendance and online access using the Canvas learning management platform). This modality supports industry skills and knowledge mastery through instructor-guided, hands-on learning and online engagement. The program typically enrolls in the Fall and Spring quarters. Students use various computer equipment, networking devices, and servers. Students are responsible for purchasing textbooks, virtual lab simulations, computer toolkits, basic networking tools, and USB drives. Laptops are available for student checkout on a first-come, first-served basis.

The program's technical core provides hands-on skills in information systems, networking, and desktop virtualization. Graduates demonstrate proficiency in information technology (IT), effective verbal, and written communications skills, and identify and summarize assumptions to draw logically valid conclusions. Core-related training relates to business, project, and team communication skills. Much of the curriculum is aligned with in-demand industry certifications through CompTIA.

Technology is a vital force in today's business and will continue to experience exponential changes in the future. Job opportunities in this field remain strong. Graduates prepare for a variety of information technology computer careers, including Help Desk Technician, Technical Support Specialist, Desktop Support Specialist, and Information Technology Support.

CIP: 11.0901

EPC: 527

Outcomes

Implement computer-based solutions for desktop and laptop computers to install, troubleshoot, configure, and maintain hardware components and core software applications.

Troubleshoot problems with wired and wireless networks, printers, video, storage, computer memory, and computer processing units.

Perform essential network systems administration skills related to server operating systems, including user management, resource sharing, network protocols, and computer and information security.

Practice communication, problem-solving, and ethical decision-making skills through the use of appropriate technology and with an understanding of the business environment.

Information Technology Specialist Certificate of Competence (67 Credits)

Technical Core (52 Credits)

CCNT 110	Fundamentals of Linux	4
CCNT 130	Server Administration	4
CCNT 140	Cisco Networking Fundamentals	4
CCNT 150	Server I	4
INFO 102	IT Applications	4
INFO 104	IT Systems I	5
INFO 105	IT Systems II	5
INFO 116	Modern Desktop Support I	4
INFO 117	Modern Desktop Support II	4
INFO 118	Cloud & Virtualization Technologies	4
INFO 205	Security I	5
HREL 111	Interviewing and Career Success or INFO 122 User Support Fundamentals 5 credits	5
Total Credit Hours:		**52**

General Education (15 Credits)

A total of 15 credits are required in the following General Education categories:

- 5 credits in Communications
- 5 credits in Quantitative
- 5 credits in Humanities, or Social Science

Communications (5 Credits)

ENGL 175	Professional Writing	5
ENGL& 101	English Composition I	5
ENGL& 235	Technical Writing	5
Total Credit Hours:		**5**

Quantitative (5 Credits)

MATH 171	Technical Math	5
MATH 172	Business Math	5
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 146	Statistics	5
MATH& 151	Calculus	5
MATH& 152	Calculus II	5
MATH& 153	Calculus III	5
Total Credit Hours:		**5**

Humanities or Social Science (5 Credits)

Choose 5 total credits from options in the Humanities or Social Science categories.

Humanities

CMST 152	Intercultural Communication	5
CMST& 102	Introduction to Mass Media	5
CMST& 210	Interpersonal Communication	5
CMST& 220	Public Speaking	5
CMST& 230	Small Group Communications	5
CMST& 240	Culture & Diversity in Health Care	5
HIST 101	A History of Science and Technology	5
HIST& 146	United States History I	5
HIST& 147	United States History II	5
HIST& 148	United States History III	5
HUM& 101	Introduction to Humanities	5

Social Science

BUS& 101	Introduction to Business	5
BUS& 201	Business Law	5
ECON& 201	Microeconomics	5
ECON& 202	Macroeconomics	5
PSYC& 100	General Psychology	5

PSYC& 200	Lifespan Psychology	5
SOC& 101	Introduction to Sociology	5
Total Credit Hours:		**5**

TOTAL CREDIT HOURS: 67