

# *Associate of Applied Science Degree in Information Systems Technology: Database and Software Development Specialization*

**AREA:** Information Systems Technology:  
Database and Software Development

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

**DEGREE:** Associate of Applied Science Degree

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

**PURPOSE:** This curriculum is designed to provide skills to students in designing, implementing, troubleshooting, and maintaining databases as well as software design and development skills.

**OCCUPATIONAL OBJECTIVES:** The associate of applied science degree curriculum in information systems technology with a database and software development specialization is designed for students who wish to seek full-time employment as a database specialist, database analyst or software developer.

**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 faculty advisor.

**PROGRAM REQUIREMENTS.** A database analyst or software developer must possess detailed knowledge of one or more database systems, strong analytical and problem-solving skills, and good interpersonal and communications skills. These skills are an integral part of the information systems 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 database administration and software development fields. Students are strongly encouraged to consult with their faculty 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 with a database and software development specialization.

**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:

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 109	Internet and Network Foundations	3
MTH 151/152	Math for Liberal Arts <sup>1</sup> (or MTH 163 or 271)	3
SDV 101	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 106	Microcomputer Operating Systems	3
ITP 100	Software Design	3
MTH 151/152	Math for Liberal Arts <sup>1</sup> (or MTH 271 or 272)	3
	Approved social science elective <sup>2</sup>	3
<b>Total</b>		<b>18</b>
<b>Third Semester</b>		
ECO 201/202	Principles of Macro/Microeconomics	3
ENG 115	Technical Writing	3
ITD 132	Structured Query Language	3
ITP 112	Visual Basic.NET I	4
PED/HLT	Physical Education (or health)	2
	Approved ITP/ITD elective <sup>3</sup>	3
<b>Total</b>		<b>18</b>
<b>Fourth Semester</b>		
ITP 120	Java Programming	4
ITP 251	Systems Analysis and Design	4
	Approved humanities elective <sup>4</sup>	3
	Approved ITP/ITD elective <sup>3</sup>	3
	Approved ITP/ITD elective <sup>3</sup>	3
<b>Total</b>		<b>17</b>
<b>Program Total</b>		<b>69</b>

<sup>1</sup> Students planning to transfer to a four-year college are encouraged to take MTH 163 or MTH 271/272.

<sup>2</sup> Students may select social science elective from approved list on page 43.

<sup>3</sup> Students may select from ITD 112, ITD 134, ITD 210, ITD 220, ITD 250, ITP 132, ITP 160, ITP 212, ITP 220, ITP 225

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