## Information Systems & Technology

**Bachelor of Applied Science Degree**

### Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>CR</th>
<th>College/University</th>
<th>Course</th>
<th>CR</th>
<th>Grade</th>
<th>Quarter</th>
<th>Year</th>
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</table>

#### Prerequisite Requirements – All Students

- Associate degree in IT-related field or equivalent credits
- Must have two English courses and at least 20 credits of general education courses from the following list of General Education requirements:
  - ENGL& 101 (5 Cr)
  - English Composition II (5 Cr) or Technical Writing (5 Cr)
  - College level math (5 Cr)
  - Social Science course from AAS-DTA transfer list (5 Cr)
    - (Students selecting the Application Development or BI concentration do not need a social science prerequisite)
  - Humanities course from AAS-DTA transfer list (5 Cr)
  - Natural Science (5-6 Cr)

Students who don’t have an associate degree in an IT-related field from Bellevue College, should contact the BAS IST program manager for technical prerequisite courses.

#### Core Program Requirements – All Students

- BUS 370 Intermediate Project Management 5
- BUS 355 Business of Information Technology 5
- CMST 340 Applied Organizational Communication 5
- ISIT 105 Problem Solving for the IT Professional 5
- ISIT 490 Capstone I 5
- ISIT 491 Capstone II 5
- PHIL& 115 Critical Thinking 5
- PHIL 375 Ethical Issues in Information Technology 5
- SOC 275 Technology in Everyday Life 5
- Any college life science course 5

**CORE TOTAL 50**

#### Technical Prerequisites for Application Development Concentration

- DBA 130* Database Theory (5 Cr)
- PROG 140* SQL & Relational Database Programming (5 Cr)
- PROG 160* Systems Analysis and Design (5 Cr)
- PROG 260* Advanced Topics in Object Oriented Programming (5 Cr)
- MATH 130/BA 240** Introduction to Statistics/Statistical Analysis (5 Cr)

Technology or math credits must not be more than 5 years old. *Additional courses needed as prerequisites. **Determined by placement or transfer.

#### Application Development Concentration Requirements

- BUS& 101 Introduction to Business 5
- ISIT 320 Advanced Web Development 5
- ISIT 322 Developing Mobile Applications 5
- ISIT 324 Principles of Software Testing 5
- ISIT 328 Information Security Essentials 5
- ISIT 420 Advanced Data Access Techniques 5
- ISIT 422 Application Architecture 5
- IT 101 Introduction to Information Technology 5

**CONCENTRATION TOTAL 40**
### PROGRAM REQUIREMENTS

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#### TECHNICAL PREREQUISITES FOR BUSINESS INTELLIGENCE CONCENTRATION

- **DBA 130**
  - Database Theory (5 Cr)
- **PROG 109**
  - Introduction to Web Development (5 Cr)
- **PROG 110**
  - Introduction to Programming (5 Cr)
- **PROG 117**
  - Web Development II (5 Cr)
- **PROG 140**
  - SQL & Relational Database Programming (5 Cr)
- **OR**
  - **PROG 111**
    - Introduction to C++ Programming (5 Cr)
  - **PROG 113**
    - Intermediate C++ Programming (5 Cr)
- **MATH 130/BA 240**
  - SQL Self-Test

- 5 Cr

- **Database Theory (5 Cr)**
- **Introduction to Web Development (5 Cr)**
- **Introduction to Programming (5 Cr)**
- **Web Development II (5 Cr)**
- **SQL & Relational Database Programming (5 Cr)**
- **Introduction to C++ Programming (5 Cr)**
- **Intermediate C++ Programming (5 Cr)**
- **Introduction to Statistics/Statistical Analysis (5 Cr)**

Technology or math credits must not be more than 5 years old. *Additional courses needed as prerequisites. **Determined by placement or transfer.

#### BUSINESS INTELLIGENCE CONCENTRATION REQUIREMENTS

- **BUS& 101**
  - Introduction to Business
  - 5 Cr
- **ISIT 328**
  - Information Security Essentials
  - 5 Cr
- **ISIT 330**
  - Business Intelligence Applications
  - 5 Cr
- **ISIT 332**
  - Data Warehousing
  - 5 Cr
- **ISIT 334**
  - Data Visualization
  - 5 Cr
- **IT 101**
  - Introduction to Information Technology
  - 5 Cr

Choose 10 credits from the following:

- **ISIT 336**
  - Dimensional Modeling (5 Cr)
- **ISIT 337**
  - Predictive Analytics (5 Cr)
- **ISIT 338**
  - Data Analysis Techniques (5 Cr)
- **ISIT 432**
  - Data Repositories for Analytics (5 Cr)
- **ISIT 434**
  - Web Analytics (5 Cr)
- **ISIT 436**
  - Performance Management (5 Cr)

**CONCENTRATION TOTAL**: 40 Cr

#### TECHNICAL PREREQUISITES FOR SYSTEM ADMINISTRATION AND INFORMATION SECURITY CONCENTRATIONS

- **BUS& 101**
  - Introduction to Business (5 Cr)
- **IT 101**
  - Introduction to Information Technology (5 Cr)
- **MATH 138**
  - College Algebra for Business & Social Science (5 Cr)
- **NSCOM 201**
  - CISCO Networking I (5 Cr)
- **NSCOM 202**
  - CISCO Networking II (5 Cr)
- **NSCOM 203**
  - CISCO Networking III (5 Cr)
- **NSCOM 204**
  - CISCO Networking IV (5 Cr)
- **NSCOM 220**
  - Implementing Client Operating Systems (5 Cr)
- **NSCOM 221**
  - Implementing Server Operating Systems (5 Cr)
- **NSCOM 222**
  - Managing a Network Environment (5 Cr)
- **NSCOM 227**
  - Implementing Directory Services (5 Cr)
- **TECH 215**
  - PC Analysis & Configuration I (5 Cr)
- **TECH 217**
  - PC Analysis & Configuration II (5 Cr)

Technology or math credits must not be more than 5 years old. *Additional courses needed as prerequisites. **Determined by placement or transfer.

#### SYSTEM ADMINISTRATION CONCENTRATION REQUIREMENTS
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<td>ISIT 342</td>
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<tr>
<td>ISIT 344</td>
<td>Virtualization and Storage</td>
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<tr>
<td>ISIT 440</td>
<td>Administering a Linux Server</td>
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<tr>
<td>ISIT 442</td>
<td>Managing Messaging Services</td>
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<tr>
<td>ISIT 444</td>
<td>Automation/Configuration and Management</td>
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<tr>
<td>PROG 160</td>
<td>Systems Analysis &amp; Design</td>
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**CONCENTRATION TOTAL** 40

**INFORMATION SECURITY CONCENTRATION REQUIREMENTS**

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**CONCENTRATION TOTAL** 40

**GRAND TOTAL** 180

The BAS in Information Systems and Technology (IST) will provide students with a broad base of theoretical and technical knowledge, as well as specialized knowledge in one of four concentration areas: application development, business intelligence, systems administration and information security. Individual concentration descriptions can be found online at [www.bellevuecollege.edu/ibit/degrees/bachelor/ist](http://www.bellevuecollege.edu/ibit/degrees/bachelor/ist).

### LEARNING OUTCOMES

Program graduates should be able to:

- Apply core competencies learned in the graduate’s chosen concentration to function as a successful professional in the field of Information Systems and Technology.
- Apply a broad understanding of information systems and technology, creative problem-solving techniques and systems thinking to developing organizational solutions.
- Work effectively in multi-disciplinary teams to apply information technology in support of organizational goals.
- Identify and analyze user needs and take them into account in the selection, creation, evaluation, administration and administration of information technology systems.
- Work efficiently and effectively applying sound project management techniques and professional communication skills.
- Analyze the local and global impact of information technology on individuals, organizations, and society.
- Apply best practices and standards, conform to legal and regulatory standards, and apply appropriate ethical considerations including respect for privacy and intellectual property.
- Engage in continuing professional development through lifelong learning.
- Analyze and apply sustainable business practices.

- Demonstrate the breadth and depth of the educational preparation through the completion of a capstone project.

### PROGRAM ELIGIBILITY

Individuals must have:

- A technical associate’s degree in an information technology related field from a regionally accredited institution.
- Completed college courses with a grade of 2.0 or higher, with a minimum grade of 2.0 in all courses required for associate's degree in IT.
- At least 30 credits of general education requirements completed as part of the associate's degree.

### DEGREE REQUIREMENTS

Completion of all required courses as shown in the worksheet for each corresponding concentration. In addition to eligibility requirements, students must also achieve the following:

- Complete 90 quarter credits in the general program and concentration requirements, with a grade of “C” or better.
- A minimum cumulative GPA of 2.0 for all coursework taken at BC and the courses applied to the degree, including credits transferred from other colleges.
- At least 45 quarter credits for the degree must be completed in residence at BC, of which 30 credits must be upper division.
- Courses may be subject to minimum grade requirements and prerequisites. Check online at [www.bellevuecollege.edu/classes/all/](http://www.bellevuecollege.edu/classes/all/).
APPLICATION PROCESS

To be considered for the bachelor of applied science in Information Systems and Technology, prospective students must submit the following:

- Completed bachelor of applied science application form
- Nonrefundable application fee of $75
- Official transcripts from regionally accredited college(s), demonstrating completion of an appropriate associate’s degree or equivalent credits, and the prerequisite courses, with a GPA of 2.0 or higher

TUITION

The Bachelor of Applied Science in Information Systems and Technology is a self-support program and therefore does not necessarily follow the upper division tuition schedule published in the college catalog and quarterly schedule. Tuition includes applicable college and course fees, plus current per credit rates published online at www.bellevuecollege.edu/enrollment/tuition/.

These courses are not eligible for tuition waivers.

FOR MOST UP-TO-DATE INFORMATION, GO TO:

www.bellevuecollege.edu/programs/degrees/bachelor/ist/

NOTES