

# INFORMATION SYSTEMS MAJOR, BS

Campus: NYC, Westchester

## Major Completion Summary

| Requirement                  | Credits    |
|------------------------------|------------|
| University Core Requirements | 44-53      |
| Major Requirements           | 64-65      |
| Electives                    | 2-12       |
| <b>Total Credits</b>         | <b>120</b> |

## University Core Requirements

See complete University Core (<http://catalog.pace.edu/undergraduate/university-core-curriculum/>) requirements.

Includes several of the major-required courses listed below:

| Code   | Title                            | Credits |
|--|----------------------------------|---------|
| <b>Foundation Requirements</b>                                   |                                  |         |
| MAT 131  | Calculus I                       | 4       |
| CS 121   | Introduction to Computer Science | 4       |
| <b>Areas of Knowledge</b>  |                                  |         |
| Two courses for each of the four Areas of Knowledge <sup>1</sup> |                                  | 24      |

<sup>1</sup> Including MAT 234 Introduction to Probability and Statistical Analysis and ECO 106 Principles of Economics: Microeconomics.

## Major Requirements (64-65)

| Code                            | Title   | Credits |
|---------------------------------|---|---------|
| <b>Information Systems Core</b> |   |         |
| CIT 211                         | Platform Technologies and Architecture                            | 4       |
| CIT 221                         | Global Networking Technology                                      | 4       |
| CIT 241                         | Database Management   | 4       |
| CIT 261                         | Introduction to Coding in Python                                  | 4       |
| CIT 262                         | Advanced Coding in Python   | 4       |
| CIT 322                         | Distributed Computing   | 4       |
| CIT 342                         | Systems Design and User Experience                                | 4       |
| CIT 471                         | Information Technology Internship                                 | 4       |
| or CIT 481                      | Capstone in Information Technology                                |         |
| <b>Electives</b>                |   |         |
| Select three of the following:  |   | 11-12   |
| CIT 251                         | Computer Security Overview  |         |
| CIT 316                         | Visual Basic Programming  |         |
| CIT 332                         | Multimedia and User Interface Design                              |         |
| CIT 336                         | Web Scripting   |         |
| CIT 344                         | Project Management  |         |
| CIT 346                         | Database Programming  |         |
| CIT 348                         | Data Mining   |         |
| CIT 352                         | Network and Internet Security                                     |         |
| CIT 354                         | Computer Forensics  |         |
| CIT 356                         | Operating Systems Concepts  |         |
| <b>Mathematics</b>              |   |         |
| CS 113                          | Mathematical Structures for Computer Science                      | 4       |
| MAT 111                         | Elementary Calculus I <sup>1</sup>                                | (3)     |
| MAT 234                         | Introduction to Probability and Statistical Analysis <sup>1</sup> | (4)     |

| IS Environment       |   |              |
|----------------------|---|--------------|
| ACC 203              | Financial Accounting                    | 4            |
| ACC 204              | Managerial Accounting                   | 4            |
| ECO 105              | Principles of Economics: Macroeconomics | 3            |
| MGT 150              | Managerial and Organizational Concepts  | 3            |
| MAR 201              | Principles of Marketing                 | 3            |
| <b>Total Credits</b> |   | <b>64-65</b> |

<sup>1</sup> Shared with the University Core.

## Electives (2-12 Credits)

| Code                             | Title | Credits     |
|----------------------------------|-------|-------------|
| <b>Electives</b>                 |       |             |
| Select 2-12 credits <sup>1</sup> |       | 2-12        |
| <b>Total Credits</b>             |       | <b>2-12</b> |

<sup>1</sup> UNV 101 First-Year Seminar: Introduction to University Community is required for all new freshmen.

Note: ENG 105C Composition and Rhetoric, MAT 100 Fundamental Mathematics, and MAT 103 Algebra cannot be used towards the 120 credits for graduation

| Course                | Title  | Credits   |
|-----------------------|--|-----------|
| <b>First Year</b>     |  |           |
| <b>Fall</b>           |  |           |
| UNV 101               | First-Year Seminar: Introduction to University Community | 1         |
| CIS 101               | Introduction to Computing                                | 3         |
| ENG 110<br>or ENG 120 | Composition<br>or Critical Writing                       | 3         |
| MAT 103               | Algebra  | 3         |
| Learning Community    |  | 6         |
| <b>Credits</b>        |  | <b>16</b> |
| <b>Spring</b>         |  |           |
| CIT 211               | Platform Technologies and Architecture                   | 4         |
| ENG 120               | Critical Writing   | 4         |
| CS 113                | Mathematical Structures for Computer Science             | 4         |
| ECO 105               | Principles of Economics: Macroeconomics                  | 3         |
| <b>Credits</b>        |  | <b>15</b> |
| <b>Second Year</b>    |  |           |
| <b>Fall</b>           |  |           |
| CIT 261               | Introduction to Coding in Python                         | 4         |
| CIT 241               | Database Management                                      | 4         |
| ACC 203               | Financial Accounting                                     | 4         |
| Civic Engagement      |  |           |
| <b>Credits</b>        |  | <b>12</b> |
| <b>Spring</b>         |  |           |
| CIT 221               | Global Networking Technology                             | 4         |
| ECO 106               | Principles of Economics: Microeconomics                  | 3         |
| ACC 204               | Managerial Accounting                                    | 4         |
| ENG 201               | Writing in the Disciplines                               | 3         |
| CIT 262               | Advanced Coding in Python                                | 4         |
| <b>Credits</b>        |  | <b>18</b> |

**Third Year****Fall**

|   |  |              |
|---|--|--------------|
| MAT 111                                       | Elementary Calculus I                  | 3            |
| MGT 150                                       | Managerial and Organizational Concepts | 3            |
| Second Language I                             |  | 3            |
| Lab Science (ENV 222/CHE 111/PHY 111/BIO 101) |  | 3-4          |
| CIT Advanced Elective                         |  | 3-4          |
| <b>Credits</b>                                |  | <b>15-17</b> |

**Spring**

|                    |  |           |
|--------------------|--|-----------|
| CIT 322            | Distributed Computing                                | 4         |
| Second Language II |  | 3         |
| MAT 234            | Introduction to Probability and Statistical Analysis | 4         |
| MAR 201            | Principles of Marketing                              | 3         |
| AOK/ARE Course     |  | 3         |
| <b>Credits</b>     |  | <b>17</b> |

**Fourth Year****Fall**

|                       |                 |           |
|-----------------------|-----------------|-----------|
| AOK/ARE Courses       |                 | 6         |
| CIT Advanced Elective |                 | 4         |
| COM 200               | Public Speaking | 3         |
| <b>Credits</b>        |                 | <b>13</b> |

**Spring**

|                       |  |                |
|-----------------------|--|----------------|
| CIT 342               | Systems Design and User Experience   | 4              |
| CIT Advanced Elective |  | 3-4            |
| CIT 471<br>or CIT 481 | Information Technology Internship<br>or Capstone in Information Technology | 4              |
| AOK/ARE Course        |  | 3              |
| <b>Credits</b>        |  | <b>14-15</b>   |
| <b>Total Credits</b>  |  | <b>120-123</b> |