

# **List of Information Systems Major Requirements**

## **(63-67 credits)**

### **1) Either CISC 1115 or CISC 1170**

- **CISC 1115: Introduction to Computing Using Java**

**Prerequisite:** None

**Note:** Not open to students who are enrolled in or have completed CISC 1110

- **CISC 1170: Java for Programmers**

**Prerequisite:** an introductory programming course in a language other than Java, and permission of the chair

**Note:** Not open to students who are in enrolled in or have completed CISC 1115 or 3115

### **2) Either CISC 4900 or 5001**

- **CISC 4900: Independent and Group Project I**

**Prerequisite:** CISC 3110 or 3115 and permission of the chairperson

- **CISC 5001: Independent Study and Research I, II, III, IV**

**Prerequisite:** CISC 3130, a minimum GPA of 3.0 overall and in CIS courses, and permission of the chairperson

### **3) All of the following:**

- **CISC 3115: Introduction to Modern Programming Techniques**

**Prerequisite:** CISC 1115 or 1170

- **CISC 3130: Data Structures**

**Prerequisite:** CISC 3115; or CISC 3110 and 1170

- **CISC 3810: Database Systems**

**Prerequisite:** CISC 3130

### **4) Three courses chosen from the following:**

**\*With permission of the chairperson of the Department of Computer and**

**Information Science, studentS may substitute one of the following courses for any course in the three-course choice below: CISC 3160, 3220, 3310, 3320, 3610, 3630.**

- **CISC 3140: Design and Implementation of Large-Scale Web Applications**  
**Prerequisite:** CISC 3130; and either 1115, 1117, or 11170
- **CISC 3150: Object-Oriented Programming**  
**Prerequisite:** CISC 3130
- **CISC 3171: Introduction to Software Engineering**  
**Prerequisite:** CISC 3130
- **CISC 3340: Computer Networks and Protocols**  
**Prerequisite:** CISC 3130; CISC 3305, 3310, or 3315; and MATH 2501
- **CISC 3345: Computer Networks**  
**Prerequisite:** CISC 3130; CISC 3305, 3310, or 3315
- **CISC 3410: Artificial Intelligence**  
**Prerequisite:** CIS 21 or CISC 3130
- **CISC 3800: Advanced Personal Computer Techniques for Business Applications**  
**Prerequisite:** CISC 1110 or 1115 and CISC 1050, or permission of the chairperson
- **CISC 3820: Introduction to Modeling and Simulation**  
**Prerequisite:** CISC 1110; and MATH 3501

**5) All of the following:**

- **CISC 2820W/Philosophy (PHIL) 3318W: Computers and Ethics**  
**Prerequisite:** CORC 1312 or Core Studies 5.1 or CIS 1000 or 1110 or 1115, and ENGL 1012
- **CISC 1590/Business (BUSN) 3420: Management Information Systems**  
**Prerequisite:** CISC 1050 and at least sophomore standing or permission of the chairperson
- **CISC 2531/BUSN 3430: Operations Management**  
**Prerequisites:** CORC 1312 or Core Studies 5.1 or CIS 100 or 1050 or 1110 or 1115; CISC 2210 or BUSN 3400 or ECON 3400 or MATH 2501 or MATH 3501.

- **BUSN 4202W/CISC 1580W: Seminar in Computer-Assisted Management Games**

**Prerequisite:** ENGL 1012

**Prerequisite or corequisite:** BUSN 3400 or MATH 2501 or 3501; and BUSN 3430 or CISC 2531; and CISC 1050 or 1110; and senior standing; and at least 34 credits in CIS and/or Business courses required for the B.S. degree in CIS or the B.S. degree in business, management, and finance.

**Notes:** Not open to students who have completed Economics 80.3

- **ECON 2100/BUSN 2100: Elementary Macroeconomics**

**Prerequisite:** Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test.

**Note:** Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

- **ECON 2200/BUSN 2200: Elementary Microeconomics**

**Prerequisite:** Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test.

**Note:** Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

- **BUSN 3200: Principles of Management**

**Prerequisite:** None

**Note:** Not open to students who have completed Economics 3200 [50.1]

- **Finance (FINC) 3310: Principles of Financial Management**

**Prerequisite:** Accounting 2001, Economics 2100, Economics 2200, and Business 3400 or Economics 3400

- **Accounting (ACCT) 2001: Introductory Accounting**

**Prerequisite:** None

**Note:** Not open to students who have completed Economics 71.01 or 71.1

## 6) Either CISC 1530/BUSN 3120 or CISC 2532/BUSN 2432

- **CISC 1530: Electronic Commerce**

**Prerequisite:** CISC 1050 or CISC 1110 or CISC 1115 or any course in computing

- **CISC 2532: Information Systems Project Management**

**Prerequisites:** CISC 1590 or BUSN 3420

**7) Either BUSN 3400/ECON 3400 or MATH 2501 or MATH 3501 or Psychology (PSYC) 3400**

- **BUSN 3400/ECON 3400: Introduction to Economic and Business Statistics**

**Prerequisite:** Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test.

**Note:** Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

- **MATH 2501: Elementary Probability and Statistics**

**Prerequisite:** Mathematics 4.20 with a grade of C- or higher; or permission of the chairperson

- **MATH 3501: Probability and Statistics I**

**Prerequisite:** Math 2201

- **PSYC 3400: Statistical Methods in Psychological Research**

**Prerequisite:** Psychology 1000.

**8) BUSN 3410/ECON 3410 or MATH 1201 or BUSN 3421 or CISC 2590**

- **BUSN 3410/ECON 3410: Fundamental Methods of Mathematical Economics I**

**Prerequisite:** Economics 2200 [20.1] or Business 2200 [20.1].

- **Math 1201: Calculus I**

**Prerequisite:** All students must have met one of the following conditions: earned a grade of C- or higher in Mathematics 1011, 1012 or 1026; achieved minimum scores on the COMPASS test of  $s1 = 70$ ,  $s2 = 70$ ,  $s3 = 70$ , and  $s5 = 70$ ; achieved a minimum score of 105 on the ACCUPLACER College-Level Math test; or obtained departmental permission

- **BUSN 3421/CISC 2590: Foundations of Business Analytics**

**Prerequisites:** Business 3400, Economics 3400, Mathematics 1501, Psychology 3400, or an equivalent statistics course with a grade of C or better; and Computer and Information Science 1050 or proficiency with spreadsheets.