Information Systems Major

The Information Systems Major is open to all NCAS and UCN students, and as a second major to other Rutgers Newark undergraduates, except for majors in Computer Science and in Management Information Systems. A total of 60 credits is required for the Information Systems Major. Courses can also be taken at NJIT using (school code 28) or at the Rutgers Business School using (school code 29.)

Required Courses:
21:198:101 – Computers & Programming I (3 credits)
21:198:102 – Computers & Programming II (3 credits)
28:548:117 – Introduction to Website Development (3 credits)
28:548:265 – Introduction to Information Systems (3 credits)
28:548:247 – Designing the User Experience (3 credits)
28:548:350 – Computers, Society and Ethics (3 credits)
28:548:331 – Database Design, Management and Applications (3 credits)
28:548:455 – Information Systems Management (3 credits)
28:198:356 – Introduction to Computer Networks (3 credits) OR NJIT’s IT 120 (Introduction to Computer Networks)
28:548:465 – Advanced Information Systems (3 credits)
28:548:491 – Senior Project (3 credits) If this class is not offered, students may substitute the IT or CS Senior Project at NJIT.

Additional Required Electives:
12 credits at the 300-400 course level, either in Computer Science or Information Systems. 200-level courses in Computer Science are also valid as electives for the Information System major, but Information Technology courses do not count as Information Systems electives. No more than 3 credits may be taken from 21:198:493, 494, 495, and 496.

Students with an interest in Business may use any of the following Business and Economics course as required Information Systems Science Electives.
29:010:203 – Introduction to Financial Accounting (3 credits)
29:010:204 – Introduction to Managerial Accounting (3 credits)
21:220:102 – Introduction to Economics, Macro (3 credits)
29:390:329 – Finance (3 credits)
29:620:301 – Principles of Management (3 credits)
29:620:302 – Management Skills (3 credits)
29:620:345 – Management of Human Resources (3 credits)

Other Required Courses:
21:640:119 – Applied Calculus (previously Basic Calculus) (4 credits) OR 21:640:135 Calculus I (4 credits)
21:640:219 – Basic Linear Algebra (3 credits)

www.ncas.rutgers.edu/math
Prerequisite Flow Diagram for the Information Systems Major

21:355:101 and one social science course

28:548:350 Computers, Society & Ethics

28:548:390 (2) Requirements Analysis & Systems Design

28:548:301 (4) Introduction to Website Development


21:198:102 Computers & Programming II

28:548:265 Introduction to Information Systems

28:548:331 Database Design Management & Applications

28:548:465 Advanced Information Systems

28:548:455 Information Systems Management

21:640:119/135 Applied Calculus (previously Basic Calculus) or Calculus

21:640:211 (3) Statistics

21:640:219 Basic Linear Algebra

28:548:247 (6) Designing the User Experience

28:544:120 (7) Introduction to Network Technology

28:548:247 (6) Designing the User Experience

21:198:251 Computer Organization

21:198:251 Computer Organization

28:548:247 (6) Designing the User Experience

28:548:491 (5) Senior Project

21:198:270 Computer Organization

Senior Standing

Recommended Course
(1) School 28 courses are available only at NJIT
(2) 28:548:390 can be replaced by 29:623:318
(4) 28:548:117 can be replaced by 28:548:270
(5) 28:548:491 can be replaced by the IT or CS project at NJIT
(6) 28:548:247 can be replaced by 28:198:332
(7) 28:544:120 can be replaced by 28:198:356