



UNIVERSITY | NEWARK

DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE

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)
28:548:390 – Requirements Analysis & Systems Design (3 credits) OR 29:623:318 – Systems Design & Analysis (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)
21:640:237 – Discrete Structures (3 credits) OR 21:198:251 Computer Organization (3 credits)
21:640:211 – Statistics (3 credits), OR 21:640:327(Math), OR 21:960:211 (Math),
OR 21:220:231 (Economics), OR 21:830:301 (Psychology), OR 21:920:301 (Sociology), OR 29:623:340 (Rutgers Business School)

Prerequisite Flow Diagram for the Information Systems Major

