

## Computer and Information Sciences

## Catalog Year 2019-2020 and Later

### Required Information Systems Courses

35 Units

|       |                                              | Units |
|-------|----------------------------------------------|-------|
| _____ | CIS 211 Fundamentals of Info Sys and Tech    | 3     |
| _____ | COSC 236 Introduction to Computer Science I  | 4     |
| _____ | COSC 237 Introduction to Computer Science II | 4     |
| _____ | ITEC 231 Fundamentals of Web Technologies    | 3     |
| _____ | CIS 239 Enterprise Systems & Architecture    | 3     |
| _____ | CIS 350 Telecommunications                   | 3     |
| _____ | CIS 377 Introduction to Cybersecurity        | 3     |
| _____ | CIS 379 Systems Analysis & Design            | 3     |
| _____ | CIS 435 Human Computer Interaction           | 3     |
| _____ | CIS 458 Organizational Database Management   | 3     |
| _____ | CIS 479 Software Project Management          | 3     |

### Required Math Courses

9-10 Units

|       |                                              | Units |
|-------|----------------------------------------------|-------|
| _____ | MATH 231 Basic Statistics                    | 3     |
| _____ | MATH 263 Discrete Mathematics                | 3     |
| _____ | MATH 211 Calculus for Applications <b>OR</b> | 3     |
| _____ | MATH 273 Calculus I                          | 4     |

### Required Core Courses

6 Units

|       |                                                   | Units |
|-------|---------------------------------------------------|-------|
| _____ | ENGL 317 Writing for Business & Industry (Core 9) | 3     |
| _____ | COSC 418 Ethical/Societal Concerns CS (Core 14)   | 3     |

### IS Capstone

3 Units

|       |                                      | Units |
|-------|--------------------------------------|-------|
| _____ | CIS 475 Information Systems Capstone | 3     |

### Required Business Track Courses

9 Units

|       |                                             | Units |
|-------|---------------------------------------------|-------|
| _____ | CIS 334 Data Organization                   | 3     |
| _____ | ACCT 201 Principles of Financial Accounting | 3     |
| _____ | ECON 201 Microeconomics                     | 3     |

### Required Course Pair

6 Units

Select one pair from the following list:

|       |                                                | Units |
|-------|------------------------------------------------|-------|
| _____ | ACCT 202 Principles of Managerial Accounting   | 3     |
| _____ | ACCT 301 Intermediate Accounting               | 3     |
| _____ | ACCT 202 Principles of Managerial Accounting   | 3     |
| _____ | ACCT 341 Management Accounting I               | 3     |
| _____ | MKTG 341 Principles of Marketing               | 3     |
| _____ | MNGT 361 Leadership & Management               | 3     |
| _____ | MNGT 361 Leadership & Management               | 3     |
| _____ | MNGT 395 Management of Organizational Behavior | 3     |
| _____ | HLTH 207 Health Care in the US                 | 3     |
| _____ | HCMN 305 Health Administration                 | 3     |

### Elective IS Courses

6 Units

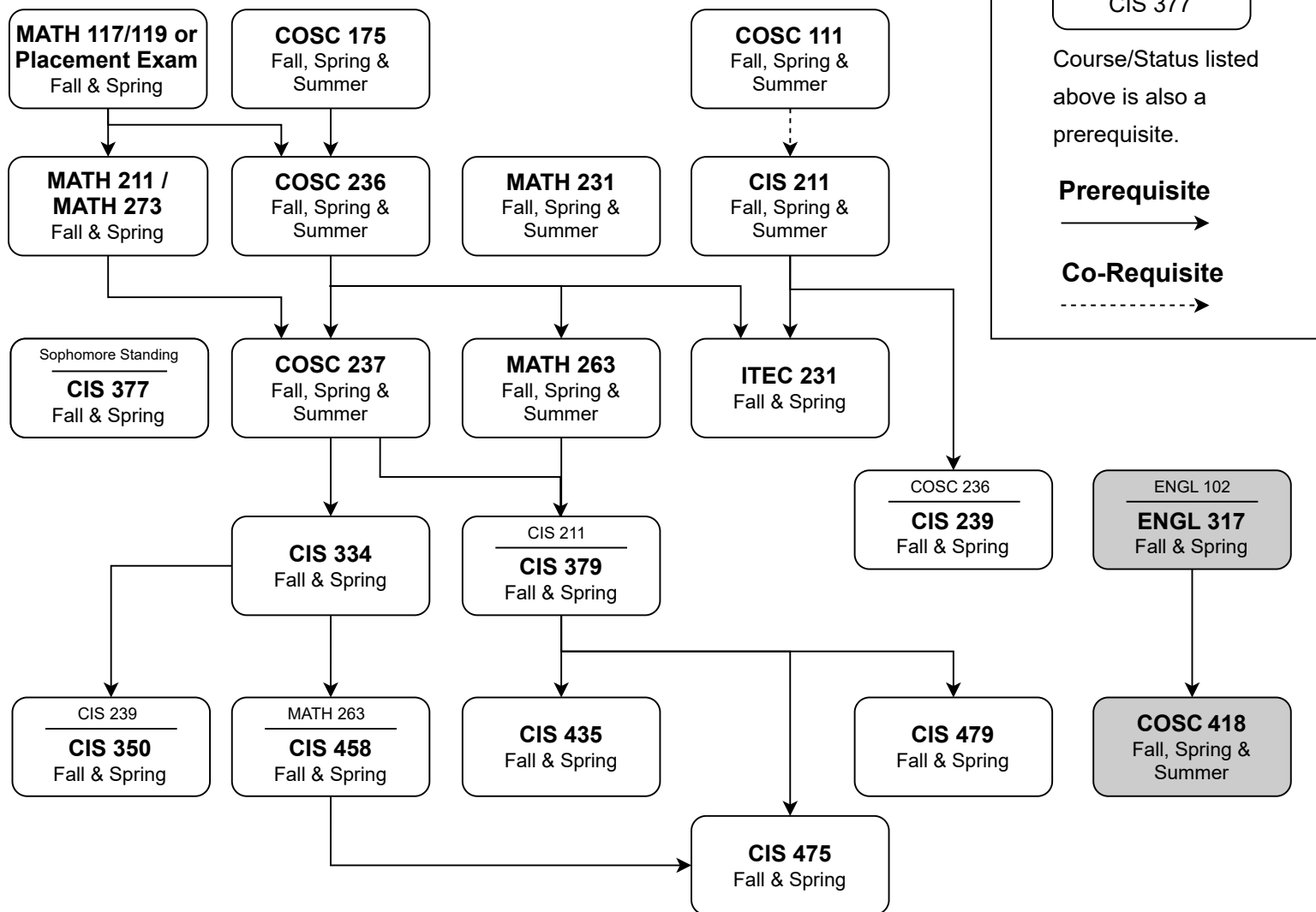
Select 2 courses from the following:

|       |                                            | Units |
|-------|--------------------------------------------|-------|
| _____ | CIS 328 Data Analytics                     | 3     |
| _____ | CIS 397 Internship in IS                   | 3     |
| _____ | CIS 426 Gaming Interface Design            | 3     |
| _____ | CIS 428 Text Analytics                     | 3     |
| _____ | CIS 433 Selected Topics in IS              | 3     |
| _____ | CIS 440 Systems Development for E-Commerce | 3     |
| _____ | CIS 468 Data Mining & Visual Analytics     | 3     |
| _____ | CIS 495 Independent Study in IS            | 3     |
| _____ | ITEC 427 Cloud Computing                   | 3     |

**Total Units: 74-75**

# Major - Information Systems Business Track

Catalog Year 2019-2020 and Later



| Elective Prerequisites |                                     |                       | Course Pair Prerequisites |                        |               |
|------------------------|-------------------------------------|-----------------------|---------------------------|------------------------|---------------|
| Course                 | Prerequisites                       | Offered               | Course                    | Prerequisites          | Offered       |
| CIS 328                | CIS 211, (MATH 231 or MATH 330)     | Fall & Spring         | ACCT 202                  | ACCT 201               | Fall & Spring |
| CIS 397                | CIS 334 or COSC 336, 2.75 GPA, IC   | Fall, Spring & Summer | ACCT 301                  | ACCT 202               | Fall & Spring |
| CIS 426                | CIS 379 or ITEC 411                 | Fall                  | ACCT 341                  | ACCT 202               | Fall & Spring |
| CIS 428                | CIS 328, (CIS 334 or COSC 336)      | Fall & Spring         | MKTG 341                  | Junior/Senior Standing | Fall & Spring |
| CIS 433                | 9 units of IS, Instructor Consent   | Occasionally          | MNGT 361                  | Junior/Senior Standing | Fall & Spring |
| CIS 440                | CIS 379 or ITEC 411                 | Fall                  | MNGT 395                  | MNGT 361               | Fall & Spring |
| CIS 468                | MATH 231, CIS 334                   | Spring                | HCMN 305                  | HLTH 207               | Fall & Spring |
| CIS 495                | Senior Standing, Instructor Consent | Occasionally          | HLTH 207                  | No Prerequisite        | Fall & Spring |

\*IC refers to instructor consent

Find more advising resources at:

<https://www.towson.edu/fcsm/departments/computerinfosci/resources/advising.html>

Visit the CIS Advising Hub in YR 207

Or Email: [cisadvising@towson.edu](mailto:cisadvising@towson.edu)