

## Computer and Information Sciences

## Major - Information Technology Data Management & Analytics

Catalog Year 2021-2022 and Later

### Required Information Technology Courses

41 Units

|       |                                            | Units |
|-------|--------------------------------------------|-------|
| _____ | COSC 111 Information & Tech for Business   | 3     |
| _____ | COSC 175 General Computer Science          | 4     |
| _____ | CIS 211 Fundamentals of IS & Business      | 3     |
| _____ | COSC 236 Intro to Computer Science I       | 4     |
| _____ | ITEC 231 Fundamentals of Web Technologies  | 3     |
| _____ | ITEC 250 Fundamentals of Computer Networks | 3     |
| _____ | ITEC 274 Fundamentals of Sys. Management   | 3     |
| _____ | ITEC 315 Data & Information Management     | 3     |
| _____ | ITEC 325 Sys. Admin & Maintenance          | 3     |
| _____ | ITEC 345 Scripting Languages               | 3     |
| _____ | CIS 377 Introduction to Cybersecurity      | 3     |
| _____ | ITEC 411 Sys. Architecture & Integration   | 3     |
| _____ | CIS 435 Human Computer Interaction         | 3     |

### Required Data Management & Analytics Track Courses

12 Units

|       |                                                | Units |
|-------|------------------------------------------------|-------|
| _____ | CIS 328 Introduction to Data Analytics         | 3     |
| _____ | CIS 428 Text Analytics                         | 3     |
| _____ | CIS 468 Applied Data Mining & Visual Analytics | 3     |
| _____ | ITEC 451 Advanced Data Management/Analysis     | 3     |

### Required Math Courses

6 Units

|       |                                              | Units |
|-------|----------------------------------------------|-------|
| _____ | MATH 231 Basic Statistics <b>OR</b>          | 3     |
| _____ | ECON 205 Statistics for Business & Economics | 3     |
| _____ | MATH 263 Discrete Mathematics                | 3     |

### Elective ITEC Courses

6 Units

| Select 2 of the following: |                                                   | Units |
|----------------------------|---------------------------------------------------|-------|
| _____                      | ITEC 397 Information Technology Internship        | 3     |
| _____                      | ITEC 423 Emerging Internet Technologies           | 3     |
| _____                      | ITEC 427 Cloud Computing for Enterprises          | 3     |
| _____                      | ITEC 437 Disaster Recovery                        | 3     |
| _____                      | ITEC 464 Web Development                          | 3     |
| _____                      | ITEC 470 Special Topics in Information Technology | 3     |
| _____                      | ITEC 485 Information Technology Senior Practicum  | 3     |

**Total Units: 74-75**

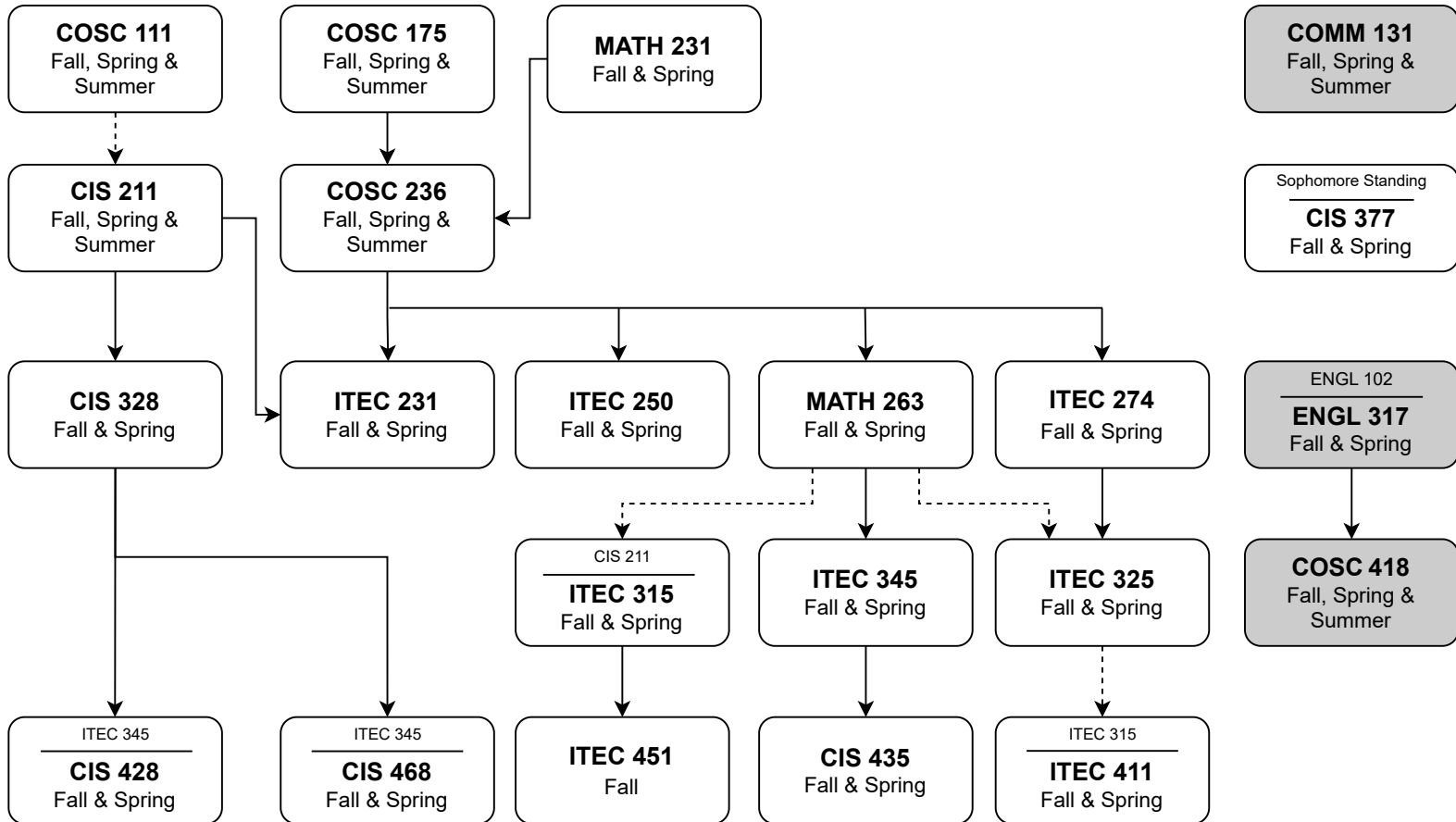
### Required Core Courses

9 Units

|       |                                                   | Units |
|-------|---------------------------------------------------|-------|
| _____ | COMM 131 Public Speaking (Core 5)                 | 3     |
| _____ | ENGL 317 Writing for Business & Industry (Core 9) | 3     |
| _____ | COSC 418 Ethical/Societal Concerns CS (Core 14)   | 3     |

# Major - Information Technology with a Track in Data Management & Analytics

Catalog Year 2021-2022 and Later



## Elective Prerequisites

### Elective

ITEC 397  
ITEC 423  
ITEC 427  
ITEC 437  
ITEC 464  
ITEC 470  
ITEC 485

### Prerequisites

ITEC 315/ITEC 325/ITEC 345, 2.75 GPA, IC  
ITEC 231  
ITEC 231  
ITEC 325  
ITEC 231  
12 units of ITEC, COSC or CIS  
ITEC 411 and Senior Standing

### Offered

Fall, Spring & Summer  
Fall, Spring & Summer  
Fall & Spring  
Fall & Spring  
Fall & Spring  
Occasionally  
Fall & Spring

Sophomore Status

**CIS 377**

Course/Status listed above  
is also a prerequisite.

## Prerequisite

## Co-Requisite

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)