



Major - Information Systems Data Analytics Track

Computer and Information Sciences

Catalog Year 2025-2026 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 Data Analytics Track Courses

15-16 Units

		Units
_____	CIS 328 Intro to Data Analytics	3
_____	CIS 334 Data Organization OR	3
_____	COSC 336 Data Structures	4
_____	CIS 428 Text Analytics	3
_____	CIS 468 Applied Data Mining	3
_____	ITEC 336 Legal & Policy Issue in IT	3

Required Math Courses

9-10 Units

		Units
_____	MATH 231 Basic Statistics	3
_____	MATH 263 Discrete Mathematics	3
_____	MATH 211 Calculus for Applications OR	3
_____	MATH 273 Calculus I	4

IS Capstone

3 Units

		Units
_____	CIS 475 Information Systems Capstone	3

Required Core Courses

6 Units

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

Elective IS Courses

6 Units

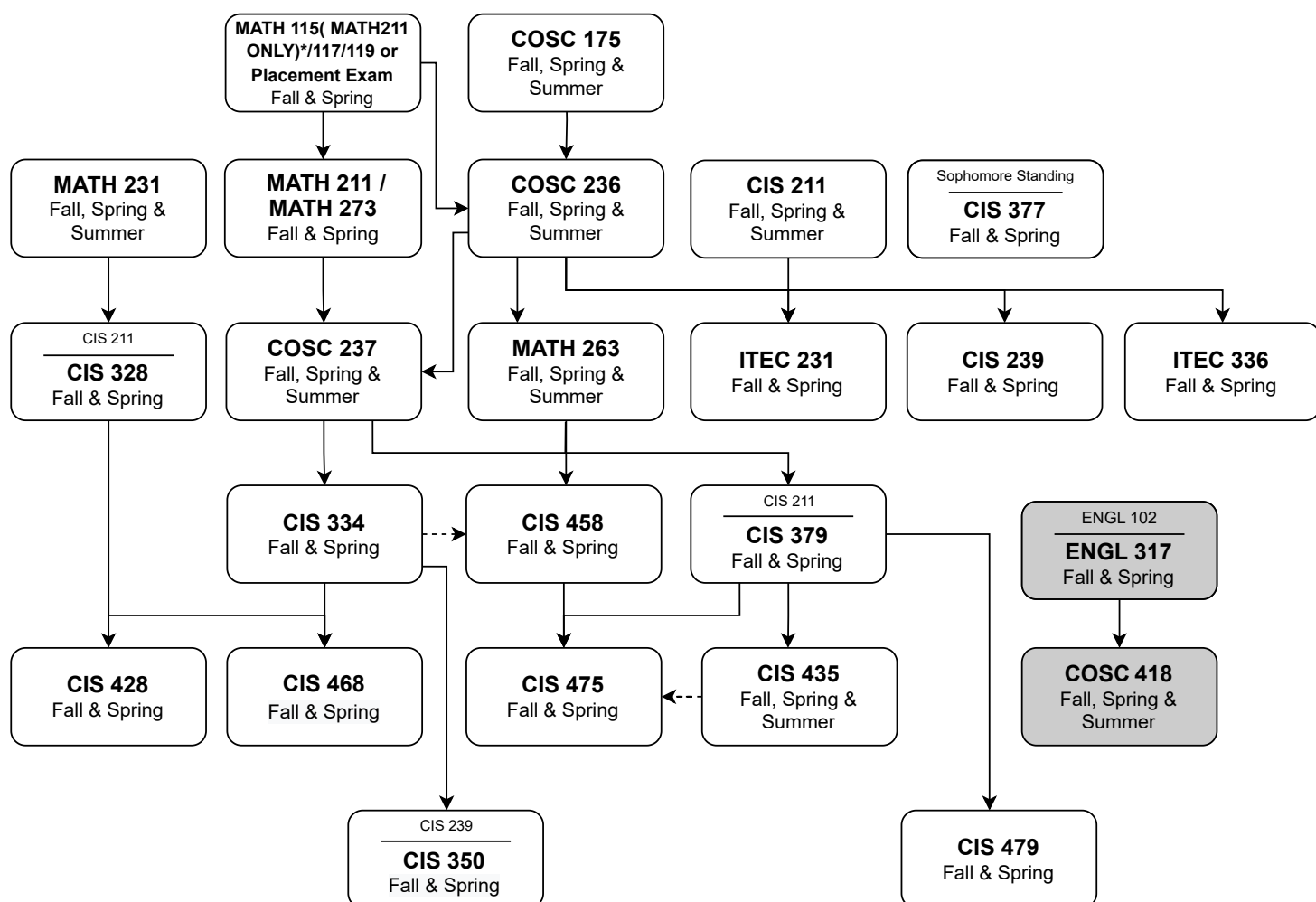
Select 2 courses from the following:

		Units
_____	CIS 265 Visual Basic	3
_____	CIS 397 Internship in IS	3
_____	CIS 426 Gaming Interface Design	3
_____	CIS 433 Selected Topics in IS	3
_____	CIS 436 E-Government	3
_____	CIS 495 Independent Study in IS	3
_____	ITEC 427 Cloud Computing	3

Total Units: 74-76

Major - Information Systems Data Analytics Track

Catalog Year 2025-2026 and Later



*MATH115 is only an accepted prerequisite for MATH211, not MATH273

Elective Prerequisites

Course	Prerequisites	Offered
CIS 265	Programming Experience	Fall, Spring & Summer
CIS 397	CIS 334 or COSC 336, 2.75 GPA, IC	Fall, Spring & Summer
CIS 425	CIS 379, MATH 231	Occasionally
CIS 426	CIS 328 or ITEC 411	Fall
CIS 433	9 units of IS, Instructor Consent	Occasionally
CIS 436	CIS 379	Fall
CIS 495	Senior Standing, Instructor Consent	Occasionally
ITEC 427	ITEC 231	Fall & Spring

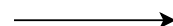
*IC refers to instructor consent

Sophomore Status

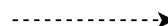
CIS 377

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>

View Third Attempt / Prerequisite Policy at:

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

Visit the CIS Advising Hub in YR 207

Or Email: cisadvising@towson.edu

*All course prerequisites are strictly enforced.

