

COMPUTER & INFORMATION SCIENCES DEPARTMENT

Information Systems

Catalog Years 2014-2015 through 2016-2017

REQUIRED CLASSES

Required CIS/COSC Courses (32 units)

		<u>Units</u>	<u>Grade</u>
CIS 211	Fund. of Info Systems and Tech	3	_____
COSC 236	Intro to Computer Science I	4	_____
COSC 237	Intro to Computer Science II	4	_____
CIS 239	Computer Systems Architecture	3	_____
CIS 350	Telecommunications	3	_____
CIS 379	Systems Analysis and Design	3	_____
CIS 435	Human Computer Interaction	3	_____
CIS 458	Org. Database Management	3	_____
CIS 479	Software Project Management	3	_____
COSC 418	Ethical/Societal Concerns	3	_____

Required MATH Courses (9-11 units)

MATH 263	Discrete Mathematics	3	_____
MATH 273	Calculus I	OR	4
MATH 211	Calculus for Applications	3	_____
MATH 231	Basic Statistics	OR	3
MATH 330	Intro to Statistical Methods	4	_____

Capstone (3 units)

CIS 475	Analysis and Design for Web Sites	3	_____
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TRACKS (select one)

Business Track (21 units)

Required Courses				Course Pair (6 units)			
CIS 334	Data Organization	3	_____	Select one pair from the following list			
ACCT 201	Principles of Financial Accounting	3	_____	ACCT 202	Prin of Managerial Accounting		_____
ECON 201	Microeconomics	3	_____	ACCT 301	Intermediate Accounting I		_____
					OR		
				ACCT 202	Prin of Managerial Accounting		_____
				ACCT 341	Management Accounting I		_____
					OR		
Elective Courses (6 units)				MKTG 341	Principles of Marketing		_____
Select two courses from the following				MNGT 361	Principles of Management		_____
CIS 440	Sys Dev for E-commerce	3	_____		OR		
ITEC 427	Cloud Computing for Enterprises	3	_____	MNGT 361	Principles of Management		_____
CIS 468	Data Mining and Visual Analytics	3	_____		OR		
CIS 397	Internship in IS	3	_____	MNGT 421	Organizational Behavior		_____
CIS 495	Independent Study in IS	3	_____		OR		
				HLTH 207	Health Care in the U.S.		_____
				HCMN 415	Financing and Org of Hlth Care		_____
					OR		
				EBTM 365	Principles of Operations Mgmt		_____
				EBTM 419	Supply Chain Management		_____
					OR		
				EBTM 365	Principles of Operations Mgmt		_____
				EBTM 454	Business Process Management		_____



TRACKS, continued

e-Government Track (21 units)

Required Courses				Two Courses from the Following:			
CIS 334	Data Organization	3	_____	CIS 377	Information Systems Security	3	_____
POSC 103	American National Government	3	_____	CIS 445	Universal Usability	3	_____
POSC 207	State Government	3	_____	POSC 375	Public Administration	3	_____
CIS 436	E-Government	3	_____	CIS 433	Selected Topics in IS	3	_____
ITEC 336	Legal and Policy Issues in IT	3	_____	CIS 495	Independent Study in CIS	3	_____
				CIS 425	Decision Support Systems	3	_____
				CIS 397	Internship	3	_____

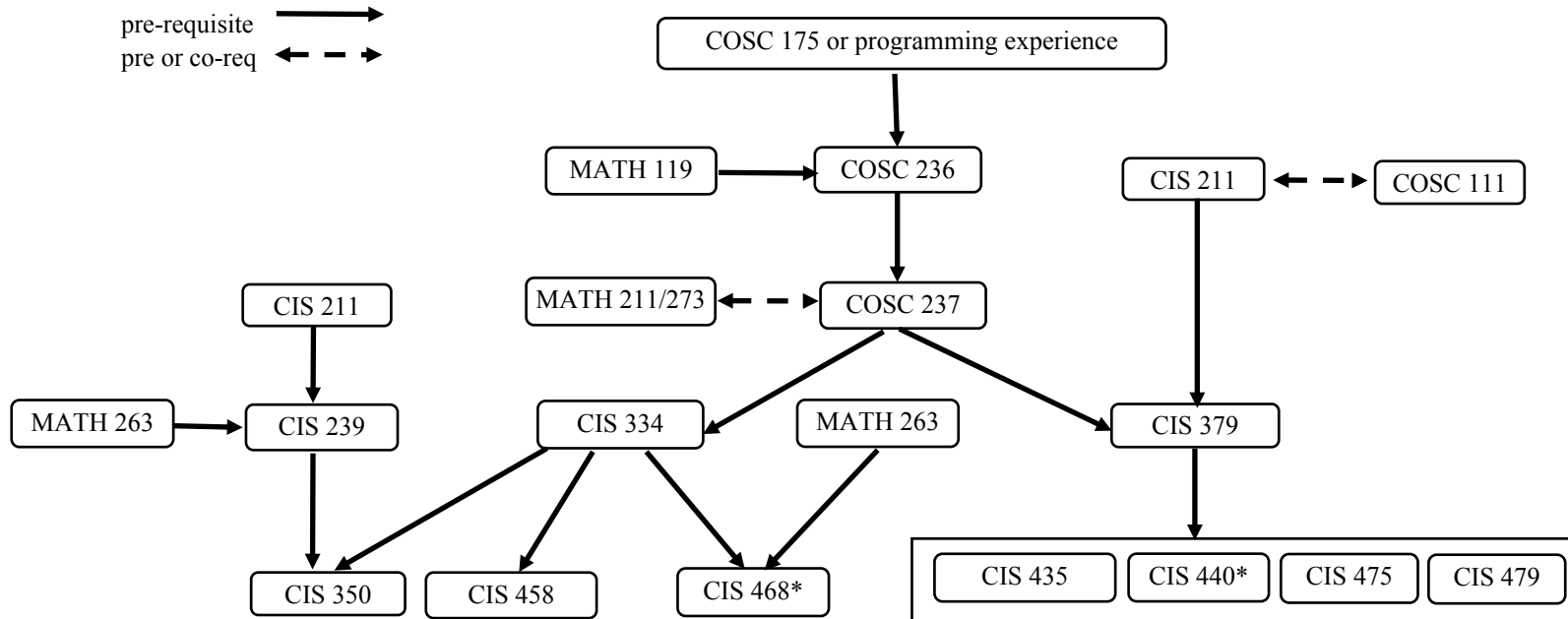
Interface Design Track (21 units)

Required Courses				Two Courses from the Following:			
CIS 334	Data Organization	3	_____	CIS 433	Special Topics in IS	3	_____
ART 103	2D Process	3	_____	CIS 425	Decision Support Systems	3	_____
ART 217	Digital Concepts: Image and Surface	3	_____	CIS 495	Independent Study in CIS	3	_____
CIS 468	Data Mining and Visual Analytics	3	_____	CIS 397	Internship in CIS	3	_____
CIS 445	Universal Usability	3	_____	CIS 436	E-government	3	_____
				ART 365	Design for WWW	3	_____
				OCTH 211	Philosophy of Occp Therapy OR	3	_____
				DFST 101	Introduction to Deaf Culture	3	_____

Systems Track (22 units)

Required Courses				Elective Courses (6 units)			
CIS 440	Sys Devel for Ecommerce	3	_____	Select two courses from the following			
COSC 336	Data Structures	3	_____	CIS 212	Intro Bus Programming OR		_____
COSC 412	Software Engineering	3	_____	CIS 265	Visual Basic	3	_____
COSC 436	Object-oriented Design and Prog.	3	_____	ITEC 345	Scripting Languages	3	_____
COSC 484	Web Programming	3	_____	CIS 377	Information Systems Security	3	_____
				CIS 397	Internship in CIS	3	_____
				ITEC 423	Emerging Internet Tech	3	_____
				CIS 425	Decision Support Systems	3	_____
				ITEC 427	Cloud Computing for Enterprises	3	_____
				CIS 433	Special Topics in IS	3	_____
				CIS 468	Data Mining and Vis. Analytics		_____
				CIS 495	Independent Study in CIS	3	_____

**Prerequisites for IS with Business Track
Prerequisites 14-15 through 16-17**

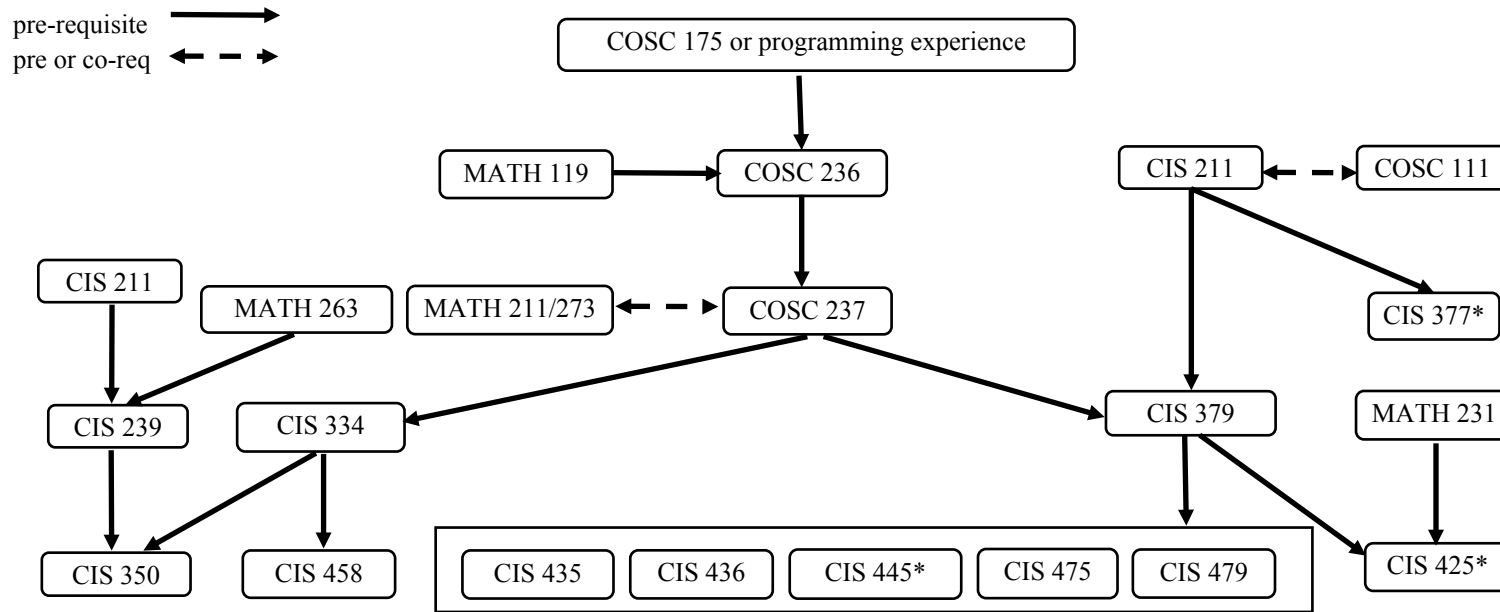


Note: CIS 211 is a prerequisite for both CIS 239 and CIS 379

*electives

CIS 397	6 units upper-level cosc or cis and consent *elective	ACCT/ECON 201	no prereq
CIS 495	Senior standing in IS and consent *elective	ACCT 202	ACCT 201
COSC 418	Jr/Sr, ENGL 317, one COSC/CIS/ITEC course	ACCT 301	ACCT 202
ITEC 427	ITEC 231 *elective	ACCT 341	ACCT 202
MATH 211	MATH 109/111/115/119	MKTG 341	Jr/Sr standing
MATH 231	MATH 111/115	MNGT 361	Jr/Sr standing
MATH 263	MATH 119 or 4 yrs HS math	HLTH 207	no prereq / core
MATH 273	MATH 119 or 4 yrs HS math	HCMN 415	HLTH 207 and HCMN 305 (fall only)
		EBTM 365	Jr/Sr standing and stats
		EBTM 419	EBTM 365 and CIS 211
		EBTM 454	EBTM 365, CIS 211, Sr standing

**Prerequisites for IS with e-Government Track
Prerequisites 14-15 through 16-17**

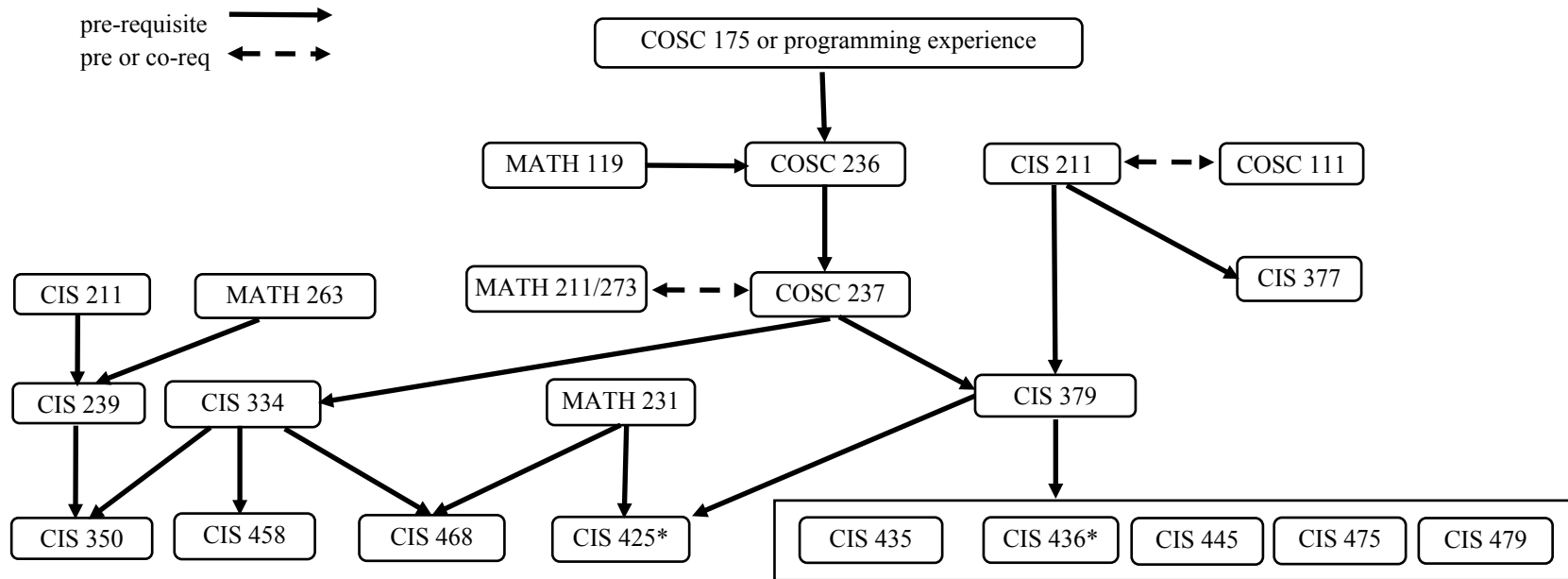


Note: CIS 211 is a prerequisite for both CIS 239 and CIS 377

*electives

CIS 397	6 units upper-level cosc or cis and consent *elective	POSC 103	no prereq / core
CIS 433	9 units cis and consent *elective	POSC 207	no prereq / core
CIS 495	Senior standing in IS and consent *elective	POSC 375	POSC 103 *elective
COSC 418	Jr/Sr, ENGL 317, one COSC/CIS/ITEC course		
ITEC 336	Prereq: CIS 211, Coreq: COSC 236		
MATH 211	MATH 109/111/115/119		
MATH 231	MATH 111/115		
MATH 263	MATH 119 or 4 yrs HS math		
MATH 273	MATH 119 or 4 yrs HS math		

Prerequisites for IS with Interface Design Track
Prerequisites 14-15 through 16-17



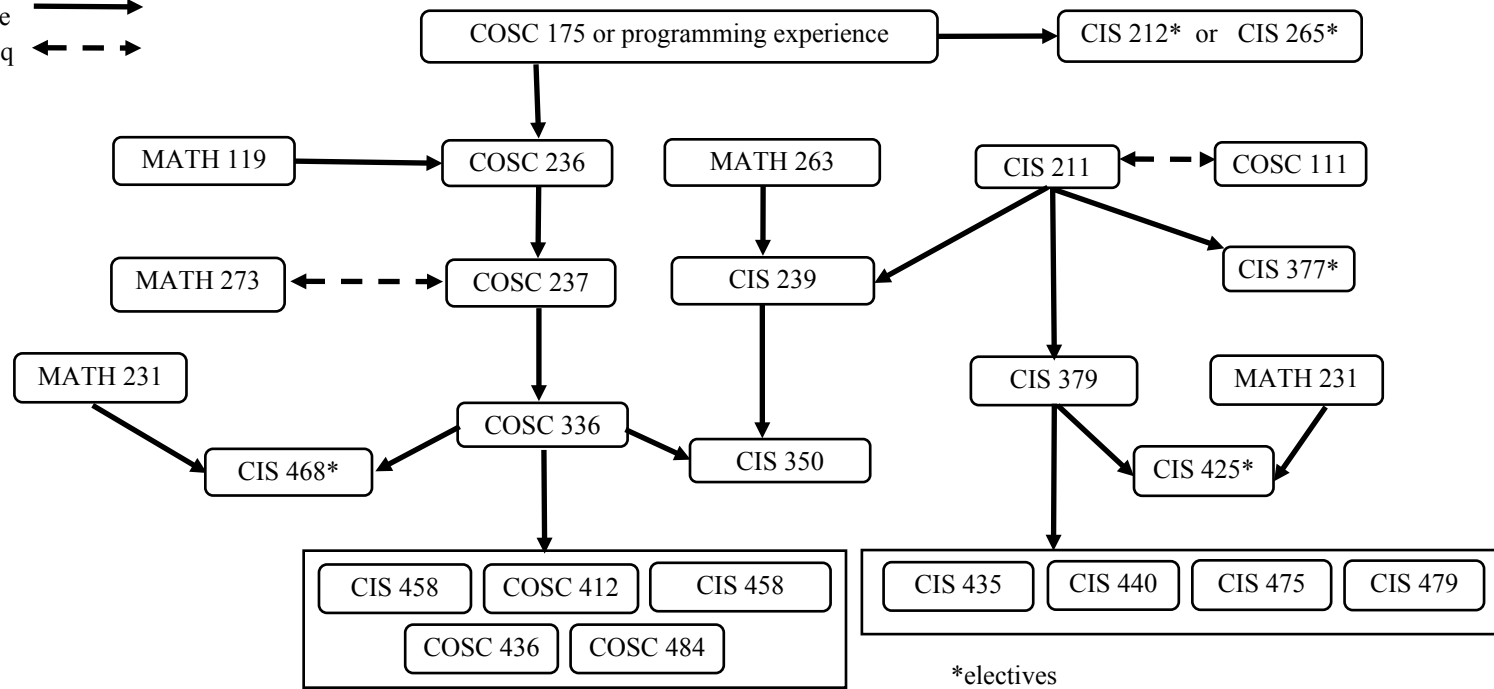
Note: CIS 211 is a prerequisite for both CIS 377 and CIS 239

*electives

CIS 397	6 units upper-level cosc or cis and consent *elective	ART 103	no prereq / core
CIS 433	9 units cis and consent *elective	ART 217	ART 101 or ART 103
CIS 495	Senior standing in IS and consent *elective	ART 365	ART 217 *elective (Art dept permission email: artdepartment@towson.edu)
COSC 418	Jr/Sr, ENGL 317, one COSC/CIS/ITEC course	DFST 101	no prereq / core *elective
MATH 211	MATH 109/111/115/119	OCTH 211	no prereq *elective
MATH 231	MATH 111/115		
MATH 263	MATH 119 or 4 yrs HS math		
MATH 273	MATH 119 or 4 yrs HS math		

**Prerequisites for IS with Systems Track
Prerequisites 14-15 through 16-17**

pre-requisite →
pre or co-req ← - - →



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- | | | | |
|----------|---|----------|--------------------|
| CIS 397 | 6 units upper-level cosc or cis and consent *elective | ITEC 345 | COSC 236 *elective |
| CIS 433 | 9 units cis and consent *elective | ITEC 423 | ITEC 231 *elective |
| CIS 495 | Senior standing in IS and consent *elective | ITEC 427 | ITEC 231 *elective |
| COSC 418 | Jr/Sr, ENGL 317, one COSC/CIS/ITEC course | | |
| MATH 211 | MATH 109/111/115/119 | | |
| MATH 231 | MATH 111/115 | | |
| MATH 263 | MATH 119 or 4 yrs HS math | | |
| MATH 273 | MATH 119 or 4 yrs HS math | | |
| MATH 330 | MATH 274 | | |