THE UNIVERSITY OF SCRANTON

COLLEGE OF ARTS & SCIENCES

APPLIED COMPUTING

About the Program

Applied computing provides students with a strong technical preparation in computing, pairing an emphasis on software development with a depth of study in a chosen application area. A student following the business track completes a specified collection of courses in accounting, economics, management and marketing. The individualized track requires the student to complete a declared minor, concentration or second major.

Outcomes & Opportunities

- All seniors complete a capstone project with faculty advisors, giving students a great opportunity to develop meaningful software products that demonstrate their expertise.
- Students are encouraged to do internships to gain workplace experience.
- Students enter the workplace armed with practical skills and experience, finding employment as computer systems analysts, information systems managers and business application developers.
- You'll find graduates working in a wide range of companies and organizations including Blue Cross/Blue Shield, IBM, Lockheed Martin, MetLife and Prudential.
- Students with strong undergraduate records may be accepted and dually enrolled in the graduate program in software engineering through the Combined Baccalaureate/Master's degree program.
- Other alumni have completed advanced degrees at Carnegie Mellon, Harvard, Penn, UConn, Drexel, Iowa State, Lehigh, UMass and Yale.

Ranked #8 nationally for "Best Science Labs" by The Princeton Review

A CATHOLIC & JESUIT UNIVERSITY • FOUNDED IN 1888 •

SUCCESS AHEAD

admissions.scranton.edu/cis

APPLIED COMPUTING CURRICULUM

	Department & Number - Descriptive Title of Course	Fall Cr.	Spr. Cr.
FIRST YEAR			
MAJOR	CMPS 134 - Computer Science I/CMPS 134L –		
	CMPS 144 - Computer Science II/CMPS 144L	4	4
GE QUAN -COGNATE	MATH 142 - (Q) Discrete Structures – MATH 114 - (Q) Calculus I	4	4
GE EP	CMPS 112 - (FYDT, FYOC) Introduction to		
	Computing & Information Technology	3	
GE EP	WRTG 107 - (FYW) Composition		3
GE PHIL-T/RS	PHIL 120 - Introduction to Philosophy –		
	T/RS 121 - (P) Theology I: Introduction to the Bible	3	3
GE HUMN	HUMN ELECT - Humanities Electives	3	3
GEF SEM	First Year Seminar [1]		
		17	17
SECOND YEAR			
MAJOR	CMPS 240 - Data Structures & Algorithms –		
	CMPS 250 - Machine Organization & Assembly Language Programming	3	3
MAJOR	CMPS 213 - Sophomore Colloquia I – CMPS 214 - Sophomore Colloquia II	0.5	0.5
COGNATE	MATH ELECT - Math Elective [2]		3
COGNATE	COGNATE ELECT - Cognate Elective [3]		3
GE NSCI	NSCI ELECT - Natural Science Elective	3	3
GE HUMN	HUMN ELECT - Humanities Elective	3	
GE S/BH	S/HB ELECT - Social Behavioral Elective	3	
GE PHIL-T/RS	PHIL 210 - Ethics		
	T/RS 122 - (P) Theology II: Introduction to Christian Theology	3	3
		15.5	15.5
THIRD YEAR			
MAJOR	CMPS 352 - Operating Systems	3	
MAJOR	CMPS 340 - Introduction to Database	3	
MAJOR	CMPS 313 - Junior Colloquia I – CMPS 314 - Junior Colloquia II	0.5	0.5
MAJOR	CMPS ELECT - Major Electives [4]	3	6
MAJOR	CMPS 341 - Database Systems		3
COGNATE	COGNATE ELECT – Cognate Electives [3]	6	3
GE S/BH	S/BH ELECT – Social/Behavioral Elective		3
		15.5	15.5

	Department & Number - Descriptive Title of Course	Fall Cr.	Spr. Cr.
FOURTH YEAR			
MAJOR	CMPS 374 - (W,EPW) Fundamentals of Software Engineering –		
	CMPS 490 - (W,EPW) Capstone Project	3	3
MAJOR	CMPS ELECT - Major Elective [4]		3
MAJOR	CMPS 413 - Senior Colloquia I – CMPS 414 - Senior Colloquia II	0.5	0.5
COGNATE	COGNATE ELECT - Cognate Elective [3]	3	
GE HUMN	HUMN ELECT - Humanities Elective		3
GE PHIL	PHIL 214 - (P) Computers & Ethics		3
GE ELECT	FREE ELECT - Free Electives	6	
		12.5	12.5

Total: 121 Credits

CONTACT INFORMATION

Computing Sciences Department
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1.888.SCRANTON *or visit* **admissions.scranton.edu**

[1] The selection of a First Year Seminar is likely to fulfill requirements for both the First Year Seminar and a General Education Requirement. Thus, the First Year Seminar will not add to the total credits for the semester. Talk with your advisor if you have any questions.

[2] MATH 204 or another departmental-approved Statistics course.

[3] The Applied Computing major must complete and obtain departmental approval of an Applied Computing Plan of Study Form, on which they specify how the program's Cognate and GE electives are used to fulfill one of the following tracks.

- *The Business Track requires ECO 153 - ECO 154 as GE S/BH Electives, and ACC 253 - ACC 254, MGT 351 MGT 352, MGT 351, MKT 351 as COGNATE Electives and Free Electives.*
- *The Individualized Track requires the student to satisfy the requirements of a declared Minor, Concentration or Second Major.*

[4] Major electives in the Applied Computing major must be chosen from CMPS 260, CMPS 330, CMPS 344, CMPS 350, CMPS 354, CMPS 355, CMPS 356, CMPS 358, CMPS 360, CMPS 362, CMPS 364, CMPS 370, CMPS 372, CMPS 376, CMPS 384, CMPS 393, CMPS 440, and CMPS 481.

Curriculum grid effective for the 2022-23 academic year in accordance with the undergraduate course catalog.