

Indiana University of Pennsylvania Department of Mathematical and Computer Sciences

Student:		

B.S. in Computer Science / Cyber Security (CYBR) Track

Liberal Studies Requirements

Learning Chille (O ex)	Cullu	C	Cud
Learning Skills (9 cr)	Cr Hr	Sem	Grd
ENGL 101 College Writing	3		
ENGL 202 Research Writing	3		
Mathematics (MATH 125)	3	_	_
Knowledge Areas (31-32 cr)			
Humanities (9 cr)			
History (196, 197, or 198)	3		
Literature ¹	3		
Phil/Rel Studies ²	3		
Fine Arts ³ (3 cr)			
	3		
Natural Science (7-8 cr)			
	4		
	3-4		
Dimensions of Wellness (3 cr)			
Social Science ⁴ (9 cr)			
Satisfied by CRIM 101	3	_	-
	3		
	3		
Liberal Studies Elective (3-9 cr)			
Satisfied by Math 216	3	_	-
Global and Multicultural Awarenss ⁵ (3 cr)			
Writing Across the Curriculum ⁶ (6 cr)			
Satisfied by COSC 319W	3	_	_

- ¹ Literature: ENGL 121 or FLNG 121
- Philosophy & Religious Studies: PHIL 100, 101, 122, 130, 223, or 240; or RLST 100 or 110
- ³ ARHI 101, DANC 102, FIAR 101, MUHI 101, THTR 101, 161
- ⁴ ANTH 110*, 211*, 213; CRIM 101; ECON 101, 121; GEOG 101, 102, 103*, 104*; JRNL 105; PLSC 101*, 111; PSYC 101; RGPL 103*; SOC 151, 161*, 231
 - (Note: Courses with * satisfy Global M/C Awareness)
- ⁵ Satisfied by Social Science with * (see note 5)
- ⁶ Two courses with W suffix
- Students with 6cr in COSC 493 may petition the department to substitute COSC 493 for COSC 473. Petition must be approved prior to start on internship.
- 8 Choose from COSC 220, 362, 365, IFMG 382, Upper-Level Elective (note 9), or Intermediate Level Foreign Language
- Choose from COSC 410, 427, 429, 430, 454, 465, 493W
 (only 3 cr of first 6 cr if not substituted for COSC 473)
- ¹⁰ CRIM 321 recommended; or, 344, 354, 374, 384, or 394
- ¹¹ CRIM 323 recommended; or, 410, 420, 450, 470

Basic Requirements for Computer Science

Computer Science Core (24 cr)	Cr Hr	Sem	Grd	
COSC 105 Fundamentals of CS	3			
COSC 110 Problem Solving	3			
COSC 210 Object-Oriented	3			
COSC 300 Comp Org & Asmbly	3			
COSC 310 Data Structures	3			
COSC 319W Software Engr	3			
COSC 341 Database Mgmt	3			
COSC 380 Seminar Comp Prof	2			
COSC 480 Technical Topics	1			
Mathematics (9 cr)				
MATH 125 Calculus I	3			
MATH 216 Probability /Stats	3			
MATH 309 Discrete Math	3			

Cyber Security Track

Required Courses (15 cr)			
COSC 216 Intro to Cybersecurity	3		
COSC 345 Computer Networks	3		
COSC 356 Network Security	3		
COSC 432 Operating Systems	3		
COSC 473 or 493W Practicum ⁷	3		
Controlled Electives (6 cr) ⁸			
Upper Level Electives (3 cr) ⁹			

Criminology Minor (18 cr)

CRIM 101 Crime & Justice Sys	3	
CRIM 102 Survey Criminology	3	
CRIM 401 Issues in Criminology	3	
CRIM 403 Dilemmas in Crim	3	
Group B: Critical Issues ¹⁰	3	
Group C: Diversity Issues ¹¹	3	

Electives (9-10 cr)			

Credit Summary (120 cr minimum)

Cr to Date	In Progress	Cr Planned	Total Cr
	/	/	