# West Chester University B.S. in MathematicsApplied and Computational Concentration through the Honors College Advisement Sheet

Effective for students entering Fall '23 and later.

# **118-122 CREDITS**

Indicate all the courses you have taken at WCU or transferred for credit. For completed courses, also list the grades. Mark an asterisk (\*) beside courses you are currently taking.

The grade of C or better is necessary in all required math major courses.

# I. MATHEMATICS REQUIRED COURSES (48 s.h.)

MA1125 (Statistics & Prob.)
MAT161 (Calculus I)
MAT162 (Calculus II)
MAT200 (Nature of Math)
MAT261 (Calculus III)
MAT311 (Linear Algebra)
STA200 (Statistics II)
STA319 (Applied Statistics)
MAT325 (Numer. Analysis I)
MAT343 (Diff. Equations)
MAT413 (Computer Algebra)
MAT425 (Numer. Analysis II)
MAT427 (Optimization) or
MAT433 (Modeling)
MAT443 (Applied Analysis I)
MAT445 (Complex Var.) <b>or</b>
MAT441 (Real Analysis I)
MAT455 (Industrial Math.)

### II. COGNATE COURSES (21-23 s.h.)

ENG368 _x (Business Wrt.)* or
ENG375 _x (Workplace Wrt.)* or
ENG371 _x (Technical Wrt)*
CSC141 (Computer Science)
PHY170 (Physics I) <b>or</b>
BIO110 (General Biology) or
CHE103 (General Chemistry) or
ESS101 (Geology)

Select 12-13 credits of science cognates (PHY, BIO, CHE, CSC, or ESS) under

the guidance of an advisor. At least two
cognates must be at the 200-level or
above

Course	Grade

\*NOTE: Fulfilled from Honors Core

# III. INTERNSHIP OR ELECTIVES (13-15 s.h.)

Course	Grade

MAT491 \_\_\_ (Internship)\*

### NOTES:

\*MAT491 is an elective and not a requirement. It may be taken for variable credit and repeated for credit.

# IV. HONORS COLLEGE CORE SEQUENCE for GEN ED (27 s.h.)

HON 100	(Self Awareness)
HON 211	(Public Discourse)
HON 212	(Ethics & Technology)
HON 310	(Community Change)
HON 311	(Stewardship/Civic
	Responsibility)
HON 312	(Educational Systems)
or	
HON 322	(Leader. With ELLs)
HON 313	(Public Opinion)
HON 314	(Environ. Systems)
HON 315	(Community & Arts)
SCI	*
MATx_	^

# NOTES:

\*HON122 (Computer Science for Social Justice) recommended ^Fulfilled from major requirements

# V. ADDITIONAL HONORS COLLEGE REQUIREMENTS (9 s.h.)

A)	Two HON seminars at the 320 level
	or above (except 322)
	HON
	HON

B)	Capstone Project^
	HON 490

^NOTE: <u>Enrollment upon core</u> completion: ideally 6<sup>th</sup> or 7<sup>th</sup> semester

# VI. DIRECTED ELECTIVES

Take enough directed electives to complete 120 credits. The actual number of electives required will vary depending upon (among other issues) the number of 3 vs. 4 hour courses taken to fulfill the major requirements and the addition of minor(s).

Course	Grade

Bring this sheet with you whenever you meet with your advisor about scheduling or course planning!

(Revised October 2023)