Secondary Science Education/Computer Science Double Major

Name:		UID:	

General Education Requirements
(Grade of (__) _._ or higher is required)

Fundamental Studies

Requirements: __credits	Course	Credits	Grade
Academic Writing (AW)	ENGL 101		
Professional Writing (PW)			
Oral Comm. (OC)			
Math (MA)	MATH 140		
Analytic Reasoning (AR)	MATH 140		

Distributive Studies

Requirements: __credits	Course	Credits	Grade
Natural Science Lab (NL)			
Natural Sciences (NS)			
History/Social Sciences (HS)	TLPL 414		
History/Social Sciences (HS)			
Humanities (HU)			
Humanities (HU)			
Scholarship in Practice (SP)	TLPL 101 & TLPL 102		
Scholarship in Practice (SP; non major)			

Big Questions
Normally double counted with Distributive Studies

Requirements: __credits	Course	Credits	Grade
Big Questions			
Big Questions			

Diversity
(overlap permitted with Distributive Studies and/or Big Questions)

Requirements: __credits	Course	Credits	Grade
Understanding Plural Soc. (UP)			
Understanding Plural Soc. (UP) or Cultural Competency (CC)	TLPL 401		

Experiential Learning- opitonal
(overlap permitted withother requirements/courses)

Requirements: __credits	Course	Credits	Grade
			n/a
			n/a

Students must earn a minimum of 120 credits to complete a degree.

Requirements for Graduation:

- ☐ At least 30 credits must be earned at UMD
- ☐ 15 of the final 30 credits must be earned at the 300-400 level
- ☐ 12 upper level major credits must be earned at UMD

Content Major Degree Requirements Computer Science

Requirements	*(Grade of C- or higher is required)*	Credits	Grade
Lower Level Requirements			
MATH 140*		4	
MATH 141		4	
CMSC 131*		4	
CMSC 132*		4	
CMSC 216		4	
CMSC 250		4	
CMSC 330*		3	
CMSC 351*		3	
MATH 240 or 241		3	
STAT 4XX*		3	
CMSC gateway benchmarks.			
Upper Level Requirements General Track			
Select 5 courses from at least 3 of the following areas with no more than 3 courses in a given area			
Area 1: Systems			
CMSC 411		3	
CMSC 412		4	
CMSC 414		3	
CMSC 417		3	
Area 2: Information Processing			
CMSC 420		3	
CMSC 421		3	
CMSC 422		3	
CMSC 423		3	
CMSC 424		3	
CMSC 426		3	
CMSC 427		3	
CMSC 470		3	
Area 3: Software Engineering and Programming Languages			
CMSC 430		3	
CMSC 433		3	
CMSC 434		3	
CMSC 435		3	
CMSC 436		3	
Area 4: Theory			
CMSC 451		3	
CMSC 452		3	
CMSC 456		3	
CMSC 457		3	
Area 5: Numerical Analysis			
CMSC 460 or CMSC 466		3	

Upper Level Elective Courses (Must pass with a grade of C- or higher)
Select 6 credits from CMSC 300- or 400-level courses (not eligible CMSC330 & CMSC351). Students should consult with

CMSC Supporting Sequence (12 credits in Education courses*- Get CMSC advisor approval.)
Suggested: EDHD 426, TLPL 414, TLPL 415,& TLPL 403 (See details below.*)

College of Education Degree Requirements
Year 1 - Benchmark Requirement

		Credits	Grade
AW with C- or higher			
MA with C- or higher			

Gateway Requirements

	Credits	
CMSC LEP Gateway requirements and admission to CMSC major		
TLPL 401 with B- or higher	3	

Pre-Professional Education Requirements

	Credits	
TLPL 101 Inquiry Approach to Teaching STEM (Step 1)	1	
TLPL 102 Inquiry Teaching of STEM in Middle School	2	
*EDHD 426 Cognitive and Motivational Literacy Content	3	
TLPL 401 Student-Centered Curriculum and Instruction	3	
*TLPL 414 Knowing and Learning in Mathematics and Science	3	
*TLPL 415 Perspectives in Science	3	

Professional Education Requirements

	Credits	
*TLPL 403 Teaching and Learning Highschool Mathematics (Fall Only)	3	
TLPL 479D Field Experiences in Education; Secondary Mathematics Education (Fall Only)	1	
TLPL 478D Special Seminar in Education: Mathematics (Spring Only)	1	
TLPL 489D Internship in Education: Mathematics (Spring Only)	12	
TLPL 477 Special Topics in Education; Teaching Academically, Culturally & Linguistically DiverseStudents in Secondary Education (Spring Only)	2	

Science Education/Computer Science Four Year Academic Plan

Year 1	Fall	Cr.	Spring	Cr.
Benchmark 1	CMSC 131	4	CMSC 132	4
AW with C- or higher	MATH 140 (MA/AR)	4	MATH 141	4
MA with C- or higher	ENGL 101 (AW)	3	GENED-NL*	4
MATH 141	GENED-OC	3	GENED-HS*	3
CMSC 131	CMSC 100	1	TLPL 102 *(SP in combination with TLPL 101)*	2
CMSC 132	TLPL 101	1		
	UNIV 100	1		
	Total	17	Total	17

Year 2	Fall	Cr.	Spring	Cr.
Benchmark 2	TLPL 414 (HS)	3	CMSC 330	3
Test of Basic Skills	CMSC 216	4	CMSC 351	3
	CMSC 250	4	MATH 240	4
	GENED-HU*	3	GENED-NS	3
	Elective	1	GENED-HU	3
	Total	15	Total	16

Year 3	Fall	Cr.	Spring	Cr.
Gateway Requirements	TLPL 401	3	EDHD 426	3
TLPL 401 with B- or higher	CMSC 4xx	3	TLPL 415	3
	CMSC 4xx	3	CMSC 4xx	3
Apply to the COE by Dec. 1st	STAT 4xx	3	CMSC 4xx	3
Cumulative GPA of 2.75	GENED-SP (non-major)	3	ENGL 393 (PW)	3
	Total	15	Total	15

Year 4	Fall	Cr.	Spring	Cr.
			YEARLONG INTERNSHIP	
	CMSC xxx	3	TLPL 478D	1
	CMSC 4xx	3	TLPL 489D	12
	CMSC 4xx	3	TLPL 477	2
	TLPL 403	3		
	TLPL 479D	1		
	GenEd*	3		
	Total	16	Total	15
			Total Degree Credits: 126	

This is a proposed plan and the College of Education does not guarantee that these courses will be offered in the designated semester. Consult the *Schedule of Classes* **for class availability and meeting times.**

* All students must complete two Distribute Studies courses that are approved for Big Questions courses. Students must complete Understanding Plural Society and Cultural Competence courses that may also fulfill a Distributive Studies category.

Students must also meet with their Academic Advisor in CMNS to discuss the CMSC course requirements.

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Secondary Science Education/Computer Science Double Major
Benchmarks

45-credit review
Completion of English and Math fundamental studies with a C- or better
Minimum cumulative GPA of 2.75

75-credit review
Passing scores on a Test of Basic Skills
Minimum cumulative GPA of 2.75
Submission of FC/MCEE Self-Assessment
Admission to the full degree/professional program (0834P)
TLPL 401 with grade of B- or better
Satisfactory completion of other Computer Science Gateway courses
Double Major with Computer Science on file

90-credit review:
Passing scores on a Test of Basic Skills
Minimum cumulative GPA of 2.75
Satisfactory Evaluation on FC/MCEE
TLPL 415 with a C- or better
Double Major with Computer Science on file

105-credit review:
Passing scores on a Test of Basic Skills
Minimum GPA of 2.75
Satisfactory Evaluation on FC/MCEE and PBA
Passing Scores on the Praxis II - see Advisor for Details.
Students must successfully complete the edTPA
TLPL 403 with a C- or better
TLPL 479D with a Satisfactory grade, "S"
Double Major with Computer Science on file