

MSU Program Contact Info:	Dr. Ajay Katangur AjayKatangur@MissouriState.edu 417-836-6646
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# OZARKS TECHNICAL COMMUNITY COLLEGE

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BEARS!  
Missouri State

## OTC Associate of Science in Computer Science

to

### MSU Bachelor of Science in Computer Science - Software Development Option with Cybersecurity Minor

Available on campus only.

Comprehensive majors do not require a minor or second major.

#### OTC Year 1 Semester 1

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
<b>Program Requirement</b>	CIS 101	Technology and Digital Literacy	3	ITC 200	
<b>Written Communications</b>	<b>Choose one:</b>		3-5	ENG 110	
	ENG 100 ENG 101	Composition I with Support Composition I			
<b>Mathematical Sciences</b>	MTH 140 ♦	Analytic Geometry and Calculus I	5	MTH 261	✓
<b>Program Requirement</b>	CIS 120	Introduction to Computer Programming	3	CSC 130	✓
<b>Semester 1 Total</b>			<b>14-16</b>		

#### OTC Year 1 Semester 2

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
<b>Oral Communications</b>	<a href="#">Choose one Oral Communications course.</a>		3	Varies	
<b>Program Requirement</b>	<b>Choose one: †</b>		3	ITC 000	
	CIS 150 CIS 170	C# Programming I Java Programming I			
<b>Program Requirement</b>	MTH 214 ♦	Discrete Mathematics	3	MTH 314	✓
<b>Program Requirement</b>	CIS 130	Web Site Development I	3	ITC 205	
<b>Program Elective</b> <i>3 hours required for the A.S. Computer Science</i>	MTH 215	Algebraic Structures	3	MTH 315	✓
<b>Semester 2 Total</b>			<b>14</b>		

#### OTC Year 2 Semester 3

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
<b>Program Requirement</b>	<b>Choose one: †</b>		3	CSC 131	✓
	CIS 151 CIS 171	C# Programming II Java Programming II			
<b>Program Requirement</b>	CSC 210	Data Structures	4	CSC 232	✓
<b>Program Requirement</b>	CIS 250	Database and Query	3	ITC 295	
<b>Program Requirement</b>	CIS 131	Web Site Development II	3	CSC 365	✓
<b>Natural Sciences*</b>	BIO 160	General Biology I	4	BIO 121	✓
<b>Semester 3 Total</b>			<b>17</b>		

#### OTC Year 2 Semester 4

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
<b>Natural Sciences*</b>	<b>Choose one:</b>		4-5	PHY 123 PHY 203	✓
	PHY 120 PHY 220	General Physics I Physics Engrs & Scientists I			
<b>Social/Behavioral Sciences* - Civics</b>	PLS 101	HST 120	3	PLS 101 HST 121 HST 122	
<b>Program Requirement</b>	CIS 260	Software Engineering Project	3	CSC 000	
<b>Program Requirement</b>	CSC 244	Computer Architecture	3	CSC 244	✓
<b>Humanities and Fine Arts*</b> <i>9 credit hours required for Core 42</i>	<a href="#">Choose one Humanities and Fine Arts course.</a>		3	Varies	
<b>Semester 4 Total</b>			<b>16-17</b>	<i>Total MSU Major Hours</i>	35-36
<b>Total Hours at OTC</b>			<b>61-64</b>		

\*Must fulfill two disciplines

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**MSU Bachelor of Science in Computer Science - Software Development Option with Cybersecurity Minor**

*after*

**OTC Associate of Science in Computer Science**

**MSU Year 3 Semester 1**

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	CREDIT HOURS
Humanities and Fine Arts*	<u>Choose one Humanities and Fine Arts course.</u>	3
Social/Behavioral Sciences*	<b>Choose one:</b>	3
	ECO 165 Principles of Microeconomics PSY 121 Introductory Psychology	
Written Communication	ENG 321 Writing II: Beginning Technical Writing	3
Major Requirement	CSC 482 Seminar in Computer Science	1
Major/Minor Requirement	CSC 335 Database System Concepts	3
Cybersecurity Minor Requirement	ITC 330 Introduction to Networking	3
<b>Semester 1 Total</b>		<b>16</b>

**MSU Year 3 Semester 2**

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	CREDIT HOURS
Major/Minor Requirement	CSC 388 Introduction to Secure Computing	3
Humanities and Fine Arts*	<u>Choose one Humanities and Fine Arts course.</u>	3
Major Requirement	CSC 360 Operating Systems	3
Major Elective	<u>Choose one class from CSC 300 and CSC courses numbered higher than 303, with no more than three hours in CSC 399 and no more than three hours in CSC 596.</u> <i>Courses not eligible: CSC 500, 505, and 510</i>	3
Major Requirement	CSC 455 Software Quality Assurance and Project Management	3
<b>Semester 2 Total</b>		<b>15</b>

**MSU Year 4 Semester 3**

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	CREDIT HOURS
Cybersecurity Minor Requirement	ITC 560 Fundamentals of Cybersecurity	3
Major Elective	<u>Choose one class from CSC 300 and CSC courses numbered higher than 303, with no more than three hours in CSC 399 and no more than three hours in CSC 596.</u> <i>Courses not eligible: CSC 500, 505, and 510</i>	3
Social/Behavioral Sciences*	<b>Choose one (not chosen in prior semester):</b>	3
	ECO 165 Principles of Microeconomics PSY 121 Introductory Psychology	
Major Requirement	CSC 565 Computer Networks	3
Software Development Option Requirement	<b>Choose one:</b> MKT 350                      MGT 340                      COM 315                      PSY 305                      PSY 481	3
<b>Semester 3 Total</b>		<b>15</b>

**MSU Year 4 Semester 4**

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	CREDIT HOURS
Major Requirement	CSC 450 Introduction to Software Engineering	4
Software Development Option Requirement	Choose one class from CSC courses numbered 500 or higher, excluding CSC 596. <i>Courses not eligible: CSC 500, 505, and 510</i>	3
Major Elective	<u>Choose one class from CSC 300 and CSC courses numbered higher than 303, with no more than three hours in CSC 399 and no more than three hours in CSC 596.</u> <i>Courses not eligible: CSC 500, 505, and 510</i>	3
Cybersecurity Minor Requirement	ITC 564 Introduction to Ethical Hacking	3
Cybersecurity Minor Requirement	ITC 583 Cloud Computing	3
<b>Semester 4 Total</b>		<b>16</b>
<b>Total Hours at MSU</b>		<b>62</b>
<b>Total Hours Overall</b>		<b>123-126</b>

\*Must fulfill two disciplines

\*\*Work with your MSU advisor to identify courses that will complement your specific career goals. Electives provide the opportunity to customize your degree program. Some elective credits may or may not be needed to bring total credit hours to a minimum of 120 credit hours and upper division hours (300+) to 40.

**Successful completion of the computer science major field test (MFT) with at least a score of 140 is required.**

**This information is provided as a guide only.**

- OTC students are strongly encouraged to meet with their major specific MSU transfer advisor early in their OTC education to discuss the most appropriate OTC coursework for their intended MSU major, MSU degree requirements, etc.
- Students are required to fulfill MSU graduation and GPA requirements to receive a degree and should consult with their MSU advisor and the MSU undergraduate catalog for details, as there may exist pre-requisite requirements as well as periodicity limitations that could affect scheduling sequences.
- Please note that transfer students from Missouri public colleges and universities may follow the general education and general baccalaureate degree requirements in effect at Missouri State when they first enrolled (or re-enrolled after an absence of one calendar year or more) as degree-seeking students at the institutions from which they transferred (e.g., OTC).

Date Modified: 11.9.23