OZARKS TECHNICAL COMMUNITY COLLEGE

Courses are sequenced to provide guidance and to help ensure that prerequisite requirements are met.

Catalog Year: 2020-2021

OTC Associate of Science in Computer Science to
MSU Bachelor of Science in Computer Science - Computer Science Option

The following is a guide to graduation with completion of OTC's Associate of Arts and
MSU's Bachelor of Science in Computer Science degree.
The B.S. in Computer Science may be completed on campus only.

FINISH IN 4 — GO BEARS! MissouriState

OTC Year 1 Semester 1

REQUIREMENT DESCRIPTION	OTC COURSE ID	TITLE	CREDIT HOURS	MSU EQUIVALENT	MEETS CORE 42	MSU MAJOR REQUIREMENT
Program Specific Course	CIS 120	Introduction to Computer Programming	3	CSC 130		✔
Written Communications *6 credit hours required for Core 42*	Choose one: ENG 100 ENG 101	Composition I with Support Composition I	3-5	ENG 110	✔	
Mathematical Sciences *3 credit hours*	MTH 140 ◇	Analytic Geometry and Calculus I	5	MTH 261	✔	✔
Program Specific Course	CIS 101	Technology and Digital Literacy	3	ITC 200		
		Semester 1 Total	**14-16**			

OTC Year 1 Semester 2

REQUIREMENT DESCRIPTION	OTC COURSE ID	TITLE	CREDIT HOURS	MSU EQUIVALENT	MEETS CORE 42	MSU MAJOR REQUIREMENT
Program Specific Course	Choose one: ✧ CIS 150 CIS 170	C# Programming I Java Programming I	3	ITC 266 ITC 260/ CSC 131		
Oral Communications *3 credit hours*	Choose one: COM 100 COM 105 COM 200		3	Varies	✔	
Program Specific Course	MTH 141 ◇	Analytic Geometry and Calculus II	5	MTH 280		✔
Program Specific Course	CIS 130	Web Site Development I	3	ITC 205		
Program Specific Elective *6 hours required for the A.S. Computer Science*	Choose one: ✧ CIS 125 CIS 170 CIS 230 CIS 290 CIS 150 CIS 171 CIS 235 CSC 140 CIS 151 CIS 201 CIS 239 MTH 130 *or higher* CIS 220		3-5	Varies		
		Semester 2 Total	**17-19**			

OTC Year 2 Semester 3

REQUIREMENT DESCRIPTION	OTC COURSE ID	TITLE	CREDIT HOURS	MSU EQUIVALENT	MEETS CORE 42	MSU MAJOR REQUIREMENT
Program Specific Course	Choose one: ✧ CIS 151 CIS 171	C# Programming II Java Programming II	3	ITC 270/ CSC 131		✔
Program Specific Course	CSC 210	Data Structures	4	CSC 232		✔
Program Specific Course	CIS 250	Database and Query	3	ITC 295		
Program Specific Course	CIS 131	Web Site Development II	3	CSC 365		✔
Natural Sciences *7 credit hours* (Must fulfill 2 disciplines including one course with a lab component)	Choose one: BIO 160 CHM 101 PHY 110 CHM 160		4	Varies	✔	✔
		Semester 3 Total	**17**			

OTC Year 2 Semester 4

REQUIREMENT DESCRIPTION	OTC COURSE ID	TITLE	CREDIT HOURS	MSU EQUIVALENT	MEETS CORE 42	MSU MAJOR REQUIREMENT
Natural Sciences *7 credit hours* (Must fulfill 2 disciplines including one course with a lab component)	PHY 220	Physics Engrs & Scientists I	5	PHY 203	✔	✔
Social/Behavioral Sciences *9 credit hours* (Must fulfill 2 disciplines)	Choose one: HST 120 PLS 101	U.S. History I: to 1865 American Government and Politics	3	HST 121 PLS 101	✔	
Program Specific Course	CIS 260	Software Engineering Project	3	CSC 450		✔
Program Specific Elective	Choose one: ✧ CIS 125 CIS 170 CIS 230 CIS 290 CIS 150 CIS 171 CIS 235 CSC 140 CIS 151 CIS 201 CIS 239 MTH 130 *or higher* CIS 220		3-5	Varies		
		Semester 4 Total	**14-16**		*Total Hours Applied Toward MSU Major Requirements:*	35
		Total Hours at OTC	**62-68**			

✳ One credit hour course

✧ If CIS 150 is a program selection, CIS 170 or CIS 171 can be taken as an elective. If CIS 170 is a program selection, CIS 150 or 151 may be taken as an elective.

◇ Counts toward a minor in Mathematics

Missouri State
UNIVERSITY

Courses are sequenced to provide guidance and to help ensure that prerequisite requirements are met.

MSU Bachelor of Science in Computer Science - Computer Science Option
after OTC Associate of Science in Computer Science

Catalog Year: 2020-2021

MSU Year 3 Semester 1

REQUIREMENT DESCRIPTION	MSU COURSE ID	TITLE	CREDIT HOURS
Humanities and Fine Arts *9 credit hours required for Core 42* (Must fulfill 2 disciplines)	Choose one: ARB 101 ART 271 ENG 200 ENG 289 ENG 362 ITL 101 KOR 102 MUS 175▲ MUS 345 PHI 115 REL 102 SPN 102 ARB 102 ART 272 ENG 203▲ ENG 340 FRN 101 ITL 102 LLT 121 MUS 176✶▲ MUS 346 PTG 101 REL 210 THE 101 ART 115▲ CHI 101 ENG 205▲ ENG 341 FRN 102 JPN 101 MED 274 MUS 178✶▲ MUS 347 PTG 102 RUS 101 ART 200 CSD 330 ENG 215▲ ENG 350 GRM 101 JPN 102 MUS 100 MUS 239 PHI 105 REL 100 RUS 102 ART 212 CSD 331 ENG 282 ENG 351 GRM 102 KOR 101 MUS 162✶▲ MUS 241 PHI 110 REL 101 SPN 101		3
Written Communication *6 credit hours required for Core 42*	Choose one: ENG 210 ENG 221	Writing II: Writing Across the Disciplines Writing II: Writing for the Professions	3
Major Requirement	CSC 335	Database System Concepts	3
Major Requirement	CSC 338	Parallel and Distributed Computing	2
Major Requirement	CSC 344	Computer Systems Fundamentals	3
		Semester 1 Total	**14**

MSU Year 3 Semester 2

REQUIREMENT DESCRIPTION	MSU COURSE ID	TITLE	CREDIT HOURS
Social/Behavioral Sciences *9 credit hours required for Core 42* (Must fulfill 2 disciplines)	Choose one: ANT 100 COM 260 ECO 165 HST 121 PLS 101 SOC 150 ANT 125 CRM 210 GRY 100 HST 122 PLS 205 SOC 152 ANT 303 ECO 101 HST 103 MED 120 PLS 232 CFD 155 ECO 155 HST 104 PLN 100 PSY 121		3
Major Requirement	CSC 388	Introduction to Secure Computing	2
Major Requirement	MTH 314	Discrete Mathematics	3
Computer Science Option Requirement *5 credit hours required*	BIO 121 CHM 160 and 161 GRY 142 BMS 110 and 111 GLG 110 PHY 204 CHM 116 and 117 GRY 135 MTH courses numbered 302 or higher that count toward the Math Major		3
Major Elective	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.		3
		Semester 2 Total	**14**

MSU Year 4 Semester 3

REQUIREMENT DESCRIPTION	MSU COURSE ID	TITLE	CREDIT HOURS
Humanities and Fine Arts *9 credit hours required for Core 42* (Must fulfill 2 disciplines)	Choose one: ARB 101 ART 271 ENG 200 ENG 289 ENG 362 ITL 101 KOR 102 MUS 175▲ MUS 345 PHI 115 REL 102 SPN 102 ARB 102 ART 272 ENG 203▲ ENG 340 FRN 101 ITL 102 LLT 121 MUS 176✶▲ MUS 346 PTG 101 REL 210 THE 101 ART 115▲ CHI 101 ENG 205▲ ENG 341 FRN 102 JPN 101 MED 274 MUS 178✶▲ MUS 347 PTG 102 RUS 101 ART 200 CSD 330 ENG 215▲ ENG 350 GRM 101 JPN 102 MUS 100 MUS 239 PHI 105 REL 100 RUS 102 ART 212 CSD 331 ENG 282 ENG 351 GRM 102 KOR 101 MUS 162✶▲ MUS 241 PHI 110 REL 101 SPN 101		3
Major Requirement	CSC 333	Language and Machines	2
Major Elective	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.		3
Major Requirement	CSC 325	Algorithms and Advanced Data Structures	3
General Elective **	Work with your MSU advisor to identify a MOTR coded course that will complement your specific career goals.		3
		Semester 3 Total	**14**

MSU Year 4 Semester 4

REQUIREMENT DESCRIPTION	MSU COURSE ID	TITLE	CREDIT HOURS
Humanities and Fine Arts *9 credit hours* (Must fulfill 2 disciplines)	Choose one: ARB 101 ART 271 ENG 200 ENG 289 ENG 362 ITL 101 KOR 102 MUS 175▲ MUS 345 PHI 115 REL 102 SPN 102 ARB 102 ART 272 ENG 203▲ ENG 340 FRN 101 ITL 102 LLT 121 MUS 176✶▲ MUS 346 PTG 101 REL 210 THE 101 ART 115▲ CHI 101 ENG 205▲ ENG 341 FRN 102 JPN 101 MED 274 MUS 178✶▲ MUS 347 PTG 102 RUS 101 ART 200 CSD 330 ENG 215▲ ENG 350 GRM 101 JPN 102 MUS 100 MUS 239 PHI 105 REL 100 RUS 102 ART 212 CSD 331 ENG 282 ENG 351 GRM 102 KOR 101 MUS 162✶▲ MUS 241 PHI 110 REL 101 SPN 101		3
Major Elective	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.		3
Major Requirement	MTH 345	Statistics for Scientists and Engineers	3
Computer Science Option Requirement *5 credit hours required*	Choose from MTH courses numbered 302 or higher that count toward the Math major (will also count toward the Math Minor).		3
Social/Behavioral Sciences *9 credit hours* (Must fulfill 2 disciplines)	Choose one: ANT 100 COM 260 ECO 165 HST 121 PLS 101 SOC 150 ANT 125 CRM 210 GRY 100 HST 122 PLS 205 SOC 152 ANT 303 ECO 101 HST 103 MED 120 PLS 232 CFD 155 ECO 155 HST 104 PLN 100 PSY 121		3
Major Requirement	CSC 482	Seminar in Computer Science	1
		Semester 4 Total	**16**
		Total Hours at MSU	**58**
		Total Hours Overall	**120-126**

** 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.

✶ One credit hour course   ▲ May choose only one, falls under MOTR code 'PERF'

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).