

University of Missouri

Bachelor of Science in Computer Science

Transfer Guide for Moberly Area Community College

This plan is intended only as a general guide based on requirements in the University of Missouri undergraduate catalog. Check the following web sites for current course descriptions, prerequisites, course equivalencies and other specific details about the Computer Science major:

- 1) College Catalog (<http://majors.missouri.edu>)
- 2) Transfer Admission (<http://transfer.missouri.edu>)
- 3) Transfer Equivalencies (<https://www.transferology.com/school/missouri> or <http://transfercourses.missouri.edu>)
- 4) Computer Science (<http://engineering.missouri.edu/cs/degree-programs/>)

Recommendation for Transfer Students - Transfer students interested in the BS in Computer Science are encouraged to take programming courses if available at the community college. Students who transfer to MU without any of the programming courses (CS 1050 and CS 2050) will be at least 3 to 3 ½ years away from graduation at MU.

For more information about the Bachelor of Science in Computer Science, contact the Department of computer Science at 573-882-3842 or WheelerAl@missouri.edu.

University of Missouri		Moberly Area Community College	
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)	
English Exposition and Argumentation (3 credits)			
ENGLISH 1000 Exposition and Argumentation	3	LAL 102 Composition II (3)	
Behavioral & Social Science (9 credits) Courses from at least two different departments.			
State Requirement in Government or History	3	Select state requirement from the general education list on page 3.	
Social Science Elective	3	Select social science from the general education list on page 3.	
Behavioral Science Elective	3	Select behavioral science from the general education list on page 3.	
Humanities/Fine Arts (Option 1 – Conventional Track) (9 credits) ▪ Only one humanities/fine arts track (Conventional or Foreign Language) must be completed ▪ Courses from at least two different departments ▪ A maximum of 3 credit hours for skills classes ▪ No foreign language courses may be used for this option			
COMMUN 1200 Public Speaking	3	SPK 101 Public Speaking I (3)	
Humanity 2	3	Select humanities from the general education list on page 3.	
Humanity 3	3		
Humanities/Fine Arts (Option 2 - Foreign Language Track) (12 credits) ▪ Only one humanities/fine arts track (Conventional or Foreign Language) must be completed ▪ Minimum of 12 college transcribed hours in a single foreign language ▪ Satisfies the 2000-level requirement			
Foreign Language 1	5	Select foreign language courses from the general education list on page 3. You may also take a foreign language in the 12-hour format. If you elect this option, you still must take Comm 1200 Public Speaking to graduate.	
Foreign Language 2	5		
Foreign Language 3	3		
Upper Level General Education (3 credits) At least 3 credit hours of behavioral science, social science or humanity must be at the 2000-level or above.			
<input checked="" type="checkbox"/> Upper-level general education courses may also count toward other general education requirements (behavioral sciences, social sciences, or humanities).			
Upper Level Course	3	Select 200/2000-level behavioral science, social science, or humanity course from the general education list on page 3. Level is based upon the community college course number, NOT the MU equivalent.	
Writing Intensive (6 credits)			
Other writing intensive outside the major	3	Must be taken at MU	
CMP SC 4970 Senior Capstone Design I	3	Must be taken at MU	
Required Computer Science Courses (42 credits)			
CMP SC 1000 Intro to Computer Science	1	None (not required if student transfers 60 credit hours or more to MU)	
CMP SC 1050 Algorithm Design and Programming I	3	No Equivalent	
CMP SC 2050 Algorithm Design and Programming II	3	CIT 208 Data Struct I (3) and CIT 216 Data Struct II (3)	
CMP SC 3050 Advanced Algorithm Design	3	No Equivalent	
CMP SC 2270 Intro to Digital Logic	3	No Equivalent	
CMP SC 3280 Computer Organization & Assembly Language	3	No Equivalent	
CMP SC 3330 Object Oriented Programming	3	No Equivalent	
CMP SC 3380 Database Applications & Information Systems	3	CIT 201 Rel Database Sys (3)	
CMP SC 4050 Design and Analysis of Algorithms I	3	No Equivalent	
CMP SC 4320 Software Engineering I	3	No Equivalent	
CMP SC 4520 Operating Systems I	3	No Equivalent	
CMP SC 4850 Computer Networks I	3	No Equivalent	
CMP SC 4970 Senior Capstone Design I (WI)	3	No Equivalent	
CMP SC 4980 Senior Capstone Design II	3	No Equivalent	

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COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)
Computer Science Electives (21 credits)		
Select one of the 4000-level courses: CMP SC 4410 Theory of Computation I CMP SC 4450 Principles of Programming Languages	3	No Equivalent No Equivalent No Equivalent
Additional 4000-level CMP SCI courses	12	No Equivalent
Other CMP SC course (2000-level or higher)	6	No Equivalent
Mathematics (19 credits)		
MATH 1500 Analytic Geometry and Calculus I	5	MTH 201 Analy Geom & Calc I (MRP) (5)
MATH 1700 Calculus II	5	MTH 202 Analy Geom & Calc II (MRP) (5)
MATH 2300 Calculus III	3	MTH 203 Analy Geom & Calc III (5)
MATH 2320 Discrete Mathematical Structures	3	No Equivalent
STAT 4710 Intro to Mathematical Statistics	3	No Equivalent
Technical Elective (3 credits)		
2000-level or above CMP SC course, 4000-level MATH course, 2000-level or above engineering course, MANGMT 3000, FINANC 3000, or 2000-level INFOTC course	3	Check the computer science and transfer equivalency web sites for course options.
Sciences (12 credits) Select one science sequence (Physics, Chemistry, Biology, or Geology)		
Select one two-semester science sequence:		
PHYSCS 2750 University Physics I and PHYSCS 2760 University Physics II	10	PHY 201 College Physics I (5) and PHY 202 College Physics II (5)
PHYSCS 1210 College Physics I and PHYSCS 1220 College Physics II	8	No Equivalent
CHEM 1320 College Chemistry I and CHEM 1330 College Chemistry II	8	PHY 121 Gen Chemistry I (5) and PHY 122 Gen Chemistry II (5)
BIO SC 1010 General Princ & Concepts of Biology and BIO SC 1020 General Biology Laboratory AND BIO SC 1200 General Botany with Lab or BIOCHM 2110 The Living World: Molecular Scale or BIOCHM 2112 Biotechnology in Society or ANTHRO 2050 Intro to Biological Anthropology or ANTHRO 2051 & 2052 Intro to Biological Anthro or BIO SC 2100 Infectious Diseases or BIO SC 2060 Community Biology or BIO SC 3050 Genetics and Society or BIO SC 2150 Genetic Diseases	8-10	BIO 101 Biology (4) AND BIO 151 Intro Plant Biol (5)
GEOL 1100 Principles of Geology with Laboratory or GEOL 1200 Environmental Geology with Lab AND GEOL 2150 The Age of the Dinosaurs or GEOL 2200 Oceanography or GEOL 2300 Earth Systems and Global Change or GEOL 2350 Historical Geology or GEOL 2400 Surficial Earth Processes and Products or GEOL 3100 & 3115 Geology of Missouri	7-8	PHY 263 Geology (4) AND Geology Course at MU
Select other courses to complete 12 credits in science:		
ASTRON 1010 Intro to Astronomy	4	No Equivalent
ASTRON 1020 Intro to Lab Astronomy	2	No Equivalent
CHEM 1100 Atoms and Molecules with Lab (only if taken before CHEM 1320 and 1330)	3	PHY 120 Found Chemistry (5)
Science sequence courses outside the selected sequence	3-5	Choose science sequence courses outside the selected sequence
BIO SC, BIOCHM, CHEM, GEOL, or PHYSCS courses beyond the levels listed above	3-5	Select sciences (biology, biochemistry, chemistry, geology) courses <i>beyond the levels listed above</i> from the general education list on page 3.
Non-Science Electives (9 credits)		
Courses in business, education, or additional humanities, social, or behavioral sciences beyond what is required in those categories. <u>Not</u> courses in CS, IT, Engineering, Math, or	9	Check the transfer equivalency web site for options.
Free Electives (4 credits) if needed to reach 126 hours NOTE: Additional free electives may be required if a course transfers with fewer credits than the MU equivalent.		
Total Hours for Bachelor of Science in Computer Science	126	

General Education Courses Moberly Area Community College

Moberly Area Community College Course	MU Equivalent	Moberly Area Community College Course	MU Equivalent
Behavioral Sciences			
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PSY 100 Interpers Relations (3)	PSYCH BEH	PSY 221 Psych of Personal Adjust (3)	PSYCH BEH
PSY 101 Gen Psychology (3)	PSYCH 1000	PSY 250 Abnormal Psych (3)	PSYCH 2510
PSY 201 Child Growth & Develop (3)	PSYCH 2410	SOC 101 Sociology (3)	SOCIOL 1000
PSY 205 Human Lifespan Develop (3)	PSYCH BEH	SOC 101H Sociology Honors (3)	SOCIOL 1000
PSY 210 Intro Social Psych (3)	PSYCH 2310	SOC 211 Soc of the Family (3)	SOCIOL 3420
PSY 215 Health Psych & Bio-Feedback (3)	PSYCH BEH	SOC 215 Social Deviance (3)	SOCIOL 1650
Humanities			
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ART 101 Art Surv & Apprec I (3)	AR_H_A 1110	LAL 250 Hist & Devlp Short Story (3)	ENGLISH LIT
ART 102 Art Surv & Apprec II (3)	AR_H_A 1120	LAL 251 Science Fiction (3)	ENGLISH LIT
ART 115 Cult Study in Art (3)	ART_GNRL HUM	LAL 252 Children's Lit (3)	ENGLISH LIT
DRM 115 Cult Studies Theater (3)	THEATR HUM	LAL 275 Classical Mythology (3)	CL_HUM 1060
DRM 120 Theater Appreciation (3)	THEATR 1100	MUS 101 Fund of Music (3)	MUSIC_NM 1211
GLS 201 Global Studies Sem (3)	MISC HUM	MUS 102 Music Appreciation (3)	MUSIC_NM 1310
LAL 120 Am Lit Survey to 1870 (3)	ENGLISH 2300	MUS 103 Hist of Rock n Roll (3)	MUSIC_NM HUM
LAL 121 Am Lit Survey 1870-Pres (3)	ENGLISH 2300	MUS 105 Music of America (3)	MUSIC_NM HUM
LAL 125 African-Amer Lit (3)	ENGLISH 2400	MUS 205 World Music (3)	MUSIC_NM 1313
LAL 125H Afri-Amer Lit Honors (3)	ENGLISH 2400	PHI 150 Intro to Philosophy (3)	PHIL 1000
LAL 130H Lit of the American South Honors (3)	ENGLISH LIT	PHI 150H Intro to Phil-Honors (3)	PHIL 1000
LAL 150 Eng Lit Survey to 1750 (3)	ENGLISH 2200	PHI 151 Intro to Logic (3)	PHIL 1200
LAL 151 Eng Lit 1750-Present (3)	ENGLISH 2200	PHI 152 Intro to Ethics (3)	PHIL 1100
LAL 151H Eng Lit Survey 1750-Present Hon (3)	ENGLISH 2200	PHI 153 Bioethics (3)	PHIL 1150
LAL 153 Intro Contemp Lit (3)	ENGLISH LIT	PHI 155 Intro to the Bible (3)	REL_ST HUM
LAL 210 Survey of Western Lit I (3)	ENGLISH LIT	PHI 157 War, Peace & Religion (3)	REL_ST HUM
LAL 211 Survey of West Lit II (3)	ENGLISH LIT	PHI 251 Religions of World (3)	REL_ST 2110
LAL 222 Masterpieces (3)	ENGLISH LIT	SPK 101 Public Speaking I (3)	COMMUN 1200
Social Sciences (◆=State Requirement)			
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ACC 110 Personal Finance (3)	FINANC 1000	HST 201 Amer Women, Amer Times (3)	HIST 2400
ECN 101 Macroeconomics (3)	ECONOM 1015	HST 201H Amer Women, Amer Times-Honors (3)	HIST 2400
ECN 102 Microeconomics (3)	ECONOM 1014	HST 215 Amer in Vietnam (3)	HIST SSC
GEO 101 World Geog I (3)	GEOG 1200	HST 215H Amer in Vietnam-Honors (3)	HIST SSC
GEO 102 World Geog II (3)	GEOG 1100	HST 220 Amer on Screen I (3)	HIST SSC
HST 101 Western Civ I (3)	HIST 1500	HST 221 Amer on Screen II (3)	HIST SSC
HST 102 Western Civ II (3)	HIST 1510	HST 230H Mod British Hist-Honors (3)	HIST 1550
◆HST 105 Amer Hist to 1865 (3)	HIST 1100	◆PSC 103 American Govt (5)	POL_SC 1100
◆HST 105H Amer Hist to 1865-Honors (3)	HIST 1100	◆PSC 105 Funct & Pol Am Govt (3)	POL_SC SSC_ST
◆HST 106 Amer Hist from 1865 (3)	HIST 1200	PSC 150 Internat Relations (3)	POL_SC 1400
◆HST 106H Amer Hist from 1865-Honors (3)	HIST 1200	PSC 201 British Pol/Soc (3)	POL_SC SSC
HST 150 AfricanAmer Hist I (3)	HIST SSC	SOC 205 Social Problems (3)	SOCIOL 3010
HST 151 AfricanAmer Hist II (3)	HIST SSC		
Foreign Language			
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FLN 101 Elem Spanish (5)	SPAN 1100	FLN 112 Interm French (5)	FRENCH 1200
FLN 102 Interm Spanish (5)	SPAN 1200	FLN 201 Span Readings (3)	SPAN 2100
FLN 111 Elem French (5)	FRENCH 1100	FLN 211 Fren Readings (3)	FRENCH 2100
SCIENCES			
Biological Sciences (▲=Lab Course)			
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▲BIO 101 Biology (4)	BIO_SC 1030	▲BIO 151 Intro Plant Biol (5)	BIO_SC 1200
BIO 105 Intro Conserv Biol (3)	BIO_SC BIO	▲BIO 205 Human Anatomy (4)	MISC BIOL
BIO 105H Intro Conserv Biol (3)	BIO_SC BIO	▲BIO 206 Microbiology (4)	BIO_SC BIOL
▲BIO 150 Gen Zoology (5)	BIO_SC 1100	▲BIO 209 Physiology (4)	BIO_SC BIOL
Physical Sciences (▲=Lab Course)			
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▲PHY 120 Found Chemistry (5)	CHEM 1100	PHY 221 Quant Analysis (3-5)	CHEM PSC
▲PHY 121 Gen Chemistry I (5)	CHEM 1320	▲PHY 222 Organic Chem I (5)	CHEM 2030 & CHEM 2130
▲PHY 122 Gen Chemistry II (5)	CHEM 1330	PHY 160 Earth Science (3)	MISC PSC
▲PHY 125 Found of Physics (5)	PHYSCS PSCL	PHY 162 Gen Astronomy (3)	ASTRON PSC
▲PHY 201 College Physics I (5)	PHYSCS 2750	▲PHY 163 Geology (4)	GEOL 1100
▲PHY 202 College Physics II (5)	PHYSCS 2760	PHY 164 Atmospheric Sci (3)	ATM_SC 1050