

# University of Missouri

## Bachelor of Science in Computer Engineering

### Transfer Guide for Three Rivers Community College

This plan is intended only as a general guide based on requirements in the 2013-2014 University of Missouri undergraduate catalog. Check the following web sites for current course descriptions, prerequisites, course equivalencies and other specific details about the Computer Engineering major:

- 1) College Catalog (<http://registrar.missouri.edu/>)
- 2) Transfer Equivalencies (<http://transfercourses.missouri.edu>)
- 3) General Education (<http://generaleducation.missouri.edu>)
- 4) Electrical Engineering (<http://engineering.missouri.edu/ece/degree-programs/>)

For more information, contact the Department of Electrical and Computer Engineering at 573-882-2648 or [Beattyt@missouri.edu](mailto:Beattyt@missouri.edu).

University of Missouri		Three Rivers Community College	
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)	
<b>Mathematics (22 credits)</b>			
MATH 1500 Analytic Geometry and Calculus I	5	MATH 171 Analy Geom&Calc I (5)	
MATH 1700 Calculus II	5	MATH 271 Analy Geom&Calc II (5)	
MATH 2300 Calculus III	3	MATH 272 Analy Geom&Calc III (5)	
MATH 4100 Differential Equations	3	None	
STAT 4710 Intro to Mathematical Statistics	3	None	
Math 2320 Discrete Mathematical Structures	3	None	
<b>Physics and Chemistry (14 credits)</b>			
CHEM 1320 College Chemistry I	4	CHEM 121 Gen Chemistry I (5)	
PHYSCS 2750 University Physics I	5	PHYS 211 General Physics I (5)	
PHYSCS 2760 University Physics II	5	PHYS 212 General Physics II (5)	
<b>English Exposition and Argumentation (3 credits)</b>			
ENGLISH 1000 Exposition and Argumentation	3	ENGL 112 Adv College Writing (3)	
<b>Behavioral &amp; Social Science (9 credits)</b> Courses from at least two different departments.			
State Requirement in Government or History	3	Select <a href="#">state requirement</a> from the general education list.	
Social or Behavioral Science Elective	3	Select <a href="#">social</a> or <a href="#">behavioral</a> sciences from the general education list.	
Social or Behavioral Science Elective	3		
<b>Humanities/Fine Arts (Option 1 – Conventional Track) (9 credits)</b> ▪ 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			
Humanity 1	3	Select <a href="#">humanities</a> from the general education list.	
Humanity 2	3		
Humanity 3	3		
<b>Humanities/Fine Arts (Option 2 - Foreign Language Track) (12 credits)</b> ▪ 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 <a href="#">foreign language</a> courses from the general education list.	
Foreign Language 2	5		
Foreign Language 3	3		
<b>Upper Level General Education (3 credits)</b>			
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 behavioral sciences, social sciences, or humanities.			
Upper Level Course	3	Select 200/2000-level behavioral science, social science, or humanity from the general education list. Level is based upon the community college course number, NOT the MU equivalent.	
<b>Writing Intensive (6 credits)</b>			
Writing intensive course (humanity, social or behavioral science or technical elective)	3	Must be taken at MU	
ECE 4970 Capstone Design	3	Must be taken at MU	
<b>Engineering (59 credits)</b>			
CS 1050 Algorithm Design and Programming	3	None	
CS 2050 Algorithm Design and Programming II	3	None	
<b>Select one of the following:</b>			
ENGINR 1200 Statics and Elementary Strength of Materials	3	None	
ENGINR 2300 Engineering Thermodynamics			
IMSE 2710 Engineering Economic Analysis			
ECE 1000 Intro to Electrical and Computer Engineering	2	None	
ECE 1210 Intro to Logic Systems	3	None	

University of Missouri		Three Rivers Community College
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)
ECE 2100 Circuit Theory I	4	None
ECE 3210 Microprocessor Engineering	4	None
ECE 3220 Computing for Embedded Systems	3	None
ECE 3810 Circuit Theory II	4	None
ECE 3410 Electronic Circuits and Signals I	4	None
ECE 3830 Signals and Linear Systems	3	None
ECE 4220 Real Time Embedded Systems	3	None
ECE 4250 VHDL and Programmable Logic Devices	4	None
ECE 4270 Microcomputer Architecture and Interfacing	4	None
ECE 3110 Electrical and Computer Engineering Projects	3	None
ECE 4970 Senior Capstone Design( <i>Writing Intensive</i> )	3	None
<b>Technical Elective (9 credits)</b>		
ECE or CS 3000+ or Math, Physics, Chemistry, BioE, ChemE, Civil, IMSE, MAE Engr.2000+	9	None
<b>ECE Electives (6 credits)</b>		
ECE Electives (4000+)	6	None
<b>Free Electives (1 credit)</b>		
<b>Total Hours for BS in Computer Engineering</b>	<b>126</b>	

# General Education Courses

## Three Rivers Community College

### Three Rivers Community College Course

#### **Behavioral Sciences**

ANTH 211 Intro to Anthropology (3)  
 PSYC 111 Gen Psychology (3)  
 PSYC 112 Psych of Pers Adjust (3)  
 PSYC 223 Child Psychology (3)  
 PSYC 233 Adolescent Psych (3)  
 PSYC 243 Human Dev Across Life (3)  
 SCOM 210 Interpers Comm (3)  
 SOCI 111 Gen Sociology (3)  
 SOCI 221 Race & Ethnicity (3)  
 SOCI 223 Marriage & the Family (3)  
 SOCI 230 Criminology (3)

#### **Humanities**

ARTS 110 Intro to Art (3)  
 ARTS 123 Hist&Apprec of Art (3)  
 ENGL 221 World Lit to 1600 (3)  
 ENGL 222 World Lit since 1600 (3)  
 ENGL 223 Classical Mythology (3)  
 ENGL 231 English Lit to 1798 (3)  
 ENGL 232 English Lit since 1798 (3)  
 ENGL 233 Shakespeare (3)  
 ENGL 241 Amer Lit to 1870 (3)  
 ENGL 242 Amer Lit since 1870 (3)  
 ENGL 281 Old Testament Lit (3)  
 ENGL 282 New Testament Lit (3)  
 FILM 122 Hist & Apprec of Film (3)  
 HNRS 220 Hnrs Multi-Disc Sem (3)  
 MCOM 101 Mass Comm & Society (3)  
 MUSC 123 Hist & Apprec of Music (3)  
 MUSC 221 Music Literature I (3)  
 MUSC 222 Music Literature II (3)  
 PHIL 200 Intro to Philosophy (3)  
 PHIL 223 Literature of Bible (3)  
 PHIL 233 Ethics (3)  
 PHIL 243 Religions of the World (3)  
 SCOM 110 Public Speaking (3)  
 SCOM 243 Argument & Debate (3)  
 THEA 120 Hist & Apprec of Theater (3)  
 VALU 161 Values, Econ & Decision (3)  
 VALU 180 Ideas in Living (3)  
 VALU 181 Images of Women (3)  
 VALU 182 Music of the World (3)  
 VALU 190 World Foods & Society (3)

### MU Equivalent

ANTHRO 1000  
 PSYCH 1000  
 PSYCH BEH  
 PSYCH 2410  
 PSYCH BEH  
 PSYCH BEH  
 COMMUN 3561  
 SOCIOL 1000  
 SOCIOL BEH  
 SOCIOL 3420  
 SOCIOL 3600

ART\_GNR1010  
 ART\_GNR1020  
 ENGLSH 2155  
 ENGLSH 2155  
 CL\_HUM 1060  
 ENGLSH 2200  
 ENGLSH 2200  
 ENGLSH 2160  
 ENGLSH 2300  
 ENGLSH 2300  
 REL\_ST 2500  
 REL\_ST 2510  
 FILM\_S HUM  
 MISC HUM  
 COMMUN 2100  
 MUSIC NM 1310  
 MUSIC\_NHUM  
 MUSIC\_NHUM  
 PHIL 1000  
 REL\_ST HUM  
 PHIL 1100  
 REL\_ST 2110  
 COMMUN 1200  
 COMMUN 3572  
 THEATR HUM  
 MISC HUM  
 MISC HUM  
 WMN\_ST HUM  
 MUSIC\_NHUM  
 MISC HUM

### Three Rivers Community College Course

#### **Social Sciences (◆=State Requirement)**

ECON 211 Prin of Macroecon (3)  
 ECON 212 Prin of Microecon (3)  
 GEOG 111 Reg World Geog I (3)  
 GEOG 112 Reg World Geog II (3)  
 GNST 111 Personal Finance (3)  
 ◆GOVT 111 Intro Political Sci (3)  
 ◆GOVT 121 National & State Gov't (3)  
 GOVT 122 Intro Public Policy (3)  
 GOVT 220 Missouri Gov't (1)  
 ◆GOVT 223 State & Local Gov't (3)  
 GOVT 233 International Relations (3)  
 ◆HIST 111 Amer Hist to 1877 (3)  
 ◆HIST 112 Amer Hist since 1877 (3)  
 HIST 121 World Civ to Renaiss (3)  
 HIST 122 World Civ since Renaiss (3)  
 HIST 201 Evil:Historical Persp (3)  
 HIST 211 The US since 1945 (3)  
 SOCI 234 Social Problems (3)

#### **Foreign Language**

SPAN 101 Elem Spanish I (3)  
 SPAN 102 Elem Spanish II (3)  
 SPAN 201 Interm Spanish I (3)  
 SPAN 202 Interm Spanish II (3)

### MU Equivalent

ECONOM 1015  
 ECONOM 1014  
 GEOG 1200  
 GEOG 1100  
 FINPLN 2183  
 POL\_SC 1700  
 POL\_SC 1100  
 POL\_SC 4320  
 POL\_SC SSC  
 POL\_SC 2100  
 POL\_SC 1400  
 HIST 1100  
 HIST 1200  
 HIST SSC  
 HIST SSC  
 HIST SSC  
 HIST SSC  
 SOCIOL 3010

SPAN 1100A  
 SPAN 1100B  
 SPAN 1200  
 SPAN 2100