

## Macomb Community College

Transfer Guide

The Bachelor of Science in Digital Media Software Engineering is designed as a degree focused on the processes, procedures, and technology involved with software development. The degree will focus on fundamental computer science topics as well as processes and procedures commonly used in the production of software. This approach will provide students with the ability to construct software as well as the knowledge and understanding of the concepts used in commercial software development. This approach will allow graduates to seamlessly transition into the workforce integrating their knowledge of the industry and successfully design, develop, and deliver quality software applications. Software engineers are needed to create innovative software for health care, bio-informatics, business, entertainment, education, military, automotive industries, and more.

### General Admission Criteria

The Digital Media Software Engineering, B.S. is a course-specific degree completion program with a four-year sequence that begins promptly upon acceptance and enrollment. It is expected that students entering this technology intensive program already have solid foundation skills in dealing with personal computers (PCs). A completed Associate degree is not required to be admitted. While students with earned college credit may apply to the program, students are encouraged to apply as a freshman/first-year student and be dually enrolled with Macomb Community College. Recent high school graduates need an ACT composite score of 21 and a high school grade point average of 2.70. All courses transferred into Ferris must be a "C" or higher including courses used in the SENG required core and recommended electives to be used towards the minimum 128 semester credits required for graduation. Official transcripts from all accredited colleges/universities must be submitted with the Ferris application. Financial aid is available for dually enrolled students.

### Course Requirements

Macomb Community College			
Course	Ferris Equiv.	Course Titles	Cr. Hrs.
SPCH 1060	COMM 121	Speech Communication	3
ENGL 1180* or ENGL 1210*	ENGL 150	Communications I or Composition I	3
ENGL 1190* or ENGL 1220*	ENGL 250	Communications II or Composition II	3
Macomb CC*	VARIES	FSU General Education – Natural Sciences Elective with lab	4
PHYS 2220	PHYS 241	Analytical Physics I	5
PHYS 2230	PHYS 242	Analytical Physics II	5
Macomb CC*	VARIES	FSU General Education - Culture Electives	6
Macomb CC*	VARIES	FSU General Education – Self and Society Electives	6
MATH 1760	MATH 220	Analytic Geometry & Calculus	4
MATH 1770	MATH 230	Analytic Geometry & Calculus II	4
PHIL 2100*	PHIL 216	Introduction to Ethics	3
ECON 1160*	ECON 221	Principles of Economics-Macro	3
BLAW 1090	BLAW 321	Business Law II	3
<b>Total Macomb Community College Credits</b>			<b>52</b>

Please refer to FSU's General Education Requirements at:  
<http://www.ferris.edu/htmls/academics/gened/index.htm>

### Program Offered at:

**Grand Rapids Campus**  
School of Digital Media  
(800) 998 – 3425  
frederickbaker@ferris.edu  
[www.ferris.edu/dmse](http://www.ferris.edu/dmse)

[www.ferris.edu/transfer](http://www.ferris.edu/transfer)

Students transferring to Ferris with the Michigan Transfer Agreement (MTA) and entering a degree program will have met a 30-hour block of lower-level general education courses. However, this does not exempt students from completing program specific prerequisites or higher-level general education course requirements. Students should contact their advisor regarding classes that meet the MTA.

Students are encouraged to work with their Ferris advisor for selection of any electives, to ensure transferability and to minimize credits taken.

Effective Fall 2017

Ferris State University is an equal opportunity institution. For information on the University's Policy on Non-Discrimination, visit [ferris.edu/non-discrimination](http://ferris.edu/non-discrimination).

Ferris State University		
Course	Ferris Course Titles	Cr. Hrs.
ENGL 311 or ENGL 321 or ENGL 325	Advanced Technical Writing or Advanced Composition or Advanced Business Writing	3
SENG 101	Computer Programming I	3
SENG 102	Computer Programming II	3
SENG 300	Software Data Structures	3
SENG 301	Programming Languages	3
SENG 315	Software Component Design	3
SENG 400	Engineering Enterprise Software Applications	3
SENG 430	Programming Graphical User Interfaces	3
SENG 160	Software Engineering Methodologies and Processes	3
SENG 170	Software Requirements Management	3
SENG 210	Software Configuration Management	3
SENG 302	Software Quality Assurance	3
SENG 350	Software Design and Architecture	3
SENG 355	Software Engineering Tools	3
MFGE 341	Quality Science Statistics	3
MFGE 423	Engineering Economics	3
MFGE 442	Design of Experiments I	3
MATH 322	Linear Algebra	3
APPS 301	Project Management	3
SENG 420	Software Development Industry Certification	3
SENG 491	Applied Internship	3
SEND 499	Capstone in SENG	3
DAGD 150	Introduction to Game Design and Development	3
DAGD 300	Game Design and Theory	3
DAGD 255	DAGD Programming I	3
DAGD 355	DAGD Programming II	3
<b>Total Ferris Credits</b>		<b>78</b>
<b>Credits Required for Degree</b>		<b>130</b>

**Transfer Student Orientation**

All new students to Ferris State University are required to complete an orientation. Orientation for incoming freshmen is a one-day session that occurs on campus and includes class registration. Eligible transfer students have the option of completing an online orientation or attending an on campus session.

**Advising Notes**

It is recommended that potential students meet with an advisor to review the degree, course schedule, and have any questions answered prior to completing an application. **Students who are completing the MTA may have different general education course requirements for the particular degree selected. Meeting with a Ferris advisor prior to the selection of any electives or general education classes shown above could reduce the chance of completing a course that will not apply toward the selected degree.** Once admitted, students must continue to meet with an advisor as they work towards graduation.

**Online Learning**

Orientation is required for students who register for an online **course** or are completing an online **degree**. Students must demonstrate competency in FerrisConnect skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

**Michigan Transfer Agreement (MTA)**

Ferris participates in the Michigan Transfer Agreement (MTA). This agreement will facilitate the transfer of general education requirements from one Michigan institution to another. Students may complete the MTA as part of a degree program or as a stand-alone package. The MTA consists of a minimum of 30 general education credit hours as identified by the college or university.

**Disclaimer**

*This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change. Students should contact their community college or Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student. Please refer to the effective and/or revised date on the bottom of the guide.*