DIGITAL MEDIA SOFTWARE ENGINEERING TRANSFER GUIDE FOR WAYNE COUNTY COMMUNITY COLLEGE DISTRICT

Ferris Program: Digital Media Software Engineering

Degree Type: Bachelor of Science **Ferris College:** College of Business

Transfer School: Wayne County Community College District (WCCCD)

Consortium Eligible: Yes

Total Credits Required: 125-126

Catalog Year: 2024-2025

GENERAL EDUCATION REQUIREMENTS - 30 Credits Required

Students are encouraged to work with an advisor to select appropriate general education courses. Diversity Competency - 2 Courses Required. If not met by courses taken for Culture, Self and Society, or MTA, a student must meet the following: 1 course with the Global Diversity attribute and 1 course with the U.S. Diversity attribute.

Visit the Ferris State for more information.

Communication Competency

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|----------------------------------------|---------------------------------------------------------------------------------------------|---------------------|-----------------|
| COMM 121 | Fundamentals of Public Speaking | 3 | SPH 101 |
| ENGL 150 | English 1 | 3 | ENG 119 |
| ENGL 250 | English 2 | 3 | ENG 120 |
| ENGL 311 or ENGL 321 or ENGL 325 | Advanced Technical Writing or Advanced Composition or Advanced Business Writing | 3 | No Equivalent |

Quantitative Literacy Competency

Requirements for Quantitative Literary Competency can be met with the following:

- Official Pre-2016 Math SAT Score of 560 or Higher
- Official Post-2016 Math SAT Score of 580 or Higher
- Official Math ACT Score of 24 or Higher
- 4 Credits Required and is met in College Requirements.

Natural Sciences Competency

Two courses are required with a minimum of 6 credits: must have at least one lab course.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------|---------------------|-----------------|
| PHYS 241 | General Physics 1 | 5 | PHY 265 |

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------------|---------------------|-----------------|
| Varies | Natural Sciences Elective | Varies | Varies |

Culture Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one at FSU 200 level or higher course. PHIL 216 is met in College Requirements.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------|---------------------|-----------------|
| Varies | Culture Electives | 6 | Varies |

Self and Society Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one at FSU 200 level or higher course, and at least one Self and Society Foundation course. ECON 201 or ECON 202 are met in College Requirements.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|----------------------------|---------------------|-----------------|
| Varies | Self and Society Electives | 6 | Varies |

COLLEGE REQUIREMENTS – 95 Credits Required

Software Development Courses

21 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|-------------------------------------------------|---------------------|-----------------|
| SENG 101 | Computer Programming | 3 | No Equivalent |
| SENG 102 | Computer Programming 2 | 3 | No Equivalent |
| SENG 300 | Software Data Structures | 3 | No Equivalent |
| SENG 301 | Programming Languages | 3 | No Equivalent |
| SENG 315 | Software Component Design | 3 | No Equivalent |
| SENG 400 | Engineering Enterprise Software Applications | 3 | No Equivalent |
| SENG 430 | Program Graphical Interfaces | 3 | No Equivalent |

Foundation Courses

21 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|-------------------------|----------------------------------------------------------------------------------------------------------|---------------------|-----------------|
| SENG 160 | Software Engineering Methodologies and Processes | 3 | No Equivalent |
| SENG 170 | Software Requirements Management | 3 | No Equivalent |
| SENG 210 | Software Configuration Management | 3 | No Equivalent |
| SENG 250 or ISYS 327 | Fundamentals of Operating Systems and Networking or Operating Systems and Network Essentials | 3 | No Equivalent |
| SENG 302 | Software Quality Assurance | 3 | No Equivalent |
| SENG 350 | Software Design and Architecture | 3 | No Equivalent |
| SENG 355 | Software Engineering Tools | 3 | No Equivalent |

Engineering Fundamentals Courses

9 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------------|
| ISYS 200 or SENG 225 or ISYS 272 | Database Design and Implementation or Introduction to Database Design or Fundamentals of Database Systems | 3 | CIS 120 or No Equivalent or No Equivalent |
| ECON 201 or ECON 202 | Principles of Microeconomics or Principles of Macroeconomics | 3 | ECO 102 or ECO 101 |
| STQM 260 | Introduction to Statistics | 3 | BUS 221 or MAT 131 |

Mathematics Courses

14 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------------------------|---------------------|-----------------|
| MATH 220 | Analytical Geometry and Calculus 1 | 4 | MAT 171 |

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------------------------|---------------------|-----------------|
| MATH 230 | Analytical Geometry and Calculus 2 | 4 | MAT 172 |
| MATH 322 | Linear Algebra | 3 | MAT 272 |
| MATH 328 | Discrete Structures | 3 | No Equivalent |

Business and Management Courses

9 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|-------------------------|-------------------------------------------------------------------|---------------------|-----------------------------|
| PHIL 216 | Introduction to Ethics | 3 | PHL 221 |
| PROJ 320 or PROJ 325 | Project Management Fundamentals or Agile Project Management | 3 | PRM 220 or No Equivalent |
| BLAW 321 | Contracts and Sales | 3 | No Equivalent |

Professional Development Courses

9 Credits Required.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|------------------------------------------------|---------------------|-----------------|
| SENG 420 | Software Development Industry Certification | 3 | No Equivalent |
| SENG 491 | Software Engineering Applied Internship | 3 | No Equivalent |
| SENG 499 | Capstone in Software Engineering | 3 | No Equivalent |

APPLICATION DOMAIN ELECTIVES - 12 Credits Required

Choose one four-course sequence in an area of interest; other than those listed must be approved by an advisor.

Game Design and Development

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|----------------------|------------------------------------------------------------------------------|---------------------|-----------------------------|
| DAGD 100 or DAGD 150 | 3D Modeling Animation 1 or Introduction to Game Design and Development | 3 | VGD 271 or No Equivalent |
| DAGD 255 | Game Programming 1 | 3 | No Equivalent |
| DAGD 300 | Level Design | 3 | No Equivalent |
| DAGD 355 | Game Programming 2 | 3 | No Equivalent |

Machine Learning Engineering

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|--------------------------------------------------|---------------------|-----------------|
| SENG 309 | Introduction to Machine Learning | 3 | No Equivalent |
| SENG 409 | Applied Machine Learning Software | 3 | No Equivalent |
| SENG 410 | Introduction to Big Data Concepts and Tools | 3 | No Equivalent |
| SENG 422 | Introduction to Cloud Application Development | 3 | No Equivalent |

PROGRAM CONTACT INFORMATION

School of Digital Media (231) 591-2712

(586) 445-7150

(231) 591-2340

ADMISSION REQUIREMENTS

New Student Admission Requirements

- 2.70 High School GPA (on a 4.00 scale)
- ACT Composite Score of 19

Transfer Student Admission Requirements

• Combined college or university GPA of 2.00 (on a 4.00 scale) from all institutions attended. GPA based on completion of 12 transferable semester credit hours or more.

MORE INFORMATION

Select courses may be delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at a statewide location).

To fulfill the residency requirement for a bachelor's degree a student must earn a minimum of 30 credits from Ferris State University.

Steps to Apply

- Complete your.
- Submit official transcripts
 - Submit official transcripts from every school attended to
 - Or mail to:

Ferris State University Admissions Office 1201 S. State St., CSS 201

- Big Rapids, MI 49307
- Submit test scores (if required)
 - ACT Scores; go to the Ferris State University School Code: 1994
 - SAT, CLEP and AP Sores; go to the Ferris State University School Code: 1222

Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, transfer policies and have any questions answered prior to completing an application. Ferris accepts transfer courses in which the student earned a letter grade of "C" or better. Additional policies such as the Ferris Sunset and Residency Requirement should be discussed with a Ferris advisor. 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 general education or elective coursework may reduce the chance of completing a course that will not apply toward the selected degree. Students must work with their Ferris advisor to declare a Minor or Concentration and for the selection of Directed Electives.

Once admitted, students are required to complete an orientation and should continue to meet with an advisor as they work toward graduation.

To schedule an appointment or for additional transfer resources and policies see our .

*Indicates an approved Ferris course substitution

Reverse Transfer Agreement

Ferris has reverse transfer agreements with several Michigan Community Colleges. Under such agreement, Ferris will provide your official University transcript to a partner school you have attended, so that they may grant you an associate or bachelor's degree upon completion of sufficient and appropriate credit hours from both institutions. In turn, the degree-granting institution will provide Ferris with an updated transcript reflecting the newly earned credential.

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.

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.

Transfer Equivalencies Tools

The transfer equivalencies link is located in the Transfer Resources section at .

Disclaimer

Transfer guides are not intended to be a contract with Ferris. The information in this guide is subject to change and is aligned with the catalog year listed above. Students should contact their community college and/or Ferris to keep informed of changes. Students' final responsibility for verifying all transfer information lies with the student. Please refer to the for the most current curriculum.

Partners may contact the Office of Transfer and Secondary School Partnerships with questions or updates at .