



**Transfer Guide for  
SOUTHWESTERN MICHIGAN COLLEGE  
Bachelor of Science Degree  
CHEMISTRY EDUCATION**

**Home Page**

<http://www.ferris.edu/htmls/colleges/educatio/index.cfm>

**Contact**

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**1-800-4-FERRIS**  
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231-591-3646

*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 Ferris to keep informed of changes (see "contact" above). Final responsibility for verifying all transfer information lies with the student.*

**ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS**

Admission to chemistry education requires a minimum 2.00 college grade point average and can be entered any semester. If a student has completed college intermediate algebra and the first two semester of college English, successfully completing the State Basic Skills Test before entering the program would be advisable [www.mttc.nesinc.com](http://www.mttc.nesinc.com)

For assistance with the admission process, contact your transfer counselor at the community college or the transfer admissions officer at Ferris State University, Shari Chamberlain, at 1-800-4-FERRIS, [chambers@ferris.edu](mailto:chambers@ferris.edu).

**APPLICATION DEADLINE**

Transfer students must be admitted (apply & be accepted) 21 days prior to the first day of the semester they plan to attend.

**TRANSFER PLAN**

Transfer of credit is awarded on a course-by-course basis.

Transferable courses are those with grades of "C" (2.00 on a 4.00 scale) or better.

The following is a list of courses students must complete for the chemistry major. However, secondary education requires a minor as well (an additional 20-27 credits). Please contact the educational counselor for assistance with minor choices. Community college equivalents are listed below and may be taken prior to transferring to Ferris. Blank spaces in the community college column indicate there are no course equivalents available.

**FERRIS STATE UNIVERSITY/SOUTHWESTERN MICHIGAN COLLEGE**  
**TRANSFER PLAN**  
**CHEMISTRY EDUCATION**

NAME: \_\_\_\_\_ SS#: \_\_\_\_\_

REQUIRED		COMMUNICATION COMPETENCE – 12 Credit Hours Required	SMC	FSU S.H.	GRADE
ENGL	150	English 1 -Must obtain a minimum of B grade for English teaching major/minor	ENGL 103	3	
ENGL	250	English 2 -Must obtain a minimum of B grade for English teaching major/minor	ENGL 104	3	
COMM		Inter. Comm. (COMM 105) or Fund. of Public Speaking (COMM 121) Program Specific Requirement	SPEE 102	3	
ENGL	321	Advanced Composition		3	
<b>SCIENTIFIC UNDERSTANDING - 7-8 Credit Hours Required:</b> Two courses from the following subject areas (one must be a lab course): ASTR, BIOL, CHEM, GEOG 111, GEOG 121, GEOL, PHSC, PHYS.					
	Chemistry Courses Will Complete This Area				
	<a href="http://www.ferris.edu/htmls/academics/gened/scicourses.html">http://www.ferris.edu/htmls/academics/gened/scicourses.html</a>				
<b>QUANTITATIVE SKILLS - Proficiency in MATH 115 or higher:</b> This requirement can be completed by <b>ONE</b> of the following options: 1. Pass MATH 115 or higher. 2. Pass course proficiency exam in MATH 115 or higher. 3. ACT Math subtest score of 24 or higher.					
			MATH 105		
<b>CULTURAL ENRICHMENT - 9 Credit Hours Required:</b> Three courses from the following subject areas: Art, History, Humanities, Philosophy (EXCEPT LOGIC), Literature, Music, Drama, and Foreign Language These courses must include: 1. At least one course at the 200 level or higher. 3. No more than 5 credit hours in music activities courses, or theater activities courses, or art studio courses may be used to complete this requirement.					
	<a href="http://www.ferris.edu/htmls/academics/gened/cultcourses.html">http://www.ferris.edu/htmls/academics/gened/cultcourses.html</a>				
	<a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783</a>				
<b>SOCIAL AWARENESS - 9 Credit Hours Required:</b> Three courses from the following subject areas: Anthropology, Economics, Political Science, or Sociology These courses must include: 1. Courses in at least two different subject areas. 2. One Social Awareness Foundations Course. 3. One course dealing with issues of race/ethnicity and/or gender. 4. <b>One course at the 200 level or higher.</b>					
	<a href="http://www.ferris.edu/htmls/academics/gened/soccourses.html">http://www.ferris.edu/htmls/academics/gened/soccourses.html</a>				
	<a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783</a>				
<b>GLOBAL CONSCIOUSNESS:</b> Each student must complete one course from the Global Consciousness group, which may also count toward fulfilling the Cultural Enrichment or Social Awareness requirement, respectively. Global Consciousness courses deal specifically with contemporary cultures, languages, and societies outside North America.					
	<a href="http://www.ferris.edu/htmls/academics/gened/globcourses.html">http://www.ferris.edu/htmls/academics/gened/globcourses.html</a> <a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783</a>				
<b>RACE, ETHNICITY AND GENDER: Choose one.</b>					
	<a href="http://www.ferris.edu/htmls/academics/gened/regcourses.html">http://www.ferris.edu/htmls/academics/gened/regcourses.html</a> <a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm?INST_CODE=001783</a>				

Note: Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.

**The MACRAO policy may have little or no effect.** BECAUSE MINOR COURSES CAN ALSO FULFILL GENERAL EDUCATION REQUIREMENTS, WHERE APPLICABLE, THE MACRAO MAY NOT HASTEN THE COMPLETION OF THIS PROGRAM.

**FERRIS STATE UNIVERSITY/SOUTHWESTERN MICHIGAN COLLEGE**  
**TRANSFER PLAN**  
**CHEMISTRY TEACHING MAJOR**  
**48 Semester Hours**

You can **NOT** have a Chemistry teaching minor with this teaching major.

REQUIRED		COURSE TITLE	SMC	FSU S.H.	GRADE
CHEM	121	General Chemistry 1	CHEM 101	5	
CHEM	122	General Chemistry 2	CHEM 102	5	
CHEM	321	Organic Chemistry 1	CHEM 201	5	
CHEM	322	Organic Chemistry 2	CHEM 202	5	
CHEM	231	Quantitative Analysis		4	
CHEM	317	Instrumental Analysis		3	
CHEM	451	Introduction to Physical Chemistry		4	
CHEM	364	Biochemistry		4	
		TOTAL		35	
MATH	220	Analytical Geometry and Calculus 1	MATH 141	5	
PHYS	211	Introductory Physics 1	PHYS 101	4	
PHYS	212	Introductory Physics 2	PHYS 102	4	
<b>NOTE: A 2.50 GPA IS REQUIRED IN THE MAJOR/MINOR. NO GRADE LESS THEN A "C".</b>					

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**IN ADDITION TO AN EDUCATION MAJOR, AN EDUCATION MINOR IS REQUIRED FOR THE COMPLETION OF THE DEGREE. IF YOU HAVE QUESTIONS, PLEASE CONTACT THE EDUCATIONAL COUNSELOR FOR ASSISTANCE. EMAIL: [CLINEMA@FERRIS.EDU](mailto:CLINEMA@FERRIS.EDU) OR TELEPHONE (231) 591-3646 OR 1-800-4-FERRIS EXTENSION 3646.**

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**FERRIS STATE UNIVERSITY/SOUTHWESTERN MICHIGAN COLLEGE  
COLLEGE OF EDUCATION AND HUMAN SERVICES  
SECONDARY EDUCATION/PROFESSIONAL SEQUENCE**

Admission to the **Technical** curriculum requires the completion of one of the following:

1. An A.A.S. Degree with at least 40 semester hours in the occupational major and a minimum grade point average of 2.50 in the major courses **OR**
2. Occupational competence documented by the Michigan Occupational Competency Assessment Center (MOCAC)

**NOTE: STUDENTS MUST OBTAIN THE APPROPRIATE GPA FOR THEIR MAJOR/MINOR AS ESTABLISHED BY EACH DEPARTMENT. A 2.75 GPA IS REQUIRED IN THE PROFESSIONAL EDUCATION COURSE SEQUENCE. A 2.50 CUMULATIVE GPA IS ALSO REQUIRED BEFORE STUDENT TEACHING.**

**FIELD EXPERIENCE REQUIREMENT: (for vocational majors only: Technical, Business, Marketing)** Two years of wage earning occupational work experience (within the last six (6) years) required. **Contact the Vocational Authorization Officer immediately.** \*Possible options are available if you have at least one-year of experience (check with Vocational Authorization Officer).

*EDUC	391	Cooperative Work Internship			
<b>REQUIRED</b>	<b>PROFESSIONAL EDUCATION COURSES (33-39 Credit Hours Required)</b>		<b>S.H.</b>	<b>SMC</b>	<b>GRADE</b>
<b>Level I Courses</b>					
EDUC	251	Life Span Human Growth & Development	3	EDUC 215	
EDUC	101	Introduction to the Profession of Teaching	1		
EDUC	289	Principles of Teaching & Learning	3		
<i>NOTE: Prior to enrolling in any Level II or Level III course, all students in teacher education programs must pass all sections of the state-mandated Basic Skills Test and complete a level II application.</i>					
<b>Level II Courses</b>					
EDUC	303	School, Work, and Society	3		
EDUC	338	Secondary General Methods I (Application Required)	4		
EDUC	415	Teaching Strategies for Special Education and Diverse Populations (prerequisite: EDUC338)	3		
EDUC	438	Secondary General Methods II (Application Required)	5		
EDUC	443	Teaching Reading/Secondary Areas	3		
<i>The next course is required for vocational majors only ( Technical, Business, Marketing)</i>					
EDUC	400	Foundations in Career and Technical Education	3		
<b>Level III Courses</b>					
EDUC	491	Secondary Directed Teaching (Application Required)	6-12		
EDUC	499	Professional Seminar	2		
		<b>TOTAL</b>	<b>33-39</b>		

Students are strongly encouraged to meet with their advisor to discuss the appropriate sequence of courses for their program and any conflicts with other courses. No Grade Lower than a C.

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