MASTER OF EDUCATION (leading to Initial Licensure)
SECONDARY TEACHER OF CHEMISTRY (8-12)

Prerequisites:
1. Bachelor’s degree in Chemistry or Bachelor’s degree with a minimum of 26 credits in chemistry (including the equivalents of the following Westfield State University courses: CHEM 0109, CHEM 0111, CHEM 0201, CHEM 0203, and CHEM 0305, and a semester of analytical chemistry or instrumental analysis) plus 2 semesters of calculus (equivalent to MATH 0105 and MATH 0106) and 2 semesters of calculus-based physics (equivalent to PHSC 0125 and PHSC 0127) with a minimum GPA for all those courses of 2.5. Students will be required to fulfill any undergraduate prerequisites for courses in their graduate program, which will likely include introductory courses in physical geology and astronomy.
2. Passing grade on the MTEL Communication and Literacy Skills Test.
3. Coursework in Adolescent Development and in Foundations of Education.

Program Requirements:

<table>
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<tr>
<th>Requirements for Initial Licensure in Teacher of Chemistry (8-12):</th>
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<tr>
<td>EDUC 0540 Students with Special Needs 3 s.h.</td>
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<tr>
<td>EDUC 0552/3/4 Educational Planning and Evaluation 3 s.h.</td>
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<tr>
<td>GNSC 0573 Methods of Chemistry Education 3 s.h.</td>
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<td>EDUC 0580 Multicultural Education 3 s.h.</td>
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<td>EDUC 0569 Practicum 6 s.h.</td>
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EDUC 0632 Research in Education (research project required) 3 s.h.

A total of 12 additional credits to include:

3-6 additional credits of pedagogical coursework at the 600 level.

6-9 additional credits of graduate coursework in the content area. Students with weaker undergraduate chemistry backgrounds will generally be expected to complete at least one upper-level chemistry course as part of their program, and should be aware that those courses are not generally offered during late afternoon or evening hours at Westfield State. Classes should be selected from the courses below, in consultation with the graduate advisor.

ASTR 0549 Integrated Physical Science: Astronomy 3 s.h.
CHEM 0511 Instrumental Analysis 4 s.h.
CHEM0513 Biochemistry 3 s.h.
GEOL 0547 Integrated Physical Science: Geology 3 s.h.

Requirements for Master’s Degree 33 – 34 s.h.

(Continue on next page)
Additional Guidelines

A. Students must have passed the MTEL subject matter test(s) and have a GPA of 2.8 before beginning the practicum. Although you may be allowed to apply for student teaching practicum with a 2.8 GPA, you must maintain a 3.0 GPA to remain in the graduate program.

B. Students are required to successfully complete a written comprehensive examination to demonstrate mastery of knowledge gained in coursework and to relate concepts across the curriculum. The comprehensive exam may be taken after completing a minimum of nine of the ten non-practicum courses within the Master’s program.

C. Passing scores on all appropriate and required sections of the MTEL are required for practicum enrollment. Practicum placement also requires completion of the following courses:

   EDUC 0540    Students with Special Needs  
   EDUC 0552/3/4 Educational Planning and Evaluation  
   GNSC 0573    Methods of Chemistry Education  
   EDUC 0580    Multicultural Education  

   and the recommendation of the student’s advisor, program director and Department Chair or designee.