

**WAYNE STATE
UNIVERSITY**

COLLEGE OF EDUCATION

Education Specialist Certificate Program

Major: Curriculum and Instruction- Science Education

I. Purpose:

The Educational Specialist Certificate program requires a minimum of thirty credits beyond the master's degree. The purpose of the program is to strengthen the liberal education of elementary, middle, and high school teachers and administrators so that they are more effective as professional workers in the field of Science Education. The specific content of each major is dependant upon the individual student's needs and interests. The typical plan includes course work in the science education and related curriculum courses as well as subject matter areas supportive of a science major or minor.

II. Admissions Requirements and procedures:

Minimum entrance requirements are:

- A master's degree from an accredited institution
- Grade point average of 2.6 or above for upper division undergraduate work
(Applicants with an undergraduate grade point average below 2.6 must have a grade point average of 3.4 or above in their master's degree work)
- A major in science
- Three years of successful teaching experience or the equivalent

Admission procedures include:

- Students who have not been previously admitted to the Graduate School should file the *Application for Graduate Admission* with the University Admissions Office located in the Welcome Center, 4th Floor, at 42 W. Warren Ave. Students who hold master's degrees from WSU use a different application form which can be obtained in room 489 Education Building.
- Forms and directions regarding fulfillment of the other College and/or program area requirements will be forwarded to the student upon receipt of the application by the Education Graduate Office.
- For further information on admissions call Academic Services at 313-577-1605.

III. Program Requirements (minimum 30 semester credits):

Science Education (minimum 12 semester hours):

ELE 6500	Science Curriculum: Preprimary-8	3 cr.
SCE 5010	Biological Sciences for Elementary & Middle School Teachers	3 cr.
SCE 5020	Physical Sciences for Elementary & Middle School Teachers	3 cr.
SCE 5030	Earth/Space Sciences for Elementary & Middle School Teachers	3 cr.
SCE 5040	Field Course in Exploring the Natural Environment	2 cr.
SCE 5060	Methods and Materials of Instruction in Secondary Science I	3 cr.
SCE 5070	Methods and Materials of Instruction in Secondary Science II	3 cr.
SCE 6030	Advanced Studies in Teaching Science in Jr. High & Middle School	3 cr.
SCE 6040	Advanced Studies in Teaching Science in High School	3 cr.
SCE 6080	Teaching Environmental Studies	3 cr.
SCE 7010*	Special Topics in Science Education	3 cr.

***SCE 7010 may be taken twice (on different topics) for a total of 6 credits**

Related Areas (minimum 9 semester hours):

Students are required to take a minimum of nine semester hours of coursework in areas related to science education. These courses are selected in consultation with the advisor and may come from areas within the Teacher Education Division, other divisions of the College of Education, and from the College of Science.

Directed Study and Research (optional – to be decided in consultation with advisor)

Students who did not have a research experience similar to the master's seminars (TED 7000 and ED 7999) should take these seminars. Students who had these seminars or equivalent experiences may submit and have approved by their advisor a field research or directed study of 2-6 semester hours in partial fulfillment of the requirement. The directed study may include science research experiences in a laboratory or in the field.

Minimum Credit Hours Above 7000:

At least 10 semester hours of coursework must be taken in courses numbered 7000 and above.

IV. Application for Completion/Certificate:

Education Specialist Certificates are awarded upon successful completion of all program requirements. Application for the certificate must be made no later than the tenth day of classes for the semester in which the requirements are to be completed.