

Master of Education Program in Science Education

Plan A: Model A 2

Group 1: Does not accept professional teacher licenses

1) For students who have a bachelor's degree or the equivalent in teaching or education.

(1) Program Structure

The program requires at least 36 credits comprising the following:

- | | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 4 | courses | (24 credits) |
| B. Thesis | | | (12 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details

A. Area-specific Courses 4 courses (24 credits)

Required 3 courses

- 21701 Research in Curriculum and Instruction
- 29701 Seminar in Science Curriculum and Instruction
- 29703 Foundations, Methodologies of Science Education

And choose 1 course from the following:

- 22759 Biology and Chemistry for Teachers
- 22760 Physics and Astronomy for Teachers
- 22761 Provision of Learning Experiences in Sciences

B. Thesis (12 credits)

- 29798 Thesis (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education*

This is an intensive training for graduate professional experience. It is equivalent to 6 credits.

The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.

Note: * Students must enroll in this seminar in the last semester before graduation only.

2) For students who have a bachelor's degree or the equivalent in science.

(1) Program Structure

The program requires at least 42 credits comprising the following:

- | | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 5 | courses | (30 credits) |
| B. Thesis | | | (12 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details

A. Area-specific Courses 5 courses (30 credits)

Required 4 courses

- 21701 Research in Curriculum and Instruction
- 29701 Seminar in Science Curriculum and Instruction
- 29702 Principles and Theories of Education for Science Teaching Profession
- 29703 Foundations, Methodologies of Science Education

And choose 1 course from the following:

- 27708 Electronic and Tele-communication Media in Education
- 29704 Media, Innovation, and Measurement and Evaluation in Science Learning

B. Thesis (12 credits)

- 29798 Thesis (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education*

This is an intensive training for graduate professional experience. It is equivalent to 6 credits. The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.



Note: * Students must enroll in this seminar in the last semester before graduation only.

Group 2: Receive a professional teacher license

3) For students who have a bachelor's degree or the equivalent in teaching or education.

(1) Program Structure

The program requires at least 55 credits comprising the following:

- | | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 8 | courses | (43 credits) |
| B. Thesis | | | (12 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details

A. Area-specific Courses 8 courses (43 credits)

Required 7 courses

- 21701 Research in Curriculum and Instruction
- 29701 Seminar in Science Curriculum and Instruction
- 29702 Principles and Theories of Education for Science Teaching Profession
- 29703 Foundations, Methodologies of Science Education
- 29708 Science Teacher Profession Practicum During Class
- 29709 Teacher Profession Practicum I*
- 29710 Teacher Profession Practicum II*

And choose 1 course from the following:

- 27708 Electronic and Tele-communication Media in Education
- 29704 Media, Innovation, and Measurement and Evaluation in Science Learning

B. Thesis (12 credits)

- 29798 Thesis (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education**

This is an intensive training for graduate professional experience. It is equivalent to 6 credits.

The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.

Note: * Is a set of courses that have a professional experience training as determined by the Teachers Council of Thailand.

** Students must enroll in this seminar in the last semester before graduation only.

Plan B**Group 1: Does not accept professional teacher licenses****1) For students who have a bachelor's degree or the equivalent in teaching or education.****(1) Program Structure**

The program requires at least 36 credits comprising the following:

- | | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 5 | courses | (30 credits) |
| B. Independent Study | 1 | course | (6 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details**A. Area-specific Courses 5 courses (30 credits)**

Required 3 courses

- 21701 Research in Curriculum and Instruction
- 29701 Seminar in Science Curriculum and Instruction
- 29703 Foundations, Methodologies of Science Education

And choose 2 courses from the following:

- 22759 Biology and Chemistry for Teachers
- 22760 Physics and Astronomy for Teachers
- 22761 Provision of Learning Experiences in Sciences

B. Independent Study 1 course (6 credits)

- 29797 Independent Study (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education*

This is an intensive training for graduate professional experience. It is equivalent to 6 credits. The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.

Note: * Students must enroll in this seminar in the last semester before graduation only.

2) For students who have a bachelor's degree or the equivalent in science.

(1) Program Structure

The program requires at least 42 credits comprising the following:

- | | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 6 | courses | (36 credits) |
| B. Independent Study | 1 | course | (6 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details

A. Area-specific Courses 6 courses (36 credits)

- 21701 Research in Curriculum and Instruction
- 27708 Electronic and Tele-communication Media in Education
- 29701 Seminar in Science Curriculum and Instruction
- 29702 Principles and Theories of Education for Science Teaching Profession
- 29703 Foundations, Methodologies of Science Education
- 29704 Media, Innovation, and Measurement and Evaluation in Science Learning

B. Independent Study 1 course (6 credits)

- 29797 Independent Study (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education*

This is an intensive training for graduate professional experience. It is equivalent to 6 credits.
The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.



Note: * Students must enroll in this seminar in the last semester before graduation only

Group 2: Receive a professional teacher license

3) For students who have a bachelor's degree or the equivalent in teaching or education.

(1) Program Structure

The program requires at least 55 credits comprising the following:

| | | | |
|--|---|---------|----------------|
| A. Area-specific Courses | 9 | courses | (49 credits) |
| B. Independent Study | 1 | courses | (6 credits) |
| C. Intensive Training for Graduate Professional Experience | | | (non-credited) |

(2) Program Details

A. Area-specific Courses 9 courses (49 credits)

- 21701 Research in Curriculum and Instruction
- 27708 Electronic and Tele-communication Media in Education
- 29701 Seminar in Science Curriculum and Instruction
- 29702 Principles and Theories of Education for Science Teaching Profession
- 29703 Foundations, Methodologies of Science Education
- 29704 Media, Innovation, and Measurement and Evaluation in Science Learning
- 29708 Science Teacher Profession Practicum During Class
- 29709 Teacher Profession Practicum I*
- 29710 Teacher Profession Practicum II*

B. Thesis (12 credits)

- 29797 Independent Study (Science Education)

C. Intensive Training for Graduate Professional Experience (non-credited)

- 29799 Graduate Professional Experience in Science Education**

This is an intensive training for graduate professional experience. It is equivalent to 6 credits.
The students' work at the intensive training is evaluated but it is not added to the cumulative GPA.

Note: * Is a set of courses that have a professional experience training as determined by the Teachers Council of Thailand.

** Students must enroll in this seminar in the last semester before graduation only.