**Master of Science Program in Chemistry for Teacher (2014)**

**Name of Degree:** Master of Science (Chemistry for Teacher)

**Abbreviation:** M.Sc. (Chemistry for Teacher)

**Curriculum**

**Total Credits**

 Plan A Type A 2 37 Credits

Plan B 37 Credits

**Curriculum Structure** **Plan A Type A 2 Type B**

Required Courses (\*) 16 16 Credits

Elective Courses (\*\*) 9 15 Credits

Thesis 12 - Credits

Independent Study - 6 Credits

**Total 37 37 Credits**

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| --- | --- |
| **First Year, 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** | **Plan A Type A 2** | **Plan B** |
| 332 721\* | Conceptual Inorganic Chemistry | 3(3-0-6) | 3(3-0-6) |
| 332 731\* | Conceptual Physical Chemistry | 3(3-0-6) | 3(3-0-6) |
| 332 761\* | Inorganic and Physical Chemistry Laboratory | 1(0-3-2) | 1(0-3-2) |
| 332 841\*\* | Management of Chemicals and Environmental Chemistry | 3(3-0-6) | - |
| **Total credits** | 10 | 7 |
| **Cumulative credits** | 10 | 7 |

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| **First Year, 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** | **Plan A Type A 2** | **Plan B** |
| 332 711\* | Conceptual Organic Chemistry | 3(3-0-6) | 3(3-0-6) |
| 332 741\* | Conceptual Analytical Chemistry | 3(3-0-6) | 3(3-0-6) |
| 332 762\* | Organic and Analytical Chemistry Laboratory | 1(0-3-2) | 1(0-3-2) |
| 332 832\*\* | Properties of Environmental Matters | 3(3-0-6) | - |
| **Total credits** | 10 | 7 |
| **Cumulative credits** | 20 | 14 |

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| **First Year, 3rd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** | **Plan A Type A 2** | **Plan B** |
| 332 xxx\*\* | Elective | - | 3(3-0-6) |
| 332 xxx\*\* | Elective | - | 3(3-0-6) |
| 332 xxx\*\* | Elective | - | 3(3-0-6) |
| **Total credits** | - | 9 |
| **Cumulative credits** | 20 | 23 |

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| **Second Year, 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** | **Plan A Type A 2** | **Plan B** |
| 332 791\* | Science Communication for Chemistry Teacher | 1(1-0-2) | 1(1-0-2) |
| 332 891\* | Seminar in Chemistry for Teacher | 1(1-0-2) | 1(1-0-2) |
| 332 899 | Thesis | 4 | - |
| 332 897 | Independent Study | - | 2 |
| 332 811\*\* | Heterocycles and Natural Products | 3(3-0-6) | 3(3-0-6) |
| **Total credits** | 9 | 7 |
| **Cumulative credits** | 29 | 30 |

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| **Second Year, 2st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** | **Plan A Type A 2** | **Plan B** |
| 332 897 | Independent Study | - | 4 |
| 332 899 | Thesis | 8 | - |
| 332 xxx\*\* | Elective | - | 3(3-0-6) |
| **Total credits** | 8 | 7 |
| **Cumulative credits** | 37 | 37 |

**Program Committee**

1. Assoc. Prof. Dr. Kwanjai Kanokmedhakul

2. Assoc. Prof. Dr. Saksit Chanthai

3. Asst. Prof. Dr. Jinda Khemprasit

4. Asst. Prof. Dr. Chanokporn Paosiri

5. Asst. Prof. Dr. Atchara Sirimungkala