**Doctor of Philosophy Program in Mathematics (2012)**

**Name of Degree:** Doctor of Philosophy (Mathematics)

**Abbreviation:** Ph.D. (Mathematics)

**Admission Requirements**

Type 1.1:

Hold a master’s degree (or an equivalent qualification) with a GPA of at least 3.50 in any fields incorporating at least 12 credits of mathematics or applied mathematics, and have capability to conduct a dissertation; or satisfy additional requirements set by the Curriculum Executive Committee

Type 2.1:

Hold a master’s degree (or an equivalent qualification) in any fields incorporating at least 12 credits of mathematics or applied mathematics, or satisfy additional requirements set by the Curriculum Executive Committee

Type 2.2:

Hold a bachelor’s degree (or an equivalent qualification) or a graduate diploma with a GPA of at least 3.00 in any fields incorporating at least 18 credits of mathematics or applied mathematics, and have capability to conduct a dissertation; or satisfy additional requirements set by the Curriculum Executive Committee and the Graduate School

**Curriculum**

**Total Credits**

Type 1.1 48 Credits

Type 2.1 48 Credits

Type 2.2 73 Credits

**Curriculum Structure**

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject** | **Number of Credits** | | |
| **Type 1.1** | **Type 2.1** | **Type 2.2** |
| Required Courses (\*) | 2 (Non-credit) | 2 (Non-credit) | 13 |
| Elective Courses (\*\*) | - | 12 | 12 |
| Dissertation | 48 | 36 | 48 |
| **Total** | **48** | **48** | **73** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **First Year, 1st Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 711\* | Algebra | - | - | 3(3-0-6) |
| 314 712\* | Linear Algebra | - | - | 3(3-0-6) |
| 314 997 | Dissertation | 9 | - | - |
| 314 999 | Dissertation | - | 6 | - |
| 314 723\*\* | Complex Analysis | - | 3(3-0-6) | 3(3-0-6) |
| **Total credits** | | **9** | **9** | **9** |
| **Cumulative credits** | | **9** | **9** | **9** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **First Year, 2nd Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 721\* | Real Analysis | - | - | 3(3-0-6) |
| 314 751\* | Topology | - | - | 3(3-0-6) |
| 314 997 | Dissertation | 9 | - | - |
| 314 999 | Dissertation |  | 6 | - |
| 314 713\*\* | Semigroups | - | 3(3-0-6) | 3(3-0-6) |
| **Total credits** | | **9** | **9** | **9** |
| **Cumulative credits** | | **18** | **18** | **18** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Second Year, 1st Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 891\* | Seminar in Mathematics | - | - | 1(0-2-2) |
| 314 997 | Dissertation | 9 | - | - |
| 314 998 | Dissertation | - | - | 6 |
| 314 999 | Dissertation | - | 6 | - |
| 314 811\*\* | Selected Topics in Advanced Algebra I | - | 3(3-0-6) | 3(3-0-6) |
| **Total credits** | | **9** | **9** | **10** |
| **Cumulative credits** | | **27** | **27** | **28** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Second Year, 2nd Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 991\* | Doctorial Seminar in Mathematics I | 1(0-2-2)  (Non-credit) | 1(0-2-2)  (Non-credit) | - |
| 314 997 | Dissertation | 9 | - | - |
| 314 998 | Dissertation | - | - | 6 |
| 314 999 | Dissertation | - | 6 | - |
| 314 843\*\* | Advanced Combinatorial Theory | - | 3(3-0-6) | 3(3-0-6) |
| **Total credits** | | **9** | **9** | **9** |
| **Cumulative credits** | | **36** | **36** | **37** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Third Year, 1st Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 997 | Dissertation | 9 | - | - |
| 314 998 | Dissertation | - | - | 9 |
| 314 999 | Dissertation | - | 9 | - |
| **Total credits** | | **9** | **9** | **9** |
| **Cumulative credits** | | **45** | **45** | **46** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Third Year, 2nd Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 991\* | Doctorial Seminar in Mathematics I | - | - | 1(0-2-2)  (Non-credit) |
| 314 992\* | Doctorial Seminar in Mathematics II | 1(0-2-2)  (Non-credit) | 1(0-2-2)  (Non-credit) |  |
| 314 997 | Dissertation | 3 | - | - |
| 314 998 | Dissertation | - |  | 9 |
| 314 999 | Dissertation | - | 3 | - |
| **Total credits** | | **3** | **3** | **9** |
| **cumulative credits** | | **48** | **48** | **55** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fourth Year, 1st Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 992\* | Doctorial Seminar in Mathematics II | - | - | 1(0-2-2)  (Non-credit) |
| 314 998 | Dissertation | - | - | 9 |
| **Total credits** | | **-** | **-** | **9** |
| **Cumulative credits** | | **48** | **48** | **64** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fourth Year, 2nd Semester** | | **Number of Credits** | | |
| **Course Number** | **Course Title** | **Type 1.1** | **Type 2.1** | **Type 2.2** |
| 314 998 | Dissertation | - | - | 9 |
| **Total credits** | | **-** | **-** | **9** |
| **Cumulative credits** | | **48** | **48** | **73** |

**Program Lecturers**

1. Assoc. Prof. Dr. Kittikorn Nakprasit

2. Assoc. Prof. Dr. Narakorn Khanasri

3. Assoc. Prof. Dr. Satit Saejung

4. Assoc. Prof. Dr. Thawhat Changphas

5. Asst. Prof. Dr. Keaitsuda Nakprasit