**Master of Science Program in Physics**

**Name of Degree:** Master of Science (Physics**)**

**Abbreviation:** M.Sc. (Physics)

**Admission Requirements**

 Hold a bachelor's degree in physics.

**Curriculum**

**Total Credits:**  42 Credits

**Curriculum Structure**

Required Courses (\*) 17 Credits

Elective Courses (\*\*) 9 Credits

Thesis 16 Credits

Total 42 Credits

|  |  |
| --- | --- |
| **First Year, 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 315 701\* | Classical Mechanics | **3**  |
| 315 711\* | Quantum Mechanics I | **3**  |
| 315 721\* | Classical Electrodynamics I | **3**  |
| 315 761\* | Mathematical Methods in Physics I | **3**  |
| **Total** | **12** |
| **cumulative credits** | **12** |

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| --- | --- |
| **First Year, 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 315 731\* | Statistical Mechanics | **3**  |
| Elective Courses | **9** |
| 301 733\*\* | Molecular Simulations and Applications | 3 |
| 315 712\*\* | Quantum Mechanics II | 3 |
| 315 753\*\* | Selected Topics in Solid State Physics | 3 |
| 315 762\*\* | Mathematical Methods in Physics II | 3 |
| 315 774\*\* | Astronomical Instrumentation and Techniques | 3 |
| 315 781\*\* | Digital Signal Processing | 3 |
| **Total** | **12** |
| **cumulative credits** | **24** |

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| --- | --- |
| **Second Year, 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| Elective Courses | **3** |
| 301 708\*\* |  Computational Materials Science | 3 |
| 301 730\*\* | Selected Topics in Materials Science and Nanotechnology | 3 |
| 315 713\*\* | Selected Topics in Quantum Mechanics | 3 |
| 315 752\*\*  | Semiconductor Physics | 3 |
| 315 783\*\* | Theory of Nuclear Magnetic Resonance | 3 |
| 315 891\* | Seminar I | 1 |
| 315 899 | Thesis | 6 |
| **Total** | **10** |
| **cumulative credits** | **31** |

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| --- | --- |
| **Second Year, 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 315 892\* | Seminar II | 1 (1-0-2) |
| 315 899 | Thesis | 10 |
| **Total** | **11** |
| **cumulative credits** | **42** |

**Program Lecturers**

1. **Associated Professor Vittaya Amornkitbamrung**
2. **Associated Professor Ekaphan Swatsitang**
3. **Associated Professor Wiwat Youngdee**
4. **Assistant Professor Thanusit Burinprakon**
5. **Assistant Professor Sriprajak Krongsuk**
6. **Assistant Professor Orrarujee Muanwong**
7. **Assistant Professor Chaiyapoj Muthaporn**
8. **Assistant Professor Teerasak Kamwanna**
9. **Assistant Professor Pornjuk Srepusharawoot**
10. **Assistant Professor Pairot Moontragoon**
11. **Assistant Professor Prasit Thongbai**