Master Program Graduation Requirements

A. Master Program (Physics stream)

- 1. Term: one to four years, has to be expelled from university after the fourth year.
- 2. Mandatory credits: 20

Statistical Mechanics I [5210] (3 credits)

Electrodynamics I [5310] (3 credits)

Quantum Mechanics I & II [5410, 5420] (3 + 3 credits)

Colloquium I & II [5930, 5940] (1 + 1 credits)

and six credits from others coded "PHYS 4" or above

3.

- (1) Exemption from the above mandatory courses is upon the conditions: a. the course(s) already been taken in the undergraduate and b. approval from the course committee.
- (2) Total credits upon graduation are 24, confined to those from Physics Department and Astronomy Institute with code "PHYS 4", "ASTR 4", or above, or from other graduate programs with code "5" or above and physics related. The approval of such classes is determined by the course committee. Students should apply before the deadline of adding classes in each semester.
- (3) Students have to take the Thesis [6910, 6920] before graduation (2 credits but not counted toward the graduation credits.)
- (4) Students must take at least one "Seminar" course.
- 4. Students should find their adviser(s) before the beginning of the second year, and should work with the adviser(s) for at least 6 months before the final oral examination. Any exception to this rule should apply to the Chairman via the adviser(s), and a decision will be made after consulting the course committee.
- 5. Students who take more than one course other than thesis and fail all courses within two consecutive semesters will be expelled from the university.

B. Master Program (Applied Physics stream)

- 1. Term: one to four years, has to be expelled from university after the fourth year.
- 2. Mandatory credits: 20

Electrodynamics I [5310] (3 credits)

Quantum Mechanics I [5410] (3 credits)

Choose two courses from the following:

Statistical Mechanics I [5210] (3 credits), Electrodynamics II [5320] (3 credits), Quantum Mechanics II [5420], Solid State Physics I [5710] (3 + 3 credits)

Colloquium [5930, 5940] (1 + 1 credits) and six credits from others coded "PHYS 4" or above.

3.

- (1) Exemption from the above mandatory courses is upon the conditions: a. the course(s) already been taken in the undergraduate and b. approval from the course committee.
- (2) Total credits upon graduation are 24, confined to those from Physics Department and Astronomy Institute with code "PHYS 4", "ASTR 4", or above, or from other graduate programs with code "5" or above and physics related. The approval of such classes is determined by the course committee. Students should apply before the deadline of adding classes in each semester.
- (3) Students have to take the Thesis [6910, 6920] before graduation (2 credits but not counted toward the graduation credits.)
- (4) Students must take at least one "Seminar" course.
- 4. Students should find their adviser(s) before the beginning of the second year, and should work with the adviser(s) for at least 6 months before the final oral examination. Any exception to this rule should apply to the Chairman via the adviser(s), and a decision will be made after consulting the course committee.
- 5. Students who take more than one course other than thesis and fail all courses within two consecutive semesters will be expelled from the university.

C. Master Program (Optical Physics stream)

- 1. Term: one to four years, has to be expelled from university after the fourth year.
- 2. Mandatory credits: 19

Quantum Mechanics I [5410] (3 credits)

Optical laboratory [5050] (2 credits)

Choose two courses from the following:

Electrodynamics I [5310], Laser Physics and Application I [5370],

Solid State Physics I [5710], Quantum Mechanics II [5420],

Electrodynamics II [5320], Microwave Physics and Application I [5370] (3 + 3 credits)

Colloquium [5930, 5940] (1 + 1 credits)

and six credits from others coded "PHYS 4" or above

3.

- (1) Exemption from the above mandatory courses is upon the conditions: a. the course(s) already been taken in the undergraduate and b. approval from the course committee.
- (2) Total credits upon graduation are 24, confined to those from Physics Department and Astronomy Institute with code "PHYS 4", "ASTR 4", or above, or from other graduate programs with code "5" or above and physics related. The approval of such classes is determined by the course committee. Students should apply before the deadline of adding classes in each semester.
- (3) Students have to take the Thesis [6910, 6920] before graduation (2 credits but not counted toward the graduation credits.)
- (4) Students must take at least one "Seminar" course.
- 4. Students should find their adviser(s) before the beginning of the second year, and should work with the adviser(s) for at least 6 months before the final oral examination. Any exception to this rule should apply to the Chairman via the adviser(s), and a decision will be made after consulting the course committee.
- 5. Students who take more than one course other than thesis and fail all courses within two consecutive semesters will be expelled from the university.