## Department of Agronomy(Genetics and Breeding group) Graduation Requirements for Master Students Enrolled after 2024 Items Notes Years of Enrollment: Part-time students may prolong years of enrollment for 1 more year. 1. Minimum years of enrollment: 1 year 2. Maximum years of enrollment: 4 years (excluding 2 years of suspension) Students are considered to have passed both academic and conduct II. Minimum credits for graduation: 3 0 assessment with the grade of 70 or above. Students who fail in conduct (physical education and citizen national defense will be dismissed. education are not included), including: The average of academic grades comprises 50 % of the overall Courses: graduation grades. \*Required credits+ Elective credits + Master Thesis = minimum minimum of required credits: 12 minimum of elective credits: 12 credits for graduation Master Thesis: 6 credits III. Transfer credits: maximum 12 credits According to NCHU regulation for credits exemption, students should apply for credits exemption prior to the deadline of course add/drop. IV. Undergraduate credits from discipline-related courses may According to NCHU regulation, the number of credits students should take is determined by their advisor or the department chairperson. be counted as graduation credits. Maximum 3 credits Students who need to take undergraduate courses for research purposes, besides the credits for graduation, may take undergraduate courses with the consent of the instructor. The course may be counted as graduation credits after obtaining the approval form the advisor, and relevant department committee. Nevertheless, the maximum for such undergraduate credits: 6 credits. If graduate students take combined courses for fourth-year undergraduates and graduates, the maximum counted credits:12 credits. V. Credits from other departments: 6 credits. Including inter-university credits. VI. Core courses and credits: 18 credits Students who fail the core courses should retake core courses. Core Course Title Credits Students who don't complete core courses cannot graduate. 2 1. Seminar in Crop Production and Physiology (I) 3. Seminar (I) and (II) each require earning 2 credits. 2. Seminar in Crop Genetics and Breeding (I) 2 \*Courses can be taken across groups and are not restricted by 3. Seminar in Statistical Method and Experimental 2 semester. Upon completing 4 credits of seminars, the course will be considered as completed. 2 4. Seminar in Crop Production and Physiology (II) 2 5. Seminar in Crop Genetics and Breeding (II) 2 6. Seminar in Statistical Method and Experimental Design(II) 7. Advanced Crop Sciences 2 2 8. Advanced Crop Genetics 2 9. Advanced Crop Physiology 10. Advanced Plant Breeding 2 11. Thesis According to NCHU graduate regulation, students should take certain VII. Prerequisite Courses (not included in graduation credits): prerequisite courses at the undergraduate level, which are decided by advisors and chairperson. Prerequisite credits will not be counted as graduation credits. Students are not eligible to attend the thesis defense until they complete the prerequisite courses. Oral defense comprises 50% of graduation grade. VIII. Thesis Defense: Students must learn "Education on Academic and Research Ethics" 1. Students should discuss with their advisors prior to the course and take the exam to obtain the certificate form the Center for end of first academic year. Taiwan Academic Research Ethics Education website. Each department may additionally require the completion of professional academic research ethics education workshops, which will be implemented according to the regulations established by each 2. Students must get the certification of "Education on Academic and Research Ethics" course before the application of the oral defense. department. 3. Students who complete minimum of enrollment, fulfill Master thesis should be written in English and oral defense should be carried out in English. Students who fail oral defense within graduation credits, and complete the draft of thesis enrollment should retake it next semester or year. If students who retake oral defense fail again, their study will be terminated. The should apply for oral defense at least 20 days prior to the oral defense. The passing grade for defense is 70. grade of those who pass retaking the oral defense is uniformly calculated at 70. IX. Others: 1. English Proficiency Graduation Criteria: None 2. Before graduating, graduate students must publish a paper in an academic journal or present a paper in an academic seminar or poster before they can apply for the thesis examination.

Students Enrolled after 2024				
Items	Notes			
<ul> <li>II. Years of Enrollment:</li> <li>1. Minimum years of enrollment: 1 year</li> <li>2. Maximum years of enrollment: 4 years (excluding 2 years of suspension)</li> </ul>	Part-time students may prolong years of enrollment for 1 more year.			
III. Minimum credits for graduation:3 0 credits (physical education and citizen national defense education are not included), including:  1. Courses:     minimum of required credits:12     minimum of elective credits:12  2. Master Thesis:6 _ credits	Students are considered to have passed both academic and conduct assessment with the grade of 70 or above. Students who fail in conduct will be dismissed.  The average of academic grades comprises 50 % of the overall graduation grades.  *Required credits+ Elective credits + Master Thesis = minimum credits for graduation			
III. Transfer credits: maximum 12 credits	According to NCHU regulation for credits exemption, students should apply for credits exemption prior to the deadline of course add/drop			
IV. Undergraduate credits from discipline-related courses may be counted as graduation credits. Maximum 3credits	According to NCHU regulation, the number of credits students should take is determined by their advisor or the department chairperson. Students who need to take undergraduate courses for research purposes, besides the credits for graduation, may take undergraduate courses with the consent of the instructor. The course may be counted as graduation credits after obtaining the approval form the advisor, and relevant department committee. Nevertheless, the maximum for such undergraduate credits: 6 credits. If graduate students take combined courses for fourth-year undergraduates and graduates, the maximum counted credits:12 credits.			
V. Credits from other departments: 6 credits.	Including inter-university credits.			
VI. Core courses and credits: 18 credits  Core Course Title Credits  1. Seminar in Crop Production and Physiology (I)  2. Seminar in Crop Genetics and Breeding (I)  3. Seminar in Statistical Method and Experimental Design(I)  4. Seminar in Crop Production and Physiology (II)  5. Seminar in Crop Genetics and Breeding (II)  6. Seminar in Statistical Method and Experimental Design(II)  7. Advanced Crop Genetics  8. Advanced Crop Genetics  9. Advanced Crop Physiology  10. Advanced Plant Breeding  21. Thesis	<ol> <li>Students who fail the core courses should retake core courses.</li> <li>Students who don't complete core courses cannot graduate.</li> <li>Seminar (I) and (II) each require earning 2 credits.</li> <li>*Courses can be taken across groups and are not restricted by semester. Upon completing 4 credits of seminars, the course will be considered as completed.</li> </ol>			
VII. Prerequisite Courses (not included in graduation credits): credits	According to NCHU graduate regulation, students should take certain prerequisite courses at the undergraduate level, which are decided by advisors and chairperson. Prerequisite credits will not be counted as graduation credits. Students are not eligible to attend the thesis defense until they complete the prerequisite courses.			
<ol> <li>IX. Thesis Defense:         <ol> <li>Students should discuss with their advisors prior to the end of first academic year.</li> <li>Students must get the certification of "Education on Academic and Research Ethics" course before the application of the oral defense.</li> </ol> </li> <li>Students who complete minimum of enrollment, fulfill graduation credits, and complete the draft of thesis should apply for oral defense at least 20 days prior to the oral defense. The passing grade for defense is 70.</li> </ol>	Oral defense comprises 50% of graduation grade. Students must learn "Education on Academic and Research Ethics" course and take the exam to obtain the certificate form the Center for Taiwan Academic Research Ethics Education website. Each department may additionally require the completion of professional academic research ethics education workshops, which will be implemented according to the regulations established by each department.  Master thesis should be written in English and oral defense should be carried out in English. Students who fail oral defense within enrollment should retake it next semester or year. If students who retake oral defense fail again, their study will be terminated. The grade of those who pass retaking the oral defense is uniformly calculated at 70.			
<ul> <li>X. Others:</li> <li>1. English Proficiency Graduation Criteria: None</li> <li>2. Before graduating, graduate students must publish a paper in an academic journal or present a paper in an academic seminar or poster before they can apply for the thesis examination.</li> </ul>				

<u>Department of Agronomy(Biostatistics group)</u> Graduation Requirements for Master Students Enrolled after 2024				
Items	Notes			
III. Years of Enrollment:  1. Minimum years of enrollment: 1 year  2. Maximum years of enrollment: 4 years (excluding 2 years of suspension)	Part-time students may prolong years of enrollment for 1 more year.			
IV. Minimum credits for graduation: 30credits (physical education and citizen national defense education are not included), including:  1. Courses:     minimum of required credits: 13	Students are considered to have passed both academic and conduct assessment with the grade of 70 or above. Students who fail in conduct will be dismissed.  The average of academic grades comprises 50 % of the overall graduation grades.  *Required credits+ Elective credits + Master Thesis = minimum credits for graduation			
III. Transfer credits: maximum 12 credits	According to NCHU regulation for credits exemption, students should apply for credits exemption prior to the deadline of course add/drop.			
IV. Undergraduate credits from discipline-related courses m counted as graduation credits. Maximum 3 credits	According to NCHU regulation, the number of credits students should take is determined by their advisor or the department chairperson. Students who need to take undergraduate courses for research purposes, besides the credits for graduation, may take undergraduate courses with the consent of the instructor. The course may be counted as graduation credits after obtaining the approval form the advisor, and relevant department committee. Nevertheless, the maximum for such undergraduate credits: 6 credits. If graduate students take combined courses for fourth-year undergraduates and graduates, the maximum counted credits:12 credits.			
V. Credits from other departments: 6 credits.	Including inter-university credits.			
Seminar in Crop Production and Physiology (I)     Seminar in Crop Genetics and Breeding (I)     Seminar in Statistical Method and Experimental Design(I)     Seminar in Crop Production and Physiology (II)     Seminar in Crop Genetics and Breeding (II)     Seminar in Statistical Method and Experimental Design(II)     Statistical Theory     Linear Models	1. Students who fail the core courses should retake core courses. 2. Students who don't complete core courses cannot graduate. 3. Seminar (I) and (II) each require earning 2 credits.  *Courses can be taken across groups and are not restricted by semester. Upon completing 4 credits of seminars, the course will be considered as completed.			
VII. Prerequisite Courses (not included in graduation credits	certain prerequisite courses at the undergraduate level, which are decided by advisors and chairperson. Prerequisite credits will not be counted as graduation credits. Students are not eligible to attend the thesis defense until they complete the prerequisite courses.			
<ol> <li>XI. Thesis Defense:         <ol> <li>Students should discuss with their advisors prior to end of first academic year.</li> <li>Students must get the certification of "Education Academic and Research Ethics" course before application of the oral defense.</li> </ol> </li> <li>Students who complete minimum of enrollment, fugraduation credits, and complete the draft of the should apply for oral defense at least 20 days prior to oral defense. The passing grade for defense is 70.</li> </ol>	Taiwan Academic Research Ethics Education website. Each department may additionally require the completion of professional academic research ethics education workshops, which will be implemented according to the regulations established by each department.  Master thesis should be written in English and oral defense should be carried out in English. Students who fail oral defense within			
<ul><li>IX. Others:</li><li>1. English Proficiency Graduation Criteria: None</li><li>2. Before graduating, graduate students must publish a paper in an academic journal or present a paper in an academic seminar or pos before they can apply for the thesis examination.</li></ul>	er			

## Department of Agronomy Graduation Requirements for Master Students Enrolled after 2024

## professional elective courses

	Core Course Title	Semester /Year	Credits
1	Crop Molecular Breeding	S	3
2	Advanced Methodology of crop breeding	S	3
3	Genomics	S	3
4	Plant Physiological and Ecological Genetics	S	3
5	Cytogenetics:with Practice	S	3
6	Crop Resources	S	2
7	Advanced Seed Science	S	2
8	Crop Environmental Physiology	S	2
9	Crop Metabolic Physiology	S	2
10	The Physiology of Crop Yield	S	2
11	Physiology of Herbicide Action	S	2
12	Regression Analysis	S	3
13	Advanced Experimental Design and Statistical Analysis	S	3
14	Sampling Techniques	S	2
15	Multivariate Statistical Analysis	S	3
16	Categorical Data Analysis	S	3
17	Nonparametric Analysis	S	3
18	Applied Statistical Packages	S	3
19	Technique in Health Cultivation Management for Crops	S	3
20	Design and Analysis of Experiments in Agricultural Science	S	3
21	The application of genetics and genomics in crop improvement	S	2
22	Statistical Methods in Bioinformatics	S	3
23	Introduction to Biostatistics	S	2
24	Advanced Research Methods in Crop Science	S	3

Cou	1303		
	Core Course Title	Semester /Year	Credits
25	Auditing Practice for Certification of Organic and TAP Agro-Product	S	2
26	Technologies of precision breeding	S	2
27	Bioinformatics in Crop Breeding	S	2
28	Utilization of Agricultural Wastes	S	2
29	Crop Breeding Method	S	2
30	Carbon Farming Technology	S	2
31	Smart-Precision Agricultural Technology	S	2
32	Soil Fertility Management	S	3

## Note:

- 1. The elective courses listed above are part of the academic curriculum plan; however, they may not be offered or may be canceled due to insufficient enrollment.
- 2. Courses with codes starting with 6 or 7 are designated as graduate-level courses.
- 3. Courses with codes starting with 5 are classified as advanced courses under the "Curriculum Planning and Course Offering Guidelines," and a maximum of 12 credits from these courses may be counted toward graduation requirements.