ACADEMIC REQUIREMENTS

Academic Requirements for Master's Degrees

In recognition that the objectives of master's degrees differ for various departments and for individual students, especially in the importance given to research, two general plans for master's degrees may be followed. The Master's Thesis Option is for MA or MS degrees with a thesis based on individual research and a final oral examination. The Master's Non-Thesis Option is for MA, ME, MEM, MFA, MPH, or MS degrees without a thesis but requiring a comprehensive examination, major project or other culminating experience to be administered by the academic unit.

Within the framework of these general regulations, it is expected that a relevant program of study will be planned for each candidate for the master's degree by the student and the faculty advisor or advisory committee. If applicable, a Planned Program of Study (PPOS) must be submitted to the School of Graduate Studies by the end of the second semester. Check with your program to determine if a PPOS is required. Such a program should include appropriate courses, thesis, and/or project hours, and may also include, where relevant, such experiences as field work or practicum. Guides to submitting and updating the PPOS through the Student Information System (SIS) are available from the University Registrar. Some departments have the degree requirements coded in the Student Information System and do not require a PPOS. For these programs, the academic requirements report in the Student Information System replaces the PPOS.

Master's Thesis Option

Unless stated higher by the department, a minimum cumulative grade point average of 3.00 is required for the awarding of the graduate degrees from the School of Graduate Studies. The master's degree under the thesis option requires a minimum of 30 total credit hours, with 18-24 credit hours of course work, plus a thesis equivalent to at least 6-12 credit hours of registration. At least 18 credit hours of coursework must be at the 400-level or higher. Courses taken at the 300-level should only be allowed when no 400-level course is available, or under unusual circumstances, both of which must be approved in advance via a petition to Graduate Studies. At least 12 credit hours of course work must be graded. Once registered for thesis credit (Course 651), a student must continue 651 registration each succeeding regular semester until graduation. However, if a student is registered for coursework or research toward the doctorate in the semester in which the thesis examination is expected to occur, concurrent registration for 651 is not required.

Each student must prepare an individual thesis. Joint theses are not permitted. The written thesis must conform to regulations concerning format, quality, digital accessibility, and time of submission as established by the School of Graduate Studies. Detailed instructions can be obtained from the School of Graduate Studies website.

For completion of master's degrees under the thesis option, an oral examination (defense) of the master's thesis is required. This examination is conducted by a committee of at least three members of the University faculty. The candidate's thesis advisor customarily serves as the chair of the examining committee. The other members of the committee are appointed by the chair of the department or curricular program faculty supervising the candidate's course of study. The examining committee must agree unanimously that the candidate has

passed the thesis examination. When the research relates to proprietary material, the student and advisor are responsible for making preliminary disclosures to the sponsor sufficiently in advance to permit timely release of the thesis, and these plans should be disclosed when the thesis is submitted to the School of Graduate Studies. These arrangements, and any requests for delayed publication, must be disclosed to the School of Graduate Studies using the Electronic Thesis and Dissertation (ETD) Document Approval and Certification Form as part of the final graduation materials.

Master's Non-Thesis Options

Unless stated higher by the department, a minimum cumulative grade point average of 3.00 is required for the awarding of the graduate degrees from the School of Graduate Studies. The minimum requirements for the master's degree under the non-thesis option are 30 credit hours of course work with at least 12 credit hours of letter-graded course work, and a comprehensive examination, approved project or other culminating experience. At least 18 semester hours of course work must be at the 400-level or higher. Courses taken at the 300-level should only be allowed when no 400-level course is available or under unusual circumstances, both of which must be approved in advance via a petition to Graduate Studies

The Case School of Engineering offers a non-thesis, course focused master's degree. The minimum requirements for the course focused master's are 30 credit hours of coursework with at least 12 credit hours of letter-graded coursework and at least 24 credit hours at the 400-level or above.

Each candidate for a master's degree under the non-thesis option must pass satisfactorily a comprehensive examination, project or other culminating experience to be administered by the department or curricular program committee. The examination may be written or oral or both. A student must be registered during the semester in which any part of the comprehensive examination is taken. If not registered for other courses, the student will be required to register for one semester hour of EXAM 600 before taking the examination.

Academic Requirements for Graduate Certificates

Case Western Reserve University awards University Certificates as a credential for completing a set of courses (possibly in combination with other learning experiences) that focus on a specific topic or theme. A graduate certificate program contains courses taught at the graduate or professional level. The program must include a minimum of 15 credit hours. The student must earn a minimum GPA of 3.00 in order for the graduate certificate to be awarded. Certificate programs may be embedded within degree programs and offered as an option for degree-seeking students, or can be stand-alone programs to which students apply and are granted admission. Courses taken as part of a certificate program may be double counted for degree programs. Certificates are recorded in the Student Information System and will appear as awarded on the student's official University transcript upon final confirmation from the School of Graduate Studies.

Academic Requirements for the Doctor of Philosophy and Doctor of Musical Arts Degrees

The degrees of Doctor of Philosophy and Doctor of Musical Arts are awarded in recognition of in-depth knowledge in a major field and comprehensive understanding of related subjects together with a demonstration of ability to perform independent investigation and to communicate the results of such investigation in an acceptable dissertation.

Curricular Requirements

Within the framework of these general regulations, it is expected that a relevant program of study will be planned for each candidate for the doctorate by the student and the faculty advisor or advisory committee. This Planned Program of Study (PPOS), if applicable, must be submitted to the School of Graduate Studies before the end of the second semester. Guides to submitting and updating the PPOS through the Student Information System (SIS) are available from the University Registrar. Some programs have the degree requirements built into the Student Information System and do not require a PPOS. For these programs, the Academic Requirements Report in the Student Information System replaces the PPOS.

Academic Requirements for the Doctor of Philosophy

Unless stated higher by the department, a minimum cumulative grade point average of 3.00 is required for the awarding of the graduate degrees from the School of Graduate Studies. Although specific requirements vary among departments, students entering with a bachelor's degree will satisfactorily complete a minimum of 36 credit hours of courses (which may include independent study/research), tutorials, and seminars. All coursework must be at the 400-level or higher, and at least 24 credit hours of course work must be graded. For students entering with an approved master's degree, completion of at least 18 credit hours of 400-level or higher course work and at least 12 credit hours of this course work must be graded. A minimum of 18 credit hours of dissertation research (Course 701) is required for all PhD students.

Academic Requirements for the Doctor of Musical Arts Degree

Unless stated higher by the department, a minimum cumulative grade point average of 3.00 is required for the awarding of the graduate degrees from the School of Graduate Studies. A minimum of 36 credit hours of course work (at least 24 credit hours must be graded work and at the 400-level or above) is required for the DMA, together with a minimum of 18 credit hours of applied music and 6 credit hours of lecture-recital/document preparation. Students are also required to give a recital, to pass a jury and qualifying examinations, and to demonstrate proficiency in two foreign languages relevant to their field of study. Students should contact the Department of Music for additional details.

Advanced Dissertation Research

For students matriculating in Summer 2019 and later, in order to accurately reflect the time and effort accrued in completing the dissertation, 36 credit hours of advanced dissertation research will be posted to the PhD/DMA student's record upon successful completion of the dissertation defense and submission of final certification paperwork.

Examination Requirements

In order to meet the requirements for the doctorate, a student must pass a general examination (or a series of examinations covering different fields) specified and administered by the student's department

or supervising committee. The examination generally precedes Advancement to Candidacy. A student must be registered during the semester in which any part of the general or qualifying examination is taken. If not registered for other courses, the student will be required to register for one semester hour of EXAM 700, before taking the examination. A student who fails the examination on the first attempt may be permitted to take the examination a second time within one year at the discretion of the department. Except in unusual circumstances, a student who fails the examination a second time will be separated from further graduate study within the same department or program.

Advancement to Candidacy

The formal acceptance of a student as a candidate for the doctoral degree is the responsibility of the student's department or the committee supervising the doctoral program in accordance with the written procedures of the academic unit. Once a student has advanced to candidacy, notification to the School of Graduate Studies should be submitted using the Advancement to Candidacy form. Generally, advancement to candidacy allows the student to enter the dissertation research phase of the degree program, and occurs after all course work and exam requirements are satisfied. At its discretion the supervising unit may require a student to pass qualifying examinations before candidacy is granted. Students are expected to make regular and continuous progress toward the degree. Advancement to candidacy in a PhD program should occur within a maximum of 6 years post-matriculation with a bachelor's degree (no later than at the completion of 36 credit hours of graduate study) and 4 years post-matriculation with a master's degree (no later than at the completion of 18 credit hours of graduate study). Students may continue in pre-candidacy status beyond this time on a limited basis by means of a petition to the School of Graduate Studies by the student and program director, based on evidence of student progress toward the degree. Individual programs can require Advancement to Candidacy before the time limit set in this policy.

The School of Graduate Studies must be notified promptly in writing of the decision concerning a student's advancement to candidacy, and a copy of the notification must be sent to the student concerned. A student who is refused candidacy status may not undertake further study for credit toward the doctoral degree within the same department or supervising unit. With the approval of both the department concerned and the School of Graduate Studies, such a student may:

- a. Take additional courses, if required, in order to complete an approved master's degree in that department.
- b. Seek admission to the graduate program of another department.

Course 701 Requirements (Dissertation Research, Preand Post-Candidacy)

When a PhD student has been advanced to candidacy, they may begin dissertation research by formally registering for course 701 credits. At the point at which students begin registering for course 701, the department must identify a University faculty member who will serve as the doctoral student's principal research advisor. Students who have been advanced to candidacy may register for 1-9 credit hours of course 701 each fall and spring semester (or up to 6 credits for the summer when needed).

In certain cases, students who have not advanced to candidacy may be given predoctoral standing status at the discretion of the department and upon submission of the Predoctoral Standing form to the School of Graduate Studies. These students may register for up to a total of 6

credit hours of course 701 over a maximum of two regular semesters. Pre-Candidacy 701 hour(s) may be taken concurrently with coursework.

Once a student begins registration of 701 hours, they must register for at least 1 credit hour of 701 each semester until graduation. PhD students have five consecutive academic years from the semester of the first credited 701 registration, including leaves of absence, to complete all requirements for the doctorate.

Dissertation Requirements

All candidates for the PhD degree must electronically submit a dissertation as evidence of their ability to conduct independent research at an advanced level. The dissertation must represent a significant contribution to existing knowledge in the student's field, and at least a portion of the content must be suitable for publication in a reputable professional journal or as a book or monograph. Students must prepare their own dissertations. Joint dissertations are not permitted. The dissertation must conform to regulations concerning format, quality, digital accessibility, and time of submission as established by the School of Graduate Studies in the Electronic Theses and Dissertation Guidelines. Research work connected with a dissertation is to be carried out under the direct supervision of a member of the University faculty.

When the research relates to proprietary material, the student and advisor are responsible for making preliminary disclosures to the sponsor in advance to permit timely release of the dissertation. These arrangements, and any requests for delayed publication, must be disclosed when the dissertation is submitted to the School of Graduate Studies on the Electronic Thesis and Dissertation (ETD) Document Approval and Certification Form as part of the final graduation materials. Once approved by the School of Graduate Studies, dissertations are to be uploaded to OhioLINK before certification of the doctorate. Because dissertations are made public immediately upon acceptance, they should not contain unauthorized, proprietary, or classified material.

Dissertation Research Advisor

Each doctoral student is responsible for becoming sufficiently familiar with the research interests of the department or program faculty to choose in a timely manner a faculty member who will serve as the student's research advisor. The research advisor is expected to provide mentorship in research conception, methods, performance, and ethics, as well as focus on development of the student's professional communication skills, building professional contacts in the field, and fostering the professional behavior standard of the field and research in general. The research advisor also assists with the selection of the other faculty to serve as members of the dissertation advisory and defense committee.

Dissertation Advisory and Defense Committee

The composition of each student's dissertation committee must have formal approval by the School of Graduate Studies on recommendation of the chair of the department, division, or curricular program committee.

The dissertation committee includes:

 a minimum of four members of the University faculty (any tenured or tenure-track Case Western Reserve University faculty member, and any CWRU full-time faculty member whose primary duties include research who is authorized to serve on a PhD dissertation committee by the school or college through which they are affiliated with the University).

- at least one of these CWRU faculty must hold a primary appointment that is outside of the student's department, program, or school.
- the chair of the committee must be a CWRU tenured or tenure-track faculty member in the student's program.
- the student's dissertation research advisor must be a member of the committee and may serve as chair if consistent with departmental policy.
- persons who are not members of the University faculty may serve as additional members of the defense committee, subject to approval by the School of Graduate Studies. A petition with the rationale for the request must be submitted to the School of Graduate Studies along with the proposed member's curriculum vitae.
- under special conditions, a former faculty member whose time of leaving the University has not exceeded 18 months may be approved as a committee member by the School of Graduate Studies.

Throughout the development and completion of the dissertation, members of the dissertation advisory committee are expected to provide constructive criticism and helpful ideas generated by the research problem from the viewpoint of their particular expertise. Each member will make an assessment of the originality of the dissertation, its value, the contribution it makes, and the clarity with which concepts are communicated, especially to a person outside the field. The doctoral student is expected to arrange meetings and maintain periodic contact with each committee member. A meeting of the full committee for the purpose of assessing the student's progress should occur at least once a year until the completion of the dissertation.

Final Oral Examination (Defense of Dissertation)

Each doctoral candidate is required to pass a final oral examination in defense of the dissertation. The examination may also include an inquiry into the candidate's competence in the major and related fields.

The defense must be scheduled with the School of Graduate Studies no later than three weeks before the date of the examination. The chair of the examining committee should give approval to schedule the defense when the written dissertation is ready for public scrutiny. The candidate must provide to each member of the committee a copy of the completed dissertation at least ten days before the examination so that the committee members have an opportunity to read and discuss it in advance.

Scheduled defenses are publicized by the School of Graduate Studies, and any member of the University may be present at that portion of the examination pre-designated as public by the chair of the dissertation defense committee. Others may be present at the formal defense only by invitation of that chair.

It is expected that all members of the dissertation defense committee be present at the defense. Exceptions to this rule: a) must be approved by petition to the School of Graduate Studies and only under extraordinary circumstances; b) no more than one voting member can ever be absent; c) the absent member must participate through real-time video conferencing at the department's expense; and d) the student must always be physically present. The petition should outline who will be attending the defense in person and who will be attending via video conferencing.

The dissertation defense committee is responsible for certifying that the quality and suitability of the material presented in the dissertation meet acceptable scholarly standards. A student will be certified as passing the

final oral examination if no more than one of the voting members of the committee dissents.

Institutional Review Board (IRB)

The promotion of scholarship and the discovery of new knowledge through research are among the major functions of Case Western Reserve University. If this research is to be meaningful and beneficial to humanity, involvement of human subjects as experimental participants is necessary. It is imperative that investigators in all disciplines strive to protect human subjects. University policy and federal regulations demand compliance. Per federal regulations (45 CFR 46), all research involving human subjects requires submission of an IRB application prior to initiation of research to the Case Western Reserve IRB.

Each IRB application must have a faculty member noted as the Responsible Investigator. Applications that are not fully completed as instructed will not be accepted. See the University IRB Policies and Procedures on the involvement of human participants in research for guidelines under which investigations involving human subjects may be pursued.

Foreign Language Requirements

Although there is no general foreign language requirement for the doctorate, each department or supervising committee may set such requirements as are appropriate to the student's program of study. It is the student's responsibility to ascertain the foreign language requirements approved by the supervising unit.

Course Designations

Courses numbered 100 to 399 are undergraduate-level courses. Courses numbered 400- and higher are graduate-level courses.

Graduate Students are expected to take courses at the 400-level or above. Some departments do allow courses at the 300-level to be used for master's programs, however, this should only occur when no graduate-level course is available or under unusual circumstances, both of which require a petition to Graduate Studies. Departments are strongly encouraged to create cross-listed graduate-level courses to accommodate this need. Graduate-level versions of courses must require additional work beyond that which is assigned to the undergraduate students in the course.

Grading System

See the University Registrar section of this General Bulletin for a list of valid grades for the School of Graduate Studies and their appropriate use in assigning to graduate students. The only grades that can be changed after they have been assigned by the instructor are Incompletes (I). All others will remain permanently on the student's academic record. Additional work cannot be done to change an existing grade to a higher grade

There are some grading schemes in the School of Graduate Studies that have important policy implications. They are:

Incomplete (I)

Grades of I can only be assigned for letter-graded and Pass/No Pass courses for extenuating circumstances and only when a student who is passing the course fails to complete a small, evaluative segment of the course. Students may not sit in the same course in a later semester

to complete the work required for the original course. All work for the incomplete grade must be made up and the change of grade recorded in the Student Information System (SIS) by the date specified by the instructor, but no later than the 11th week of class in the semester following the one in which the I grade was received.

In exceptional circumstances, a student may petition for an extension of the incomplete deadline. The petition should be submitted by the original deadline date and must contain the reasons for the extension, a proposed new completion date, and a letter from the instructor supporting the extension.

When a student fails to submit the work required for removing the Incomplete by the date established, the instructor will enter a final grade that assumes a failing performance for the missing work. In the absence of the assignment of a grade by the instructor, the Registrar will convert the I to F when the deadline for making up Incomplete grades from a previous semester has passed.

Pass/No Pass (P/NP)

Some graduate courses are graded on a Pass/No Pass basis. Students in the School of Graduate Studies do not have the option to change a letter graded course to Pass/No Pass. Of the minimum credit hours required beyond the bachelor's degree to complete coursework requirements, at least 12 credit hours must be letter graded for the master's degree, and at least 24 credit hours must be letter graded for the PhD degree. For students with approved master's degrees who are admitted to PhD programs, at least 12 credit hours of the required minimum of 18 credit hours of coursework must be letter graded. Letter graded courses should be the courses most central to the student's plan of study. Additional requirements of letter graded course work may be specified by departmental policy.

Satisfactory/Unsatisfactory (S/U)

Grades of Satisfactory (S) and Unsatisfactory (U) are to be used exclusively for 651 thesis research and 701 dissertation research and the M.S. Project course (695) in the Case School of Engineering. Satisfactory indicates an acceptable level of progress towards completion of the research required for the degree, and Unsatisfactory indicates an unacceptable level of progress towards completion of the research for the degree. Any student who receives a grade of U will automatically be put on academic probation, and if a second U is received, the student will be separated from further study in their degree program. Students who receive a U must repeat the course for the same number of credits the following semester.