PhD General Exam
Media Arts and Sciences (MAS) Academic Program, MIT Media Lab

Structure of the MAS Academic Program
Graduate students in the MAS academic program start in the masters program, which typically lasts two years (culminating in a masters thesis). After finishing their masters degree, students can be admitted to the PhD program, which typically lasts four years. During the PhD program, students are required to pass a General Exam (typically in the second year of the four-year program) and submit a PhD Dissertation proposal (typically in the third year).

Purpose of PhD General Exam
The MAS General Exam is intended to help PhD students develop the knowledge and expertise they need to begin work on research for their PhD Dissertation. Unlike some other departments, MAS does not use its General Exam as a “qualifying” exam, in order to “weed out” students. Rather, the goal is to help students get ready for their work on their PhD Dissertation.

Structure of the PhD General Exam
The General Exam process consists of several stages (typically over a six-month period):

- The student selects three academic/research areas relevant to their Dissertation
- The student assembles a three-person committee, one member for each area
- The student submits proposal (including reading list for each area)
- The student participates in an oral exam with the three committee members
- The student submits written components for each of the three academic areas

Each of these stages is described in more detail below.

Academic Areas for the General Exam
The student (in consultation with their Faculty Advisor) selects three academic areas relevant to their Dissertation Research:

- a “primary” area at the core of the Dissertation research
- a “technical” area focusing on technological or scientific underpinnings of the work
- a “contextual” area placing the intended Dissertation work in a larger social, psychological, philosophical, cultural, aesthetic, or historical perspective

The three areas should represent three distinct intellectual traditions. For example, if a student plans to work on a Dissertation involving the design of a new learning technology using audio signal-processing, the student might select “learning technologies” as the primary area, “audio signal processing” as the technical area, and “constructivist learning theory” as the contextual area. In deciding on the scope/granularity of each area, it is useful to think of a topic that could be the subject of a semester-long graduate course.

Committee for the General Exam
The student (in consultation with their Faculty Advisor) assembles a three-person committee consisting of specialists in the three areas of the exam. The Faculty Advisor serves as chair of the committee. At least two of the committee members should be MAS faculty members or Media Lab principal investigators. (Exceptions can be granted upon written request.) The Faculty Advisor typically supervises the “primary area”, but that is not required.

Proposal for the General Exam
The student submits a proposal to MAS graduate committee (MASCOM). The proposal should include:

- A short (roughly one-page) overview of the overall theme of the General Exam, including short descriptions of the three areas and how they relate to the overall theme. Note that the General Exam is not a dissertation proposal, but rather a way for the student to explore and develop expertise in areas relevant for their future dissertation research.
- A reading list for each of the three areas in the exam, compiled by the student in consultation with the committee member for each area. The reading list should focus on “classic” works from the field (not just recent conference papers). The reading list could be similar to a reading list from a graduate seminar course.
- Approvals from the three committee members (including biographical information for members from outside MAS). Approvals may be submitted via email.

Oral Component of the General Exam
In the oral component of the General Exam, the three committee members meet together with the student, to evaluate whether the student has achieved a strong understanding of core issues and ideas in the three academic areas selected for the exam.

The oral component typically last about two hours. Ideally, all committee members participate in person, though committee members can join remotely, if necessary. The session begins with a presentation by the student, in which the student provides a perspective or synthesis (not just a summary) of the areas that the student has been studying. Committee members ask questions to evaluate the student’s knowledge, understanding, and ability to think through issues and problems in the three selected areas. The student’s opening presentation can cover ideas from all three areas, or it can be divided into three shorter presentations, with questions and discussion in between. The student should spend at most 30 minutes presenting, leaving plenty of time for questions and discussion.

If all goes well during the oral component, there should also be time for the student to talk with committee members about the plans and directions for the student’s dissertation research.

At the end of the oral component, the committee members can reach one of three decisions:

- Pass: the student has successfully passed the oral component
- Conditional Pass: the committee specifies some additional action (such as completing a particular course) that the student must take in order to pass
- Repeat: the student is required to take the oral component again
Written Component of the General Exam
The student must produce a written component for each of the three areas of the General Exam. The written components include:

- a publication-quality paper (typically, but not necessarily, in the primary area)
- two 24-hour take-home exams, with questions posed by the committee members responsible for those two areas

The purpose of the 24-hour written exams is not to test what the student can produce under time pressure. Rather, the 24-hour limit is imposed to avoid the student spending too much time on this component of the exam. The time limit can be adjusted based on mutual agreement between committee member and student. Also, it is fine for the student to work together with committee members to develop the questions for the written exams.

The written components are typically conducted after the oral component, so that committee members can use the written component to probe more deeply on issues that arise in the oral component.

Here are some examples of take-home questions: Resnick_24_hour_exam_questions.pdf

Each committee member is responsible for evaluating the written component for their area, and informing the Faculty Advisor when the student has successfully completed the work.