Report of Completed Building Technology/PhD Requirements

Student's name

| enrolled in the Building Technology PhD program on This information is to be added to the student's Departmental and Institute records as appropriate. Please forward a copy of this form to Renée Caso in 7-337 upon completion of each requirement. | | | |
|---|---|----------------------------------|--|
| Qualifying P | aper (to be submitted at the completion of 4 | 481) | |
| Date completed | | | |
| Administered by | Y | | |
| BT faculty advis | or (or Sectionhead) | | |
| Dissertation | Proposal (to be completed prior to the end o | of the 2nd term of registration) | |
| Title of proposal | l | | |
| Date approved | | | |
| | Committee member name (print) | Signature | |
| Advisor/Chair | | | |
| Reader | | | |
| Reader | | | |
| Reader | | | |

The dissertation committee must consist of at least three people of which the advisor is one. The chair must be a permanent member of the BT faculty. One reader must be a member of the Department and the second reader can be someone from outside of the Department or MIT. Signatures are required on this form from all members of the student's committee to affirm their willingness to assume responsibility of committee membership. Generally, thesis registration does not begin until a dissertation proposal has been approved.

Major Field

While no fixed number of courses is prescribed, a typical program will include at least five graduatelevel subjects taken in a coherent field. Please list the subject number and semester completed.

| Field of Major | | | | |
|----------------|----|----|----|----|
| Subject #1 | #2 | #3 | #4 | #5 |
| Date #1 | #2 | #3 | #4 | #5 |

_____ ____

List additional subjects taken for major; include date completed:

BT faculty advisor (or Sectionhead)

Minor Field

Three subjects (not less than 24 units) must be taken in a coherent field different from the major. Please list the three subjects that comprise the student's Minor.

| Field of Minor | | |
|---|--|--|
| Subject #1 | #2 | #3 |
| Date #1 | #2 | #3 |
| BT faculty advisor (or Sectionhead) | | |
| General Exam (to be con | mpleted by the end | of the fourth regular term of registration) |
| There are two parts to the 0 | General (Qualifying | z) Exam |
| 1. Subjects taken to demonst and one B in at least four st <i>BT general exam</i> at the end of | strate mastery in th ubjects chosen acro of this document. | ree areas. To pass, students must earn at least three As ss three of seven areas from Table 1, <i>Discipline areas for the</i> |
| Subject #1 | Grade | Semester completed |
| Subject #2 | Grade | Semester completed |
| Subject 31 | Grade | Semester completed |
| Subject #4 | Grade | Semester completed |
| 2. Presentation | | |
| Date completed | | Satisfactory 🗖 Unsatisfactory 🗖 |

| BT faculty advisor (or Sectionhead) | |
|---------------------------------------|--|
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PhD Dissertation Committee Meetings

Note date of each meeting with student's dissertation committee listing those present. Meetings should be held at least once each term after the dissertation proposal is accepted.

| Date | Committee members present (print) | | |
|------|-----------------------------------|--|--|
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| Dissertation | Defense | |
|---------------------|-------------------------------|----------------|
| Dissertation Title | e | |
| Date approved _ | Satisfactory | Unsatisfactory |
| | Committee member name (print) | Signature |
| Advisor/Chair | | |
| Reader | | |
| Reader | | |
| Reader | | |

Table 1: Discipline areas for the Building Technology Ph.D. general exam To pass the subject area mastery portion of the doctoral general exam, students must earn three As and one B (or four As) in at least four subjects chosen across three of the seven areas from the table below. Substitutions of subjects not included in the list below will be considered on a case-by-case basis and will require approval from all BT faculty.

| Area | Semester Completed | Grade | Subject |
|---|-----------------------|----------|--|
| Thermal Sciences | | | 4.424J/2.52J or 2.55 (Heat Transfer) 2.25 (Fluid Mechanics) 2.42 (Thermodynamics) |
| Building Systems and Performance | | | 4.430 (Daylighting) 2.151 (Controls) 4.431 (Architectural Acoustics) |
| Structural Mechanics and Analysis | | | 2.093 or 2.094 (Finite Element Analysis) 1.573 (Structural Mechanics) 1.581 (Structural Dynamics) 1.571 (Structural Analysis) 4.445 (Analysis of Historic Structures) |
| Materials and Construction | | | 3.22 (Mechanical Behavior of Materials) 3.36 (Cellular Solids) 3.560 (Industrial Ecology of Materials) |
| Urban Systems and Resources | | | 2.83 (Energy, Materials and Manufacturing) 11.526J/1.251J (Land Use + Transportation Planning) 15.871 (System Dynamics) 4.433 (Modeling Urban Energy Flows) |
| Optimization and Machine Learning | | | 6.255J/15.093J (Optimization Methods) 6.252J/15.084J (Nonlinear Optimization) 4.450J/1.575J (Structural Optimization) 16.888J/IDS.338J (Multidisciplinary Optimization) 6.862 or 6.867 (Machine Learning) 15.077J/IDS.147J (Statistical Learning + Data Mining) |
| Computational Geometry | | | 4.517 (Parametric Design and BIM) 4.521 or 4.522 (Visual Computing) GSD SCI-6338 (Introduction to Computational Design) 18.9501 (Differential Geometry) 6.838 (Shape Analysis) |
| Date of subject | area mastery com | pletion: | Signature of advisor: |