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 Tessa Haynes in 7-337 upon completion of each requirement.

Qualifying Paper (to be submitted at the completion of 4.481)

Date completed _____

Administered by _____

BT faculty advisor (or Section head) _____

Dissertation Proposal (to be completed prior to the end of the 2nd term of registration)

Title of proposal _____

_____

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 graduate-level 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 Section head) _____

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 completed by the end of the fourth regular term of registration)

There are two parts to the General (Qualifying) Exam

1. Subjects taken to demonstrate mastery in three areas. To pass, students must earn at least three As and one B in at least four subjects chosen across three of seven areas from Table 1, *Discipline areas for the BT general exam* at the end of this document.

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 Section head) _____

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)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Dissertation Defense

Dissertation Title _____

_____

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 completion: _____

Signature of advisor: _____