

Harvard-MIT Health Sciences and Technology  
**Contract for Technical Qualifying Exam (TQE)**

Name: \_\_\_\_\_ Email: \_\_\_\_\_

Advisor: \_\_\_\_\_ Research Supervisor (if known): \_\_\_\_\_

**I. Concentration Area** (check one):

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Aeronautics & Astronautics | <input type="checkbox"/> Chemistry                       | <input type="checkbox"/> Mechanical Engineering        |
| <input type="checkbox"/> Biological Engineering     | <input type="checkbox"/> Computer Science                | <input type="checkbox"/> Nuclear Science & Engineering |
| <input type="checkbox"/> Brain & Cognitive Sciences | <input type="checkbox"/> Electrical Engineering          | <input type="checkbox"/> Physics                       |
| <input type="checkbox"/> Chemical Engineering       | <input type="checkbox"/> Materials Science & Engineering |  |

NOTE: Students wishing to change their TQE concentration area after submission of this form must submit a written petition to the QuEHST committee.

**II. Concentration Subject Selection**

List a plan below which fulfills the requirements of your concentration area; a summary subject grid can be found on the back of this form and detailed information about each concentration area is available on the HST website: <http://hst.mit.edu/academics/memp/concentration-areas>

*Alternate Subject:* We recommend all students designate an additional subject on their plan as an alternate, for planning purposes. Any student listing a TQE subject in which they have already earned a “B” during their 1<sup>st</sup> semester MUST include an alternate subject.

NOTE: Students may make changes to their TQE class selections until ADD date of the term in which they are enrolled in the class being added to their TQE. Under no circumstances will students be permitted to add a class to their TQE after earning a grade in the class. To make a change, email Traci Anderson in the HST Academic Office with a cc. to your academic advisor by ADD date.

Subject number	Subject Title	Units*	Term/Year <i>(eg. Spring 2017)</i>
			[ALTERNATE]

\* 42 units required, may require 5 subjects in certain concentration areas.

**III. Other TQE Subject Requirements**

All students must also take **Human Pathology** (HST030/031 or HST034/035) and **Introduction to (Bio)Medical Engineering and Medical Physics** (HST500) as part of their TQE.

\_\_\_\_\_  
Student Signature/Date

\_\_\_\_\_  
Academic Advisor Signature/Date

HST MEMP TQE Concentration Areas ~ Approved Subjects Grid

<b>Aeronautics and Astronautics</b>	<b>Biological Engineering</b>	<b>Brain and Cognitive Sciences</b>	<b>Chemical Engineering</b>	<b>Chemistry</b>	
2.080J; 2.183J; (6.231 or 16.32); (6.241J or 16.31); 16.422; 16.423J 16.453J; 16.470 (16.851J or 16.89J); (16.910J or 16.920J); 22.55J; HST.582J	<i>choose BOTH</i> 20.420J and 20.440	<i>choose ONE</i> 9.011 or HST.131	<i>choose at least TWO</i> 10.40; 10.50; 10.65	42 UNITS required, may need 5 subjects	
	<i>choose at least ONE</i> 20.201; 20.405J; 20.410J; 20.415; 20.430J; 20.463J; 20.490 20.203J; 20.215; 20.409; 20.446J; 20.452J; 20.470J; HST.508; HST.522J; HST.523J, HST.537J	<i>choose at least ONE</i> 9.012; 9.013J; 9.014; 9.015J; 9.017 9.021; 9.073J; 9.123J; 9.160; 9.181J; 9.285J; 9.301J; 9.422J; 9.520J; 9.601J; 9.611J; 9.660; HST.562J; HST.580J; HST.582J; HST.721	10.34; 10.537J; 10.538J; 10.539J; 10.542; 10.545; 10.546J; 10.55; 10.562; 10.566; 10.568; 10.569; 10.595; 10.643J; 10.668J;		5.062; 5.45; 5.511; 5.52; 5.53; 5.54J; 5.56; 5.64J; 5.68J; 5.70J; 5.72; 5.73; 5.74; 5.78; 7.51; 10.569; 20.201, 20.463J
<b>Computer Science</b>		<b>Electrical Engineering</b>		<b>Materials Science and Engineering</b>	
<i>choose TWO from one group and ONE from each of the other groups</i>		<i>choose TWO from one group and ONE from each of two additional groups</i>		<i>choose BOTH</i> 3.20 and 3.21	
6.046J; 6.337J; 6.338J; 6.852J; 6.854J; 6.856J		6.011; (6.231 or 6.241J); (6.251J or 6.255J); (6.341 or 6.344 or 6.555J); 6.556J		3.22; 3.23; 3.40J; 3.46; 3.941J; (3.963J or 3.971J)	
6.434J; 6.436J; 6.437; 6.438; 6.867; 9.520J; 15.077J; HST.460J; STAT.211		6.334; 6.374; 6.525J; 6.775 6.262; 6.267; 6.436J; (6.437 or 6.438); 6.441; 6.450; 6.453; 6.867			
6.521; 6.555J; 6.556J; 6.862; 6.872J; 6.874J; 6.878J; 8.591J; 18.417; (6.345J or 6.863J or 6.864); (6.866 or 6.869); 6.839; 6.832; HST.508; HST.956; BioPhys 205		(6.630 or 6.632); (6.631 or 2.710); 6.634J; 6.561J; 6.685 6.521J; 6.720J; 6.728; 6.730; 6.774; 6.777J (6.336J or 6.339J)			
<b>Mechanical Engineering</b>		<b>Nuclear Science and Engineering</b>			<b>Physics</b>
<i>choose at least TWO from the first group; if you choose three or four from the first group, you may include classes from the same set marked with *</i>		42 UNITS required; may need 5 subjects			<i>No more than TWO from the first group</i>
2.032; (2.071 or 2.072 or 2.080J)*; (2.140 or 2.151 or 2.153)*; 2.25; 2.37; 2.42; 2.55; (2.710 or 6.631); 2.75J; 2.810; 2.066; (2.097J or 2.29)*; (2.720 or 2.77); (2.794J; 2.795J or 2.798J)*		22.11; 22.12; 22.13; 22.14; 22.15; 22.51; 22.55J		8.591J; 8.592J; 8.593J 8.311; 8.321; 8.322; 8.333; 8.334; 8.351J; 8.421; 8.422; 8.511; 8.512; 8.613J; 8.701	
2.183J; 2.372J; (2.782J or 2.785J or 2.79J or 3.963J); HST.537J					