

## **S.B. and M.Eng. Requirements Checklist**

MIT Department of Electrical Engineering and Computer Science

- S.B. in 6-1 (Electrical Science and Engineering)
  - S.B. in 6-2 (Electrical Engineering and Computer Science)
    - S.B. in 6-3 (Computer Science and Engineering)

Fall 2015

Name:	ID:
Email:	Advisor:

INSTITUTE REQUIREMENTS			
	Subject	Term	Grade
Chemistry (1)	3.091/5.11		
Biology (1)	7.01		
Calculus (2)	18.01		
	18.02		
Physics (2)	8.01		
	8.02		
<b>Institute Lab (1)</b>			
6.01 + (6.02 or 6.03), or 6.S04			
<b>REST (2)</b>			
18.03, 18.06, 6.002, 6.005, 6.041, 6.042			
<b>HASS (8)</b>			
HASS-H			
HASS-A			
HASS-S			
Concentration			
Concentration			
Concentration			
Concentration/Elective			
Elective			

DEPARTMENT REQUIREMENTS			
	Subject	Term	Grade
<b>Introductory (2)</b> 6.01; 6.02 or 6.03 or 6.S04	6.01		
<b>Mathematics* (2)</b> <b>6-1:</b> 18.03; 6.041 or 6.008 <b>6-2:</b> 18.03 or 18.06; 6.041 or 6.042 or 6.008 <b>6-3:</b> 18.03 or 18.06; 6.042 or 6.008			
<b>Foundations (3 or 4)</b> <b>6-1:</b> 3 EE Foundations: 6.002, 6.003, 6.004, 6.007 <b>6-3:</b> 3 CS Foundations: 6.004, 6.005, 6.006 <b>6-2:</b> 4 with at least 2 EE, 2 CS, 6.008 allowed as EE or CS			
<b>Department Lab (1)</b> <b>6-3:</b> 6.141, 6.170, 6.172, 6.173, 6.175, 6.035, 6.813, 6.828 <b>6-1, 6-2:</b> all 6-3 labs listed above plus 6.101, 6.111, 6.115, 6.123, 6.129, 6.131, 6.142, 6.152, 6.161, 6.163, 6.182			
<b>Headers (3)</b> <b>6-1:</b> 3 EE Headers: 6.011, 6.012, 6.013, 6.021 <b>6-3:</b> 3 CS Headers: 6.033; 6.034 or 6.036; 6.045 or 6.046 <b>6-2:</b> 3 with at least 1 EE, 1 CS			
<b>Advanced Undergraduate Subjects (2)</b> See reverse side of this sheet			
<b>Advanced Project** (1 or 2)</b> 6.UAT and (6.UAP or additional Dept. CI-M Lab), or 12 units 6.UAR			
<b>M.Eng. Restricted Electives (2)</b> See reverse side of this sheet			
<b>M.Eng. Advanced Approved Graduate Subjects (4)</b> See reverse side of this sheet Concentration: _____			
<b>M.Eng. Thesis (24 units minimum)</b>	6.THM		
	6.THM		

\* Check which math courses are prerequisites for your other courses. 6.008 can be used instead of 6.042 as a prereq for CS courses, by petition.

\*\* If taken Fall 2015 or after, 12 units of 6.UAR also satisfies the 6.UAT requirement; otherwise 6.UAT is required for all students.

Juniors must take one of the EECS CI-M courses -- see  
<http://www.eecs.mit.edu/academics-admissions/undergraduate-programs/curriculum/communication-requirement>

Dept. requirements may be used to satisfy the Institute Lab, REST and CI-M requirements. Otherwise: NO DOUBLE COUNTING!

## M.Eng. Program, AUS Subjects and Concentrations in EECS

42 units: Four EECS Approved Advanced Graduate Subjects (AAGS); one of the four can be non-EECS AAGS by petition

24 units: Two subjects from Restricted Electives list

24 units: M.Eng. thesis (6.THM)

90 units TOTAL

**Restricted Electives** (2 subjects): 6.041, 6.042, 6.436, 8.044, 18.04, 18.05, 18.06, 18.075/18.0751, 18.085/18.0851, 18.086/18.0861, 18.100A/18.100B/18.100C/18.1001/18.1002, 18.310/18.200/18.200A, 18.311/18.300, 18.330, 18.440/18.600, 18.700, 18.703, 18.781

**Concentration Fields:** one three-subject concentration from among the 2 AUS and 4 AAGS subjects. Classes in **bold** may be used as AUS by Advisor permission.

**Applied Physics** AUS: 6.061, 6.602/6.S077

AAGS: **6.621**, 6.630, **6.631**, **6.632**, **6.634**, 6.637, 6.638, **6.641**, 6.642, 6.644, 6.645, **6.685**, 6.690, 6.691, 6.695

Approved Substitution: \_\_\_\_\_

**Artificial Intelligence** AUS: 6.036, 6.141, 6.189, 6.801, 6.802, 6.803, 6.804, 6.806, 6.813 if not used as Lab, 6.S078, 6.905

AAGS: 6.345, **6.437**, **6.438**, **6.831**, **6.832**, 6.833, 6.834, **6.863**, 6.864, **6.866**, **6.867**, 6.868, 6.872, **6.874**, 6.881, 6.882, 6.883, 6.884, 6.945, 6.946, MAS.S63

Approved Substitution: \_\_\_\_\_

**BioEECS** AUS: 6.022, 6.023, 6.024, 6.025, 6.027, 6.047, 6.048, 6.049, 6.502, 6.503, 6.802

AAGS: **6.345**, **6.521**, **6.522**, 6.524, 6.525, 6.541, 6.542, 6.544, 6.545, **6.551**, 6.552, **6.555**, 6.556, 6.557, **6.561**, 6.580, 6.581, 6.582, 6.589, 6.872, 6.874, 6.877, 6.878

Approved Substitution: \_\_\_\_\_

**Circuits** AUS: 6.301, 6.302

AAGS: 6.331, 6.332, 6.333, **6.334**, **6.374**, **6.375**, **6.376**, **6.775**, 6.776

Approved Substitution: \_\_\_\_\_

**Communications** AUS: 6.207, 16.36

AAGS: 6.231, **6.255**, 6.260, 6.261, **6.262**, 6.263, 6.264, 6.265, 6.266, **6.267**, 6.268, 6.434, 6.435, **6.436**, **6.437**, **6.438**, 6.440, 6.441, 6.442, 6.443, 6.450, 6.451\*, 6.452, 6.453, 6.859

Approved Substitution: \_\_\_\_\_

**Computer Systems** AUS: 6.035 (if not used as Lab), 6.172 (not if used as Lab), 6.173\* (if not used as lab), 6.805, 6.814, 6.816

AAGS: **6.820**, 6.821, **6.823**, **6.824**, **6.828**, **6.829**, **6.830**, 6.836, 6.846, **6.857**, **6.858**, 6.885, 6.886, 6.887, 6.888

Approved Substitution: \_\_\_\_\_

**Control** AUS: 6.302.

AAGS: 6.231, **6.241**, 6.242, 6.243, 6.245, 6.246, 6.247

Approved Substitution: \_\_\_\_\_

**Graphics and Human-Computer Interfaces** AUS: 6.801, 6.807, 6.809, 6.811, 6.813 (if not used for Lab), 6.815, 6.819, 6.837

AAGS: **6.831**, 6.835, 6.838, **6.839**, 6.865, 6.869, 6.870, 6.894, 6.895, 6.896

Approved Substitution: \_\_\_\_\_

**Materials, Devices and Nanotechnology** AUS: 6.602\*, 6.701, 6.717

AAGS: 6.719, **6.720**, **6.728**, **6.730**, 6.731, 6.732, 6.735, 6.736, 6.763, 6.772, **6.774**, **6.777**, 6.780J, 6.781, 6.789

Approved Substitution: \_\_\_\_\_

**Numerical Methods**

AAGS: 6.248, 6.249, **6.251**, 6.252, 6.253, 6.254, **6.255**, 6.256, **6.336**, 6.337, 6.338, 6.339, 6.581, 6.673

Approved Substitution: \_\_\_\_\_

**Signals and Systems**

AAGS: **6.341**, 6.342, **6.344**, **6.345**, 6.347, 6.348, **6.437**, **6.438**, 6.456, **6.555**, 6.556

Approved Substitution: \_\_\_\_\_

**Theoretical Computer Science** AUS: 6.045

AAGS: **6.840**, 6.841, 6.842, 6.845, 6.849, 6.850, 6.851, 6.852, 6.853, **6.854**, 6.856, 6.875, 6.876, 6.889, 6.890, 6.891, 6.892, 6.893

Approved Substitution: \_\_\_\_\_

\*no longer satisfies requirement or no longer exists; but can be used if taken previously.

Bold subjects can be used to satisfy the AUS requirement by advisor permission only.

**General AUS Subjects:** 6.101, 6.111, 6.115, 6.131, 6.170, 6.175, 21M.359

Subjects used a AUS cannot also be counted for Lab or Senior Project (6.UAP).