

Course 2, Registration Check Sheet

The registration check sheet on the reverse is to be used for students who are majoring in Course 2.

This check sheet is to be kept in the advisee's folder and updated each semester. We suggest that you put a diagonal line (/) in the square for the semester when the subject is being taken, and that you write the grade over this when the course is completed. A blacked-out square (■■■) indicates that the course is not offered.

Students may receive CI credit for only one CI-H subject per semester. The Communication Requirement specifies that undergraduates complete one CI subject by the end of the first year, two by the end of the second year, three by the end of the third year, and four by graduation.

For questions, contact

- Undergraduate Academic Administrator: Brandy Baker, brandyb@mit.edu
- Undergraduate Officer: Rohit Karnik, karnik@mit.edu

Student Information & Forms

- Student Records: <http://student.mit.edu/>
- Registration: <https://registration.mit.edu/>
- Add/Drop Forms: <https://studentformsandpetitions.mit.edu/>

Thesis Information

- Thesis Resources Website: <http://meche-thesis-resou.wix.com/thesis>
- Thesis Proposal Form: http://web.mit.edu/me-ugoffice/thesis_form.pdf
- Thesis Preparation Guidelines: <http://libraries.mit.edu/archives/thesis-specs/index.html>

Pre-approved Substitutions for Course 2:

- 2.01 + 2.02A or 2.02B (no longer offered) → 2.001
- 2.03 + 2.031 → 2.003
- 2.05 + 2.051 + 2.06 → 2.005
- 2.087 + 6 units of math or science (not engineering!) → 18.03
- 2.013, 2.014, 2.750 or 2.760 → 2.009 (with a petition)
- 2.014 or 2.752 → 2.ThU (with a petition, can't "double count" for another requirement)
- Course 2 graduate class → restricted elective (with a petition)

Advisee: _____

Date SB expected: _____

General Institute Requirements

| | | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Alternatives: |
|---------------------|-------|-------|--------|----|--------|----|--------|-------|--------|-------|----------------------------------|
| Subject | Units | Units | FA | SP | FA | SP | FA | SP | FA | SP | |
| Chemistry | 3.091 | 12 | | | | | | | | | 5.111 or 5.112 |
| Physics I | 8.01 | 12 | | | | | | | | | 8.012 or 8.01L |
| Physics II | 8.02 | 12 | | | | | | | | | 8.021 or 8.022 |
| Calculus I | 18.01 | 12 | | | | | | | | | 18.01A or 18.014 |
| Calculus II | 18.02 | 12 | | | | | | | | | 18.02A, 18.022, 18.023 or 18.024 |
| Biology | 7.012 | 12 | | | | | | | | | 7.013, 7.014, 7.015 |
| First CI-H Subject | | 9-12 | | | | | ■ ■ ■ | ■ ■ ■ | ■ ■ ■ | ■ ■ ■ | |
| Second CI-H Subject | | 9-12 | | | | | ■ ■ ■ | ■ ■ ■ | ■ ■ ■ | ■ ■ ■ | |

Departmental Core Subjects (Required)

| | | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Prerequisites* |
|---|-------------------|-------|--------------------------------|-------|--------|----|--------|----|--------|----|--|
| Subject | Units | Units | FA | SP | FA | SP | FA | SP | FA | SP | |
| Differential Equations | 18.03 | 12 | | | | | | | | | 18.02 |
| Mechanics and Materials I | 2.001 | 12 | | | | | | | | | 8.01, 18.02, 18.03 |
| Mechanics and Materials II | 2.002 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.001; 3.091, 5.111, or 5.112 |
| Dynamics and Control I | 2.003 | 12 | | | | | | | | | 8.01, 18.03 |
| Dynamics and Control II | 2.004 | 12 | | | | | | | | | 2.003, 8.02 |
| Thermal-Fluids Eng'g I | 2.005 | 12 | | | | | | | | | 8.02, 18.02, 2.086 |
| Thermal-Fluids Eng'g II | 2.006 | 12 | | | | | | | | | 2.005 |
| Design and Manufacturing I or Design of Elect. Robotic Syst | 2.007 or 2.017 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.001 2.003; 2.005 or 2.016; 2.671 |
| Design and Manufacturing II | 2.008 | 12 | | | | | | | | | 2.007 or 2.017; 2.005 |
| Prod. Eng'g Processes (CI-M) <i>Can sub: 2.013, 2.750, 2.760</i> | 2.009 | 12 | | ■ ■ ■ | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.001, 2.003, 2.005; 2.670, 2.678 or 2.00B; senior standing |
| Numerical Comp for MEs Prereg required! | 2.086 | 12 | | | | | | | | | 8.01, 18.02, 18.03 or 2.087 |
| Mech. Eng'g Tools (P/D/F) | 2.670 | 3 | COURSE ONLY OFFERED OVER IAP ! | | | | | | | | |
| Meas. & Instrumentation (CI-M) Prereg required! | 2.671 | 12 | | | | | | | | | 2.001, 2.003, 8.02 |
| Undergraduate Thesis | 2.ThU | 6-15 | | | | | | | | | |

Restricted Electives (take 2)

| | | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Prerequisites* |
|-------------------------------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|------------------------------|
| Subject | Units | Units | FA | SP | FA | SP | FA | SP | FA | SP | |
| Hydrodynamics | 2.016 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | 8.02, 18.03 |
| Design of Elect. Robotic Syst | 2.017 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.003; 2.005 or 2.016; 2.671 |
| Design of Ocean Systems | 2.019 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.001; 2.003; 2.005 or 2.016 |
| Nonlinear Dynamics I: Chaos | 2.050 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | 18.03 or 18.04; 8.02 |
| Comp Methods in Dynamics | 2.092 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | 2.001, 2.003 |
| Introduction to Robotics | 2.12 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | 2.004 |
| Feedback Control Systems | 2.14 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.004 |
| Biomech & Neural Control Mv | 2.184 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.004 |
| Molecular Mechanics | 2.370 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.001; 3.091, 5.111 or 5.112 |
| Intermed Heat & Mass Transfer | 2.51 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | 2.006 |
| Advanced Energy Conversion | 2.60 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.006 |
| Intro to Sustainable Energy | 2.650 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | Permission of Instructor |
| Optics | 2.71 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.004, 8.02, 18.03 |
| Elements of Mechanical Design | 2.72 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.005, 2.008, 2.671 |
| Mol, Cell, & Tissue Biomech | 2.797 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 18.03; 7.012; 2.370 or 2.772 |
| Environ Benign Design & Mfr | 2.813 | 12 | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | 2.008 |
| Management in Eng'g | 2.96 | 12 | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | | ■ ■ ■ | |

*Simplified from prerequisites listed in the catalog; Co-requisite courses are listed in italics