This list is a guide for students to use in the selection of their graduate program. A student selects a major subject and an area of concentration from among those listed under the field to which he or she was admitted. Minor subjects and concentrations may be chosen from the same field or other fields; however, fields of Special Committees may place restrictions on the choice of minor subjects. The degrees listed for each field apply to all subjects offered by the field unless the degrees are listed beside the subject to which they apply. Below are the explanations of typefaces and asterisks.

**FIELD [DEGREE]** (All capitals, bold face)

**Subject** (initial capitals, bold face)

concentration (all lower case, not bold face)

Minor field, subject or concentration (italics)

*Restricted to students in other fields

### AEROSPACE ENGINEERING

Aerospace Engineering [M.S./Ph.D.), Ph.D., M.Eng.]

- aerospace engineering

Aerodynamics

- aerodynamics

### CHEMICAL ENGINEERING

Chemical Engineering [M.S., Ph.D., M.Eng.]

- advanced materials processing
- computational methods
- biochemical engineering
- chemical reaction engineering
- classical and statistical thermodynamics
- fluid dynamics, rheology, and bioreology
- heat and mass transfer
- kinetics and catalysis
- polymers
- surface science

### COMPUTER SCIENCE

Computer Science [Ph.D., M.Eng.]

- artificial intelligence
- computer science
- programming languages and logics
- scientific computing and applications systems
- theory of computation

### ELECTRICAL AND COMPUTER ENGINEERING

Electrical Engineering [M.S./Ph.D., Ph.D., M.Eng.]

- computer engineering
- electrical engineering
- electrical systems
- electrophysics

### GEOLOGICAL SCIENCES

Geological Sciences (M.S., Ph.D., M.Eng]

- economic geology
- engineering geology
- environmental geophysics
- general geology
- geobiology
- geochemistry and isotope geology
- geohydrology
geomorphology
geophysics
geotectonics
mineralogy
paleontology

△ petroleum geology
petrology
planetary geology
Precambrian geology
Quaternary geology
rock mechanics
sedimentology
seismology
stratigraphy
structural geology

△ marine geology

MATERIALS SCIENCE AND ENGINEERING
Materials Science and Engineering [M.S., Ph.D., M.Eng.]
materials engineering
materials science

MECHANICAL ENGINEERING
Mechanical Engineering [M.S./Ph.D., Ph.D., M.Eng.]
biomechanical engineering

△ combustion
△ energy and power systems
fluid mechanics
heat transfer
materials and manufacturing engineering
mechanical systems and design
multiphase flows

OPERATIONS RESEARCH
Operations Research [Ph.D.]
applied probability and statistics
manufacturing systems engineering
mathematical programming
Operations Research and Information Engineering [M.Eng.]
applied operations research financial engineering information technology

manufacturing and industrial engineering
strategic operations

SYSTEMS ENGINEERING
Systems Engineering [M.Eng.]
systems engineering

THEORETICAL AND APPLIED MECHANICS
Engineering Mechanics [M.Eng.]
advanced composites and structures
Theoretical and Applied Mechanics [M.S., Ph.D.]
dynamics and space mechanics
fluid mechanics
mechanics of materials
solid mechanics

May 2009