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. Degrees are listed beside the subjects to which they apply. Below are the explanations of typefaces and asterisks.

<table>
<thead>
<tr>
<th>FIELD (All capitals, bold face)</th>
<th>Subject (initial capitals, bold face)</th>
<th>concentration (all lower case, not bold face)</th>
<th>Minor field, subject or concentration (italics)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><strong>Concentrations marked with an asterisk are open only to students in other fields</strong></em></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**AEROSPACE ENGINEERING**  
Aerospace Engineering [Ph.D., M.Eng.]  
aerodynamics  
aerospace systems  
bimechanics  
dynamics and control  
materials and structures  
propulsion  
thermal sciences

**AFRICANA STUDIES**  
Africana Studies [Ph.D.]  
Cultural, Literary, and Visual Analysis  
Historical, Political, and Social Analysis

**AMERICAN INDIAN STUDIES**  
American Indian Studies  
American Indian studies

**AMERICAN STUDIES**  
American Studies  
American studies

**ANIMAL SCIENCE**  
Animal Science [M.S., M.S./Ph.D., Ph.D.]  
aminal genetics  
animal genomics  
animal nutrition  
animal science  
physiology of reproduction  
Agriculture and Life Sciences [M.P.S.]  
aminal genetics  
animal genomics  
animal nutrition  
animal science  
physiology of reproduction

**ANTHROPOLOGY**  
Anthropology [M.A., Ph.D.]  
archaeological anthropology  
biological anthropology  
socio-cultural anthropology

**APPLIED ECONOMICS AND MANAGEMENT**  
Agricultural Economics [M.S., Ph.D.]  
food and agricultural economics  
environmental, energy and resource economics  
international and development economics management  
**Agriculture and Life Sciences [M.P.S.]**  
applied behavioral economics and individual choice  
food and agricultural economics  
environmental, energy and resource economics  
international and development economics management  
**APPLIED MATHEMATICS**  
Applied Mathematics [Ph.D.]  
applied mathematics  
**APPLIED PHYSICS**  
Applied Physics [M.S., Ph.D.]  
applied physics  
Engineering Physics [M.Eng.]  
engineering physics  
**ARCHAEOLOGY**  
Archaeology [M.A.]  
African Archaeology  
archeology of Europe, the Caucasus, & Eurasia  
Latin American & Caribbean archaeology  
Mediterranean & Near Eastern archaeology  
North American archaeology  
South & East Asian archaeology  
archeological science economy & exchange  
identity  
intercultural engagement  
landscape & environment materiality  
museums and heritage politics & complexity  
ritual & religion visual culture  
**ARCHITECTURE**  
Architectural Science [M.S.]  
computer graphics  
building technology and environmental science  
Design [M.Arch. post-professional]  
architectural design  
urban design  
theory and criticism of architecture  
History of Architecture and Urban Development [Ph.D.]  
history of architecture  
history of urban development

**ART**  
Creative Visual Arts [M.F.A.]  
painting  
photography  
printmaking  
sculpture  
studio art

**ASIAN STUDIES**  
Asian Studies [M.A.]  
East Asian studies  
South Asian studies  
Southeast Asian studies  
East Asian linguistics  
South Asian linguistics  
Southeast Asian linguistics

**ASIAN LITERATURE, RELIGION, AND CULTURE**  
Asian Literature, Religion, and Culture [Ph.D.]  
Asian religions  
East Asian literature and culture  
South Asian literature and culture  
Southeast Asian literature and culture  
Theory and method

**ASTRONOMY AND SPACE SCIENCES**  
Astronomy [Ph.D.]  
anatomy  
anthropology  
astrophysics
cosmology
infrared astronomy
planetary studies
radio astronomy
radiophysics
space sciences [general]
thoretical astrophysics

ATMOSPHERIC SCIENCE
Atmospheric Science [M.S., M.S./Ph.D., Ph.D.]
atmospheric science

BIOCHEMISTRY, MOLECULAR & CELL BIOLOGY
Biochemistry [Ph.D.]
biochemistry
biophysics
Molecular and Cell Biology [Ph.D.]
cell biology
molecular biology

BIOLOGICAL AND ENVIRONMENTAL ENGINEERING
Biological and Environmental Engineering
[M.S., M.S./Ph.D., Ph.D., M.Eng.]
bienergy and integrated energy systems
bioenvironmental engineering
biological engineering
bioprocess engineering
ecohydrology
environmental engineering
food engineering
industrial biotechnology
nanobiotechnology
sustainable systems
synthetic biology
Agriculture and Life Sciences [M.P.S.]
bienergy and integrated energy systems
bioenvironmental engineering
biological engineering
bioprocess engineering
ecohydrology
environmental engineering
environmental management
food engineering
industrial biotechnology
nanobiotechnology
sustainable systems
synthetic biology

BIOMEDICAL ENGINEERING
Biomedical Engineering [M.S., Ph.D., M.Eng.]
biomedical engineering

BIOPHYSICS
Biophysics [Ph.D.]
biophysics

CHEMICAL ENGINEERING
Chemical Engineering [M.S., Ph.D., M.Eng.]
adanced materials processing
applied math and computational methods
biochemical engineering
chemical reaction engineering
classical and statistical thermodynamics
fluid dynamics, rheology, and biorheology
heat and mass transfer
kinetics and catalysis
polymers
surface science

CHEMISTRY AND CHEMICAL BIOLOGY
Chemistry and Chemical Biology [Ph.D.]
analytical chemistry
bio-organic chemistry
biophysical chemistry
chemical biology
chemical physics
inorganic chemistry
materials chemistry
organic chemistry
organometallic chemistry
physical chemistry
polymer chemistry
theoretical chemistry

CITY AND REGIONAL PLANNING
City and Regional Planning [Ph.D., M.R.P., MRP/MLA dual degree, MRP/MPS, (Real Estate) dual degree]
city and regional planning
economic development planning:
communities and regions
international studies in planning
land use and environmental planning
Historic Preservation Planning [M.A.]
historic preservation planning

CIVIL AND ENVIRONMENTAL ENGINEERING
Civil and Environmental Engineering
[M.S., M.S./Ph.D., Ph.D., M.Eng.]
environmental and water resources systems
engineering
environmental fluid mechanics and hydrology
environmental processes
geotechnical engineering
remote sensing
structural engineering
transportation systems engineering
structural mechanics
Engineering Management [M.Eng.]
engineering management

CLASSICS
Classics [Ph.D.]
ancient history
ancient philosophy
classical archaeology
classical literature and philology
Greek and Latin language and linguistics
medieval and Renaissance Latin literature
classical myth
classical rhetoric
Indo-European linguistics

COMMUNICATION
Communication [M.S., Ph.D.]
communication
human-computer interaction
language and communication
media communication and society
organizational communication
science, environment and health
communication
social psychology communication

COMPARATIVE BIOMEDICAL SCIENCES
Veterinary Medicine [Ph.D.]
cellular and molecular medicine
developmental and reproductive biology
infectious diseases
population medicine and epidemiology
structural and functional biology

COMPARATIVE LITERATURE
Comparative Literature [Ph.D.]
comparative literature

COMPUTATIONAL BIOLOGY
computational biology [Ph.D.]
computational behavioral biology
computational biology
computational cell biology
computational ecology
computational genetics
computational macromolecular biology
computational organism biology

COMPUTATIONAL SCIENCE AND ENGINEERING
computational science and engineering

COMPUTER SCIENCE
Computer Science [Ph.D., M.S., M.Eng.]
artificial intelligence
computer science
programming languages and logics
scientific computing and applications systems
theory of computation
Information Systems [M.S.]
connective media

CONSERVATION AND SUSTAINABLE DEVELOPMENT
Conservation and Sustainable Development
conservation and sustainable development

DEMOGRAPHY
Demography
demography

DESIGN AND ENVIRONMENTAL ANALYSIS
Design [M.A.]
interior design
sustainable design studies
Human Behavior and Design [Ph.D.]
human behavior and design
Human-Environment Relations [M.S.]

environmental psychology
facilities planning and management
human factors and ergonomics
sustainable design studies

DEVELOPMENT SOCIOLOGY
Development Sociology [M.S./Ph.D., Ph.D.]
  population and development
  rural and environmental sociology
  state, economy, and society
  development sociology
  methods of social research

ECOLOGY AND EVOLUTIONARY BIOLOGY
Ecology [M.S., Ph.D.]
  animal ecology
  applied ecology
  biogeochemistry
  community and ecosystem ecology
  limnology
  oceanography
  physiological ecology
  plant ecology
  population ecology
  theoretical ecology
  vertebrate zoology
Evolutionary Biology [M.S., Ph.D.]
  ecological genetics
  paleobiology
  population biology
  systematics

ECONOMICS
Economics [Ph.D.]
  applied economics
  econometrics and economic statistics
  economics of education
  economic development and planning
  economic history
  economic systems
  economic theory
  health economics
  industrial organization and control
  international economics
  labor economics
  monetary and macro economics
  public finance

EDUCATION
Education [M.S., Ph.D.]
  adult and extension education
  learning, teaching, and social policy
Agriculture and Life Sciences [M.P.S.]
  adult and extension education
  learning, teaching, and social policy
Mathematics 7-12 [M.S.*]
  mathematics 7-12

ELECTRICAL AND COMPUTER ENGINEERING
Electrical and Computer Engineering [Ph.D., M.Eng.]
  computer engineering
  electrical engineering
  electrical systems
  electrophysics

ENGLISH LANGUAGE AND LITERATURE
Creative Writing [M.F.A.]
  creative writing (M.F.A. only)
English Language and Literature [Ph.D.]
  African American literature
  American literature after 1865
  American literature to 1865
  American studies
  colonial and postcolonial literatures
  cultural studies
  dramatic literature
  English poetry
  lesbian, bisexual, and gay literary studies
  literary criticism and theory
  Old and Middle English
  prose fiction
  the English Renaissance to 1660
  the nineteenth century
  the Restoration and the eighteenth century
  the twentieth century
  women's literature

ENTOMOLOGY
Entomology [M.S., M.S./Ph.D., Ph.D.]
  acarology
  apiculture
  applied entomology
  aquatic entomology
  biological control
  insect behavior
  insect biochemistry
  insect ecology
  insect genetics
  insect morphology
  insect pathology
  insect physiology
  insect systematics
  insect toxicology and insecticide chemistry
  integrated pest management
  medical and veterinary entomology
  general entomology

ENVIRONMENTAL QUALITY
Environmental Quality
  environmental quality

ENVIRONMENTAL TOXICOLOGY
Environmental Toxicology [M.S., Ph.D.]
  cellular and molecular toxicology
  ecotoxicology and environmental chemistry
  nutritional and food toxicology
  risk assessment, management, and public policy

EPIEDEMIOLGOLY
Epidemiology
  human and animal epidemiology

FEMINIST, GENDER, & SEXUALITY STUDIES
Feminist, Gender, & Sexuality Studies
  feminist, gender, and sexuality studies

FIBER SCIENCE AND APPAREL DESIGN
Apparel Design [M.A., Ph.D.]
  apparel design
Fiber Science [M.S., Ph.D.]
  fiber science
  polymer science
  textile science

HUMAN ECONOMICS
Human Ecology [M.P.S.]
  apparel design
  fiber science

FILM AND VIDEO STUDIES
Film and Video Studies
  film and video studies

FOOD SCIENCE AND TECHNOLOGY
Food Science and Technology [M.S., Ph.D.]
  dairy science
  enology
  food chemistry
  food engineering
  food microbiology
  food processing waste technology
  food science [general]
  international food science
  sensory evaluation
Agriculture and Life Sciences [M.P.S.]
  dairy science
  enology
  food chemistry
  food engineering
  food microbiology
  food processing waste technology
  food science [general]
  international food science
  sensory evaluation

GENETICS, GENOMICS AND DEVELOPMENT
Genetics [Ph.D.]
  developmental biology
  genetics
  genomics

GENOMICS
Genomics
  genomics

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
  ocean science and technology
  paleontology
  petroleum geology
  petrology
  planetary geology
  Precambrian geology
Quaternary geology
rock mechanics
sedimentology
seismology
stratigraphy
structural geology
marine geology

GERMANIC STUDIES
Germanic Studies [Ph.D.]
German area studies
German intellectual history
Germanic linguistics
Germanic literature
Old Norse

GLOBAL DEVELOPMENT
Agriculture and Life Sciences [M.P.S.]
international agriculture and rural development
International Development [M.P.S./I.D.]
development policy
international nutrition
international planning
international population
science and technology policy

GOVERNMENT
Government [Ph.D.]
American politics
comparative politics
international relations
political thought
political methodology
public policy

HISTORY
History [Ph.D.]
African history
American history
ancient Greek history
ancient history
ancient Roman history
early modern European history
English history
French history
German history
history of science
Korean history
Latin American history
medieval Chinese history
medieval history
modern Chinese history
modern European history
modern Japanese history
modern middle eastern history
premodern Islamic history
premodern Japanese history
Renaissance history
Russian history
south Asian history
Southeast Asian history
American studies

HISTORY OF ART, ARCHAEOLOGY, AND VISUAL STUDIES
History of Art and Archaeology [Ph.D.]

19th century art
African, African American, and African Diaspora
American art
ancient art and archaeology
Asian American art
baroque art
comparative modernities
contemporary art
digital art
East Asian art
history of photography
Islamic art
Latin American art
medieval art
modern art
Native American and Indigenous studies
Renaissance art
South Asian art
Southeast Asian art
texture and criticism
visual studies

HORTICULTURE
Horticultural Biology [M.S., Ph.D.]
human-plant interactions
physiology and ecology of horticultural crops
Horticultural Crop and Landscape Management [M.S., Ph.D.]
breeding of horticultural crops
horticultural crop management systems
Agriculture and Life Sciences [M.P.S.]
human-plant interactions
physiology and ecology of horticultural crops
breeding of horticultural crops
horticultural crop management systems

HOTEL ADMINISTRATION
Hospitality Management [M.S., Ph.D.]
financial management
food and beverage management
hospitality management
hotel accounting
human resource management
marketing
properties asset management
real estate management

HUMAN DEVELOPMENT
Developmental Psychology [M.A., Ph.D., Ph.D./JD dual degree]
ageing and health
cognitive development
developmental psychopathology
ecology of human development
law, psychology and human development
social and personality development
Human Development and Family Studies [M.A., Ph.D.]
ageing and health
ecology of human development
family studies and the life course

IMMUNOLOGY AND INFECTIOUS DISEASE
Immunology [Ph.D.]
cellular immunology
immunocompetence
immunogenetics
immunopathology
infection and immunity

INDUSTRIAL AND LABOR RELATIONS
Industrial and Labor Relations [M.S., M.S./Ph.D., Ph.D., M.I.L.R., M.P.S.(I.L.R.), MILR/MBA dual degree]
collective representation (M.I.L.R. only)
dispute resolution (M.I.L.R. only)
human resource studies (M.S./Ph.D. only)
human resources and organizations (M.I.L.R. only)
international and comparative labor
labor market policy (M.I.L.R. only)
labor relations, law, and history (M.S./Ph.D. only)
organizational behavior (M.S./Ph.D. only)
labor economics
social statistics

Human Resources [M.P.S.]
human resource management
labor relations, economics, and organizational behavior

INFORMATION SCIENCE
Information Science [Ph.D., M.P.S.]
cognition
human computer interaction
information science
information systems
social aspects of information

Information Systems [M.S.]
connective media

LANDSCAPE ARCHITECTURE
Landscape Architecture [M.L.A., M.P.S., MLA/MRP dual degree]
landscape architecture

LATIN AMERICAN STUDIES
Latin American Studies
Latin American studies

LATINO STUDIES
Latino Studies
Latino studies

LAW
Law [J.S.D.]

LEBRAN, GAY, BISEXUAL AND TRANSGENDER STUDIES
Lesbian, Gay, Bisexual and Transgender Studies
Lesbian, gay, bisexual and transgender studies

LINGUISTICS
Linguistics [Ph.D.]
general linguistics
Computational linguistics
East Asian linguistics
English linguistics
Germanic linguistics
Indo-European linguistics
phonetics
phonological theory
second language acquisition
semantics
Slavic linguistics
Southeast Asian linguistics
syntactic theory

MANAGEMENT
Management [Ph.D.]
accounting
finance
marketing
organizational behavior
production and operations
managerial economics

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

MATHEMATICS
Mathematics [Ph.D.]
mathematics

MECHANICAL ENGINEERING
Mechanical Engineering [Ph.D., M.Eng.]
bioengineering
bioengineering and technology
biomechanics
dynamics and control
energy and sustainability
fluid dynamics
micro- and nanoscale engineering
solid mechanics and materials
thermal science

MEDIEVAL STUDIES
Medieval Studies [Ph.D.]
medieval archaeology
medieval art
medieval history
medieval literature
medieval music
medieval philology and linguistics
medieval philosophy

MICROBIOLOGY
Microbiology [Ph.D.]
microbiology

MOLECULAR AND INTEGRATIVE PHYSIOLOGY
Physiology [Ph.D.]
behavioral physiology
cardiovascular and respiratory physiology
dermatology
environmental and comparative physiology
gastrointestinal and metabolic physiology
membrane and epithelial physiology
molecular and cellular physiology
neural and sensory physiology
physiological genomics
reproductive physiology

MUSIC
Music [D.M.A.]
composition
performance practice
Musicology [Ph.D.]
musicology
Music Performance
music performance
Musical Composition
musical composition
Theory of Music
theory of music

NATURAL RESOURCES
Natural Resources [M.S., M.S./Ph.D., Ph.D.]
ecology
community-based natural resources
conservation biology
ecosystem biology and biogeochemistry
fishery and aquatic science
forestry science
human dimensions of natural resources
management
policy and institutional analysis
program development and evaluation
quantitative ecology
risk analysis and management
wildlife science
Agriculture and Life Sciences [M.P.S.]
application of natural resources
management
conservation biology
ecosystem biology and biogeochemistry
fishery and aquatic science
forestry science
human dimensions of natural resources
management
policy and institutional analysis
program development and evaluation
quantitative ecology
risk analysis and management
wildlife science

NEAR EASTERN STUDIES
Near Eastern Studies [Ph.D.]
near eastern studies

NEUROBIOLOGY AND BEHAVIOR
Behavioral Biology [Ph.D.]
behavioral ecology
chemical ecology
ethology
neuroethology
sociobiology
Neurobiology [Ph.D.]
cellular and molecular neurobiology
neuroanatomy
neurochemistry
neuropsychology
neuropsychology
neuropsychology
sensory physiology

NUTRITION
Nutrition [Ph.D.]
animal nutrition
community nutrition
human nutrition
international nutrition
molecular nutrition
Human Ecology [M.P.S.]
animal nutrition
community nutrition
human nutrition
international nutrition
molecular nutrition

OPERATIONS RESEARCH AND INFORMATION ENGINEERING
Operations Research [Ph.D.]
application of operations research
data analytics
financial engineering
information technology
manufacturing and industrial engineering
strategic operations

PEACE STUDIES AND PEACE SCIENCE
Peace Science
peace science
Peace Studies
peace studies

PHARMACOLOGY
Pharmacology [Ph.D.]
pharmacology

PHILOSOPHY
Philosophy [Ph.D., Ph.D./JD dual degree]
philosophy

PHYSICS
Physics [Ph.D.]
experimental physics
physics
theoretical physics

PLANT BIOLOGY
Plant Biology [Ph.D.]
cytology
paleobotany
plant biochemistry
plant cell biology
plant ecology
plant molecular biology
plant morphology, anatomy, and biomechanics
plant physiology
systematic botany

PLANT BREEDING
Plant Breeding [M.S., M.S./Ph.D., Ph.D.]
plant breeding
plant genetics
Agriculture and Life Sciences [M.P.S.]
plant breeding
plant genetics

PLANT PATHOLOGY AND PLANT-MICROBE BIOLOGY
<table>
<thead>
<tr>
<th>Field</th>
<th>Degree Level</th>
<th>Courses/Programs</th>
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<tbody>
<tr>
<td>Plant Pathology [M.S., Ph.D.]</td>
<td></td>
<td>fungal and oomycete biology plant pathology plant-microbe biology</td>
</tr>
<tr>
<td>Agriculture and Life Sciences [M.P.S.]</td>
<td></td>
<td>fungal and oomycete biology plant pathology plant-microbe biology</td>
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<tr>
<td>PLANT PROTECTION</td>
<td>Agriculture and Life Sciences [M.P.S.]</td>
<td>plant protection</td>
</tr>
<tr>
<td>PSYCHOLOGY</td>
<td>Psychology [Ph.D.]</td>
<td>behavioral and evolutionary neuroscience perception and cognition and development social and personality psychology</td>
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<tr>
<td>PUBLIC AFFAIRS</td>
<td>Public Administration [M.P.A., M.P.A./M.H.A dual degree]</td>
<td>environmental policy finance and fiscal policy government, politics, and policy studies human rights and social justice international development studies public and nonprofit management science and technology policy science, technology, and infrastructure policy social policy</td>
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<tr>
<td>REAL ESTATE</td>
<td>Real Estate [M.P.S./R.E., MPS/MBA dual degree]</td>
<td>real estate</td>
</tr>
<tr>
<td>REGIONAL SCIENCE</td>
<td>Regional Science [M.A., M.S., Ph.D.]</td>
<td>environmental studies international spatial problems location theory multiregional economic analysis peace science planning methods urban and regional economics</td>
</tr>
<tr>
<td>RISK ANALYSIS, COMMUNICATION AND POLICY</td>
<td>Risk Analysis, Communication and Policy</td>
<td>risk analysis, communication and policy</td>
</tr>
<tr>
<td>ROMANCE STUDIES</td>
<td>Romance Studies [Ph.D.]</td>
<td>French literature French studies Hispanic literature theatre theory and aesthetics theatre practice (acting or directing)</td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY STUDIES</td>
<td>Science and Technology Studies [Ph.D.]</td>
<td>history and philosophy of science and technology social studies of science and technology</td>
</tr>
<tr>
<td>SOCIETY</td>
<td>Sociology [M.A., Ph.D.]</td>
<td>economy and society gender and life course organizations political sociology/social movements racial and ethnic relations social networks social psychology social stratification methodology policy analysis</td>
</tr>
<tr>
<td>REAL ESTATE</td>
<td>Soil and Crop Sciences [M.S., Ph.D.]</td>
<td>agronomy environmental information science field crop science soil science</td>
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<tr>
<td>SOIL AND CROP SCIENCES</td>
<td>Agriculture and Life Sciences [M.P.S.]</td>
<td>agronomy environmental information science environmental management field crop science soil science</td>
</tr>
<tr>
<td>STATISTICS</td>
<td>Applied Statistics [M.P.S.(A.S.)]</td>
<td>applied statistics</td>
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<td>Systems Engineering [M.Eng.]</td>
<td>Systems Engineering</td>
<td>systems engineering systems engineering</td>
</tr>
<tr>
<td>THEATRE ARTS</td>
<td>Theatre Arts [Ph.D.]</td>
<td>drama and the theatre theatre history</td>
</tr>
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<td>URBAN STUDIES</td>
<td>Urban Studies</td>
<td>urban studies</td>
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<tr>
<td>WATER RESOURCES</td>
<td>Water Resources</td>
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