

EDGERTON CENTER (EC)

The Edgerton Center specializes in experiential learning and offers interactive subjects in electronics, high-speed photography, and video production. The center is also the home of D-Lab classes (see EC.700-EC.792[JJ]).

Seminars

EC.050 Re-create Experiments from History: Inform the Future from the Past

Subject meets with EC.090

Prereq: None

U (Fall, IAP, Spring)

1-3-2 units

Provides perspective for thinking about the future through the study of historical physical science and historically significant experiments. Designed to build awareness of the unexpected through both observation of the sky and lab activities that focus on light, electricity, and motion. Labs are complemented by museum and site visits; readings include accounts by Galileo, Archimedes, and other historical observers. Individual and team assignments provide opportunities to develop skills in observation, exploration, and evaluation. Students must keep an observing notebook and write a reflective paper; students taking the graduate version complete additional assignments.

J. Bales, E. Cavicchi

EC.074 The Start-up Experience at MIT

Prereq: None

U (Fall)

2-0-4 units

Explores some of the critical actions in starting up a technology-based business, including concept generation, searching prior art and patents, protecting intellectual property, founders agreements, forming and building teams, and work-life balance. Students review case studies and complete exercises that develop practicable knowledge in these areas. Each student keeps an "idea log book," which includes critical assessments of each case study, to be presented at the end of the term. First in a two-part series (seminars do not have to be taken sequentially; see EC.075 in spring term). Preference to undergraduates; open to graduate students with permission of advisor.

J. Hadzima

EC.075 Starting Up New Technology-Based Business Enterprises at MIT

Prereq: None

U (Spring)

2-0-4 units

Seminar participants define and study the development stages of new enterprises at MIT, from the exciting moment a new idea for a tech product or service is realized, through to selling, customer support, and the next new idea. Follows the history of successful MIT spin-off companies with attention to the people (and their ideas) behind the start-up. Students attend MIT technology and science start-up case presentations given by individuals and teams working from zero-stage, and by partners in going concerns of historical relevance to the Institute and the economy. Second in a two-part series (seminars do not have to be taken sequentially; see EC.074 in fall term).

J. G. Hadzima

EC.090 Re-create Experiments from History: Inform the Future from the Past

Subject meets with EC.050

Prereq: None

G (Fall, IAP, Spring)

1-3-2 units

Provides perspective for thinking about the future through the study of historical physical science and historically significant experiments. Designed to build awareness of the unexpected through both observation of the sky and lab activities that focus on light, electricity, and motion. Labs are complemented by museum and site visits; readings include accounts by Galileo, Archimedes, and other historical observers. Individual and team assignments provide opportunities to develop skills in observation, exploration, and evaluation. Students must keep an observing notebook and write a reflective paper; students taking the graduate version complete additional assignments.

J. Bales, E. Cavicchi

Electronics and Programming

EC.110[J] Introduction to Digital Electronics

Same subject as 6.072[J]

Prereq: None

U (Fall, Spring)

0-3-3 units

Design your own circuits for times when off-the-shelf solutions are not available. Seminar begins with assembly of a utility board. Weekly labs cover digital logic gates, memory elements, and finite-state machine design. Seminar concludes with a team-based design project. Preference given to freshmen. Maximum of 10 students per term, lottery at the first class session if oversubscribed .

J. Bales

EC.120[J] Electronics Project Laboratory

Same subject as 6.070[J]

Prereq: None

U (Fall, Spring)

2-2-2 units

See description under subject 6.070[J]. Enrollment may be limited.

J. Bales

Imaging and Visualization

EC.210 Visualization for Mathematics, Science, and Technology Education

Prereq: None

U (Spring)

Not offered regularly; consult department

3-2-7 units

Introduces principles and techniques for visual communication of educational concepts in mathematics, the natural sciences, and engineering. Students complete interactive assignments and class activities in visual arts media, such as photography, illustration, stop-motion and computer animation, and web graphics. A final project in a visual arts medium of the student's choice must meet professional aesthetic standards for visualization; it must also be applicable for teaching and learning concepts in mathematics, science, or engineering in a formal or informal setting. Coursework requires use of production equipment (e.g., photo and video cameras) and software tools (Adobe Creative Suite, Final Cut Studio, and Maya) at the New Media Center. Limited to 18.

V. Ivanova

Media and Production

EC.305 Digital and Darkroom Imaging

Subject meets with EC.A305

Prereq: None

U (Fall)

2-0-4 units

Credit cannot also be received for EC.310

Students use both film and digital photography to develop a creative imaging project of their own choice. Develops skills in the use of image editing software to enhance, select, and combine images that the student has taken. Uses the darkroom to develop film for scanning and for chemical enlargement. Discusses topics such as the camera, composition, lighting, modes and formats, image compression, and halftone and dye sublimation printing. Students are expected to produce a duplicate set of black and white and/or color prints, along with a writeup and digital copy as the project output.

T. Mislick

EC.310 Creative Imaging

Prereq: None

U (Spring)

2-1-6 units. HASS-E

Credit cannot also be received for EC.305, EC.A305

Focuses on film and digital photography. Develops skill in the use of chemical darkrooms, scanners, digital printers and cameras to create striking still images capable of evoking strong emotional and intellectual responses from a viewer. Emphasizes the interplay between classical chemical and digital techniques and how they can be used to control the use of lighting, color, depth, and composition in an image. Students present their intermediate assignments to the class for critical discussion; at the end of the term, they submit a substantive project presenting their own creative images for critique and evaluation.

T. Mislick, J. K. Vandiver

D-Lab**EC.700 D-Lab: Field Study**

Prereq: One D-Lab subject, permission of instructor
U (IAP)

Units arranged

Can be repeated for credit.

Provides the opportunity to gain direct fieldwork experience in a global context. Subject spans three-four weeks in which students continue work from a prior D-Lab subject. Students work directly with international community partners to find solutions to real world problems, focusing on one or more issues in education, design, or public service. Group presentations and written reflection required.

A. B. Smith

EC.701[] D-Lab: Development

Same subject as 11.025[]

Subject meets with 11.472[], EC.781[]

Prereq: None

U (Fall)

3-2-7 units. HASS-S

Issues in international development, appropriate technology and project implementation addressed through lectures, case studies, guest speakers and laboratory exercises. Students form project teams to partner with community organizations in developing countries, and formulate plans for an optional IAP site visit. (Previous field sites include Ghana, Brazil, Honduras and India.) Recitation sections focus on specific project implementation, and include cultural, social, political, environmental and economic overviews of the target countries as well as an introduction to the local languages. Enrollment limited by lottery; must attend first class session.

S. L. Hsu, A. B. Smith, B. Sanyal

EC.702[] Cross-Cultural Investigations: Technology and Development

Same subject as 21A.801[], STS.071[]

Subject meets with EC.792[], 21A.839[], STS.481[]

Prereq: None

Acad Year 2017-2018: Not offered

Acad Year 2018-2019: U (Spring)

3-0-9 units. HASS-S

See description under subject 21A.801[].

C. Walley

EC.711[] D-Lab: Energy

Same subject as 2.651[]

Subject meets with EC.791

Prereq: None

U (Spring)

3-3-6 units

Provides a project-based approach that engages students in understanding and addressing the applications of alternative energy technology in developing countries. Focuses on compact, robust, low-cost systems for generating electrical power. Includes projects such as micro-hydro, solar, or wind turbine generators along with theoretical analysis, design, prototype construction, evaluation and implementation. Students will have the opportunity for an optional spring break site visit to identify and implement projects. Students taking graduate version complete additional assignments. Enrollment limited by lottery; must attend first class session.

S. L. Hsu

EC.713[] D-Lab Schools: Building Technology Laboratory

Same subject as 4.411[]

Prereq: Physics I (GIR), Calculus I (GIR)

U (Fall)

2-3-7 units. Institute LAB

See description under subject 4.411[].

L. K. Norford

EC.714 D-Lab: Earth

Prereq: None

U (Spring)

2-0-4 units

Multidisciplinary seminar explores the interacting systems of global biodiversity and human well-being to address how low-income communities can both preserve and use their natural resources sustainably. Includes guest lectures, experiential activities, and projects. Covers topics such as reforestation, nutrient cycles, poaching, climate change, eco-tourism, governance, ecological measurement and sustainable design. Potential opportunities for travel.

S. Murcott, A. Phillips

EC.715 D-Lab: Water, Sanitation, Hygiene and Environmental Innovations for the Common Good

Subject meets with 11.474

Prereq: None

U (Fall)

3-0-6 units

Focuses on disseminating Water, Sanitation and Hygiene (WASH) or water/environment innovations in developing countries and underserved communities worldwide. Structured around field-based learning, case studies, lectures and videos in which teams propose an idea and are mentored through the process of bringing that innovation to fruition. Emphasizes core WASH and water/environment principles, culture-specific solutions, tools for start-ups, appropriate and sustainable technologies, behavior change, social marketing, building partnerships, and the theory and practice of innovation diffusion. Term project entails entering the IDEAS or other competition(s) while implementing a WASH or water/environment innovation in a specific locale. Guest lectures on specific real-world WASH and water/environment projects which have been disseminated by MIT faculty, students, alumni, and others. Students taking graduate version complete additional assignments. Limited to 30.

S. E. Murcott

EC.716 D-Lab: Waste

Subject meets with EC.786

Prereq: None

Acad Year 2017-2018: Not offered

Acad Year 2018-2019: U (Fall)

3-0-6 units

Uses a multi-disciplinary approach to understand global challenges related to waste. Discusses cradle-to-cradle design, upcycling, diminishment of environmental impacts, and enterprise opportunities for marginalized populations. Studies zero-waste strategies worldwide; examines different models of collection, recycling, waste management, and businesses developed in low-income settings; and researches public policy that supports sustainable, integrated waste management systems. Teams develop solutions around waste-related challenges, in partnership with wastepickers, municipal governments, and private sector and community organizations. Includes guest speakers and field trips, as well as opportunities for IAP or summer travel. Students taking graduate version complete additional assignments.

K. Mytty

EC.718 D-Lab: Gender (New)

Subject meets with EC.798

Prereq: None

U (Fall)

2-2-2 units

Explores gender roles, illuminates the power dynamics and root causes of inequality, and provides a framework for understanding gender dynamics. Develops skills to conduct a gender analysis and integrate gender-sensitive strategies into large- and small-scale development solutions. Prompts critical discussion about social, economic, and political conditions that shape gender in development (particularly design and implementation of appropriate technology) as well as agricultural and job creation initiatives. In project development workshops students apply key tools to real-life situations, e.g., providing a gender analysis and making recommendations on how to incorporate gender considerations into an existing organization; developing programs in low-income communities; or building a gender component to be incorporated in a new initiative. Opportunities may be available for international fieldwork over IAP. Students taking graduate version complete additional assignments. Limited to 12; must attend first class session.

E. McDonald, M. Thompson

EC.719 D-Lab: Water and Climate Change

Subject meets with EC.789

Prereq: None

U (Spring)

3-4-5 units

Addresses mitigation and adaptation to climate change as it relates to water. Weekly seminars as well as readings and discussions, workshops/games, field trips, and films tackle the water/climate change challenge and explore solutions. Field trips include coastal watershed restoration, flood protection, carbon sequestration and zero carbon sites in the greater Boston area. Students submit a project proposal (individually or in teams) to MIT Climate CoLab or a grant-making organization of their choice.

S. Murcott

EC.720[J] D-Lab: Design

Same subject as 2.722[J]

Prereq: 2.670 or permission of the instructor

U (Spring)

3-0-9 units

Addresses problems faced by underserved communities with a focus on design, experimentation, and prototyping processes. Particular attention placed on constraints faced when designing for developing countries. Multidisciplinary teams work on long-term projects in collaboration with community partners, field practitioners, and experts in relevant fields. Topics covered include design for affordability, manufacture, sustainability, and strategies for working effectively with community partners and customers. Students may continue projects begun in EC.701[J]. Enrollment limited by lottery; must attend first class session.

A. B. Smith, M. McCambridge

EC.721 D-Lab: Mobility Technology for, by, and with People with Disabilities

Prereq: None

Acad Year 2017-2018: Not offered

Acad Year 2018-2019: U (Fall)

2-2-5 units

Students improve wheelchair technology in developing countries by applying sound engineering practices to create appropriate devices. Lectures focus on wheelchair usage, social stigmas, and manufacturing constraints. Includes lectures by third-world community partners, US wheelchair organizations, and MIT faculty. Multidisciplinary student teams conduct term-long wheelchair projects relating to hardware design. Funded opportunities available for travel to implement class projects at wheelchair workshops in the field.

M. McCambridge

EC.722 Prosthetics for the Developing World

Prereq: None

U (Spring)

2-2-5 units

Introduces the fundamentals of human walking. Provides an overview of different types of gait disabilities and the available technologies that address them. Presents patient perspective as well as current areas of research. Topics focus on lower-limb disabilities, such as polio and above- and below-knee amputation. Covers both developed and developing world techniques for overcoming these disabilities. Includes a term project in which teams of 3 to 5 students manufacture a prototype. Teams meet outside of class and work with a TA (project mentor) to research, design, prototype, and test a solution. Projects focus on low-cost orthotic and prosthetic knee designs for the developing world, as specified by partner organizations in India and Guatemala.

M. McCambridge

EC.729[J] D-Lab: Design for Scale

Same subject as 2.729[J]

Prereq: Permission of instructor

U (Fall)

3-2-7 units

Focuses on product development of technologies for people in less industrialized markets. Students work in interdisciplinary teams to develop previously established prototypes or technologies towards manufacturing-ready product designs. Topics are presented within the context of the developing world and include technology feasibility and scalability assessment; value chain analysis; product specification; design for affordability, manufacturability, usability, and desirability; and product testing and manufacturing at various scales. Lessons are experiential and case study-based; taught by instructors with field experience and by industry experts from product development consulting firms and the consumer electronics industry.

M. McCambridge, M. Yang, H. Quintus-Bosz

EC.731[J] Development Ventures

Same subject as 15.375[J], MAS.665[J]

Prereq: Permission of instructor

G (Fall)

3-0-9 units

See description under subject MAS.665[J].

J. Bonsen, A. Pentland, C. Breazeal

EC.733[] D-Lab: Supply Chains

Same subject as 15.772[]

Prereq: None

U (Fall)

3-3-6 units

See description under subject 15.772[].

S. C. Graves

EC.740 D-Lab: New Economies

Prereq: None

U (Spring)

3-0-6 units

Explores the ideas behind and actions toward alternatives to the corporate-driven globalization economic model. Begins with review and analysis of the worldviews that led to the current system and the theoretical and empirical arguments embraced by its critics. Examines concepts and case studies for developing new opportunities, including circular and local economies. Concludes with an experiential component in which students apply the concepts to develop a strategy (economic, policy, or other) for building on and contributing to a sustainable and inclusive local economy in a mid-sized city in Nicaragua. Potential opportunities for travel over summer. Limited to 12.

E. McDonald, K. Mytty

EC.746[] Design for Complex Environmental Issues: Building Solutions and Communicating Ideas (New)

Same subject as 1.016[], 2.00C[]

Prereq: None

U (Spring)

3-1-5 units

Students work in small groups, under the guidance of researchers from MIT, to pursue specific aspects of the year's Terrascope problem. Teams design and build prototypes, graphic displays and other tools to communicate their findings and display them in a Bazaar of Ideas open to the MIT community. Some teams develop particular solutions, others work to provide deeper understanding of the issues, and others focus on ways to communicate these ideas with the general public. Students' work is evaluated by independent experts. Offers students an opportunity to develop ideas from the fall semester and to work in labs across MIT. Limited to first-year students.

A. W. Epstein, S. L. Hsu

EC.750 Humanitarian Innovation: Design for Relief, Rebuilding, and Recovery

Subject meets with EC.785

Prereq: None

U (Spring)

4-0-8 units

Explores the role innovation can and does play in how humanitarian aid is provided, and how it can impact people, products, and processes. Provides a fundamental background in the history and practice of humanitarian aid. Considers the various ways that design can be used to enhance aid, such as product and system design for affected populations, co-creation with affected populations, and capacity building to promote design by refugees and the displaced. Case studies and projects examine protracted displacement as well as recovery and resettlement, including efforts in Colombia, Lebanon, Nepal, Sudan, and Uganda. Potential for students to travel over the summer to partner communities.

A. Smith, M. Thompson

EC.770 D-Lab: Independent Project

Prereq: Permission of instructor

U (Fall, IAP, Spring)

Units arranged [P/D/F]

Can be repeated for credit.

Opportunity for independent study under regular supervision by a staff member. Projects require prior approval, as well as a written proposal and final report. Students work with international community partners to continue developing projects, focusing on one or more issues in education, design, or public service. Final presentations and written reflection required. May be repeated for credit for a maximum of 12 units.

S. L. Hsu

EC.780 D-Lab: Independent Project

Prereq: None

G (Fall, IAP, Spring)

Units arranged

Can be repeated for credit.

Opportunity for independent study under regular supervision by a staff member. Projects require prior approval, as well as a written proposal and final report. Students work with international community partners to continue developing projects, focusing on one or more issues in education, design, or public service. Final presentations and written reflection required. May be repeated for credit for a maximum of 12 units.

S. L. Hsu

EC.781[J] D-Lab: Development

Same subject as 11.472[J]

Subject meets with 11.025[J], EC.701[J]

Prereq: None

G (Fall)

3-2-7 units

Issues in international development, appropriate technology and project implementation addressed through lectures, case studies, guest speakers and laboratory exercises. Students form project teams to partner with community organizations in developing countries, and formulate plans for an optional IAP site visit. (Previous field sites include Ghana, Brazil, Honduras and India.) Recitation sections focus on specific project implementation, and include cultural, social, political, environmental and economic overviews of the target countries as well as an introduction to the local languages. Enrollment limited by lottery; must attend first class session.

S. L. Hsu, A. B. Smith, B. Sanyal

EC.785 Humanitarian Innovation: Design for Relief, Rebuilding, and Recovery

Subject meets with EC.750

Prereq: None

G (Spring)

4-0-8 units

Explores the role innovation can and does play in how humanitarian aid is provided, and how it can impact people, products, and processes. Provides a fundamental background in the history and practice of humanitarian aid. Considers the various ways that design can be used to enhance aid, such as product and system design for affected populations, co-creation with affected populations, and capacity building to promote design by refugees and the displaced. Case studies and projects examine protracted displacement as well as recovery and resettlement, including efforts in Colombia, Lebanon, Nepal, Sudan, and Uganda. Potential for students to travel over the summer to partner communities.

A. Smith, M. Thompson

EC.786 D-Lab: Waste

Subject meets with EC.716

Prereq: None

Acad Year 2017-2018: Not offered

Acad Year 2018-2019: G (Fall)

3-0-6 units

Uses a multi-disciplinary approach to understand global challenges related to waste. Provides a platform for initiatives such as cradle-to-cradle design, upcycling, diminishment of environmental impacts, and enterprise opportunities for marginalized populations. Studies zero-waste strategies worldwide; examines different models of collection, recycling, waste management, and businesses developed in low-income settings; and researches public policy that supports sustainable, integrated waste management systems. Teams engage in development of solutions around waste-related challenges, in partnership with wastepickers, municipal governments, and private sector and community organizations. Includes guest speakers and field trips, as well as opportunities for IAP or summer travel. Students taking graduate version complete additional assignments.

K. Mytty

EC.788 D-Lab: Field Research

Prereq: Permission of instructor

G (Spring)

3-0-9 units

Combines hands-on methods for conducting field research with exploration of questions that continue to challenge practitioners, donors, policymakers and researchers in international development. Designed for students preparing to conduct field-based research for theses, product design project, or development ventures. Practices key research skills particularly applicable to conducting research involving people and communities in the context of development. Limited to 16.

E. Moreno

EC.789 D-Lab: Water and Climate Change

Subject meets with EC.719

Prereq: None

G (Spring)

3-4-5 units

Addresses mitigation and adaptation to climate change as it relates to water. Weekly seminars as well as readings and discussions, workshops/games, field trips, and films tackle the water/climate change challenge and explore solutions. Field trips include coastal watershed restoration, flood protection, carbon sequestration and zero carbon sites in the greater Boston area. Students submit a project proposal (individually or in teams) to MIT Climate CoLab or a grant-making organization of their choice.

S. Murcott

EC.790 D-Lab: Field Study

Prereq: One D-Lab subject, permission of instructor
 G (IAP)
 Units arranged
 Can be repeated for credit.

Provides the opportunity to gain direct fieldwork experience in a global context. Subject spans three-four weeks in which students continue work from a prior D-Lab subject. Students work directly with international community partners to find solutions to real world problems, focusing on one or more issues in education, design, or public service. Group presentations and written reflection required.
S. Hsu

EC.791 D-Lab: Energy

Subject meets with 2.651[], EC.711[]
 Prereq: None
 G (Spring)
 3-3-6 units

Provides a project-based approach that engages students in understanding and addressing the applications of alternative energy technology in developing countries. Focuses on compact, robust, low-cost systems for generating electrical power. Includes projects such as micro-hydro, solar, or wind turbine generators along with theoretical analysis, design, prototype construction, evaluation and implementation. Students will have the opportunity for an optional spring break site visit to identify and implement projects. Students taking graduate version complete additional assignments. Enrollment limited by lottery; must attend first class session.
S. L. Hsu

EC.792[] Cross-Cultural Investigations: Technology and Development

Same subject as 21A.839[], STS.481[]
 Subject meets with EC.702[], 21A.801[], STS.071[]
 Prereq: None
 Acad Year 2017-2018: Not offered
 Acad Year 2018-2019: G (Spring)
 3-0-9 units

See description under subject 21A.839[].
C. Walley

EC.798 D-Lab: Gender (New)

Subject meets with EC.718
 Prereq: None
 G (Fall)
 2-2-2 units

Explores gender roles, illuminates the power dynamics and root causes of inequality, and provides a framework for understanding gender dynamics. Develops skills to conduct a gender analysis and integrate gender-sensitive strategies into large- and small-scale development solutions. Prompts critical discussion about social, economic, and political conditions that shape gender in development (particularly design and implementation of appropriate technology) as well as agricultural and job creation initiatives. In project development workshops students apply key tools to real-life situations, e.g., providing a gender analysis and making recommendations on how to incorporate gender considerations into an existing organization; developing programs in low-income communities; or building a gender component to be incorporated in a new initiative. Opportunities may be available for international fieldwork over IAP. Students taking graduate version complete additional assignments. Limited to 12; must attend first class session.
E. McDonald, M. Thompson

Teaching, UROP, Independent Study

EC.900 Independent Study

Prereq: None
 U (Fall, IAP, Spring, Summer)
 Units arranged [P/D/F]
 Can be repeated for credit.

Opportunity for independent study under regular supervision by a staff member. Projects require prior approval, as well as a written proposal and final report.
Staff

EC.910 Edgerton Center Undergraduate Teaching

Prereq: None
 U (Fall, IAP, Spring, Summer)
 Units arranged [P/D/F]
 Can be repeated for credit.

An opportunity for undergraduates to participate in teaching and tutoring Center subjects and seminars. Students develop one-on-one teaching skills under the supervision of an Edgerton Center instructor.
Staff

EC.980 Edgerton Center Independent Study - Graduate

Prereq: None

G (Fall, IAP, Spring, Summer)

Units arranged

Can be repeated for credit.

Opportunity for independent study under regular supervision by a staff member. Projects require prior approval, as well as a written proposal and final report.

*Staff***EC.990 Edgerton Center Graduate Teaching**

Prereq: None

G (Fall, IAP, Spring, Summer)

Units arranged [P/D/F]

Can be repeated for credit.

An opportunity for graduate students to participate in teaching and tutoring Edgerton Center subjects and seminars. Permission of Edgerton Center staff required.

*Staff***EC.UR Undergraduate Research**

Prereq: None

U (Fall, IAP, Spring, Summer)

Units arranged [P/D/F]

Can be repeated for credit.

Undergraduate research opportunities in the Edgerton Center.

*J. K. Vandiver***EC.URG Undergraduate Research**

Prereq: None

U (Fall, IAP, Spring, Summer)

Units arranged

Can be repeated for credit.

Undergraduate research opportunities in the Edgerton Center.

*J. K. Vandiver***Special Subjects****EC.S00 Special Subject at the Edgerton Center**

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S01 Special Subject at the Edgerton Center**

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S02 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S03 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S04 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S05 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged [P/D/F]

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S06 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S07 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff

EC.S08 Special Subject at the Edgerton Center

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S09 Special Subject at the Edgerton Center**

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S10 Special Subject at the Edgerton Center**

Prereq: None

U (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S11 Special Subject at the Edgerton Center**

Prereq: None

G (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S12 Special Subject at the Edgerton Center**

Prereq: None

G (Fall, IAP, Spring)

Not offered regularly; consult department

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

*Staff***EC.S13 Special Subject at the Edgerton Center**

Prereq: None

G (Fall)

Units arranged

Can be repeated for credit.

Seminar combining lectures and lab run by students and academic staff at the Edgerton Center. Students explore specialized electronics, robotics, or mechanical design and fabrication topics not offered in the regular curriculum; classes range from beginner level to more advanced. Some offerings may be taught in an intensive fashion (meeting for up to several times a week for four weeks). Up to three sequential seminars may be offered per semester, covering a different topic each time. Students can take one or all of the seminars.

Staff