# **Fall 2018 Supplement and Course Offerings List**

(vol17, no1.3, Aug 24, 2018)

Information Contained In this Document

- 1) Schedule of Deadlines
- 2) Cross-Registration Deadlines and Instructions
- 3) Course Tips & Curriculum Info and Catalog Supplement (courses new to catalog for 2018-19 or special topics)
- 4) Course Offerings List (you can also search this here: Course Search)
- 5) Course Offerings Grid
- 6) Tentative Spring 2019 Courses

For General Registration Information and FAQs (formerly contained in the registration booklets), please visit our <u>web page</u>.

## Schedule of Deadlines for Add; Drop and Pass/No Credit; Withdraw

Session	Add	Drop and Pass/No Credit	Withdraw
Full Semester (Aug 30 – Dec 7)	September 13, 2018	November 2, 2018	December 7, 2018
Session I (Aug 30 – Oct 16)	September 6, 2018	October 1, 2018	October 15, 2018
Session II (Oct 18 – Dec 7)	October 24, 2018	November 15, 2018	December 7, 2018

## Cross-Registration Deadlines To find cross-registration instructions, click here.

	Babson	Brandeis	Wellesley
Cross-registration open period	4/9/2018 - 9/5/2018 at 4:30 p.m.	7/19/2018 – 9/14/2018	4/23/2018 - 9/14/2018 at 11 p.m.
First day of classes	8/29/2018	8/29/2018	9/4/2018
Drop deadline	9/5/2018 at 4:30 p.m.	10/17/2018	9/28/2018 at 11 p.m.

## **Course Tips & Curriculum Info**

## Design Depths - We have many!

In the fall, there are 4 offerings for design depths. They are: 1) Affordable Design and Entrepreneurship, 2) Tell the Story of What You Make, 3) User Experience Design, 4) Biomedical Device Design. Also, keep in mind that in the spring, there will be at least 3, and possibly 4 offerings as well. You can find our tentative listing of spring in this booklet.

#### Bio, we have Bio - Read on:

In the fall we have 2 sections of foundational biology options. We also plan for two in the spring semester as well. Below is an updated policy about our foundational biology requirement. Please read through for clarity.

If you took an AP biology class in High School and received a score of "4" or "5", you are automatically eligible to place into an intermediate or advanced biology class. Olin typically offers one advanced Biology course per year.

Students who took an AP biology class in High School and received a score of "3", or IB HL and received a comparable score have the option to take an oral assessment to determine if you are eligible to place into an advanced biology class. If you meet the criteria to take the exam, please contact biology faculty Helen Donis Keller (Helen.Donis-Keller@olin.edu), Jean Huang (Jean.Huang@olin.edu), and/or Joanne Pratt (Joanne.Pratt@olin.edu) to set up an appointment for the exam.

## "Probability and Statistics" - What are my choices?

Once again, we are diversifying our probability and statistics offerings. This fall semester, we have two choices and both are new. They are listed below and both have descriptions further in this booklet.

- 1) Allen Downey's ENGR3533/MTH2133 Computational Bayesian Statistics
- 2) Sanjoy Mahajan's MTH2132/SCI2032 Bayesian Inference and Reasoning

We also plan on at least two additional topics in the spring semester. You can find our tentative listing of spring in this booklet.

## **Catalog Supplement**

Degree requirements are outlined in the Course Catalog

**Course descriptions** can also be found in the catalog and in the portal course search. New, highlighted, and Special Topics course descriptions are listed below.

## **Topics Courses**

## AHSE1199: Writers' Workshop: Creativity and the Literary Imagination

Instructors: Caitrin Lynch, Lauren Taaffe

Credits: 4 AHS

This class explores what it means to be human through the lens of literature and creative writing. Students will become better writers because they will become better readers, and better readers because they will become better writers. We will explore literary short fiction by reading a diverse array of well-regarded American short stories written in the 21st and 20th centuries, as well as some additional works by writers about language and the writing process. We'll read closely and talk about the components of fiction such as description, word choice, dialogue, point of view, tense, place, humor, and context. Students will complete a series of analytical and creative writing assignments, and pursue their own projects, some of which they'll share with the class. We'll practice receiving and giving feedback, both privately and during class discussions, debates, and presentations. There will be emphasis on experimentation, drafting, and revision. No prior experience in creative writing is required. We believe that strong writing is a skill that can be developed through ongoing experimentation, practice, feedback, and revision. The wider context for the class is the notion of understanding people in order to do engineering "for the good of the world" (which is in Olin's founding precepts!).

## AHSE2199-01: Special Topics in Art, Humanities, Social Sciences

Creative Approaches to Emerging Technology

Instructor: Onuoha Credits: 4 AHS

We live in a world where we have more data, computational power, and access to digital connectivity than ever before. But how do we make sense of the promise inherent in this reality while also coming to terms with the challenges that it presents? How do we situate the technologies that we have come to take for granted? And more importantly, how do we make active and creative responses that interrogate and hint at the potential for different futures?

This course examines emergent technological fields, spanning topics like data collection/representation, artificial intelligence, social algorithms, surveillance, and digital mapping and asks how the technologies inherent to each can be leveraged for response, creation, and critique.

While this course is primarily conceptual and theory-based, the content covered will be technical in nature and students will be tasked with creating bi-weekly creative responses to the content in the tradition of the new media/digital arts and design worlds.

## **ENGR2199-01: Special Topics in Engineering**

Small Satellite Engineering

Instructor: Lee Credits: 4 ENGR Hours: 4-0-8

Do you want to design, build, and test a satellite that will be launched into space? This is exactly what we'll be doing during the next academic year as part of the ThinSat program. Our ThinSat (approximate dimensions 11 x 11 x 1.25 cm and mass 280 g) has a specific NASA-sponsored mission related to the tracking of orbital debris. Project work will involve all aspects of the satellite including embedded programming, sensor measurements, data transmission and communication, mechanical design, attitude dynamics, environmental testing, and systems integration. Related background and content will be covered

as needed. We will be working in partnership with high school students from Dexter Southfield School in Brookline and will meet with them regularly.

Enrollment will balanced with approximately six students per class year. All students will enroll in the Tuesday session and then choose an additional lab session on either Monday or Wednesday.

## **ENGR2199A: Special Topics in Engineering**

Designing with Multiple Stakeholder Groups: The AC Reboot

Instructors: Somerville, Hoover, Goldenson, Barrett

2 ENGR

In this project-based course, students will work closely as a part of a team that includes faculty, staff, and architectural professionals. The team will facilitate a community-based process in order to develop a deep understanding of stakeholder needs around a real-world project, in order to produce architectural programming for the potential renovation of a part of Olin's Academic Center.

## Courses Changed, Renumbered or New to Catalog

## AHSE1148: Arts, Humanities, Social Science Foundation Topic

From Dirt to Shirt Instructor: Lynch Credits: 4 AHS

Registration note: AHS FOUNDATION; restricted to first year students

This course is an intensive study of the global supply chain for clothing. It examines social, economic, political, environmental, and technological issues all along the supply chain. This includes historical and contemporary production of components such as cotton, wool, and Kevlar; textile processing and garment production; and the after-life of the clothes we dispose of. The class will include readings, discussions, and engagement with multimedia sources; first-person contact with local people involved in the industry; and student projects on a chosen node of the supply chain. The course is multidisciplinary, but centered in cultural anthropology. In anthropology, empathy is a means to understanding, and a central premise of the course is the need to develop empathy. This class takes an empathetic approach to people and activities all along the global garments supply chain.

### **ENGR3232: Biomedical Device Design**

Instructor: Sarang-Sieminski

Credits: 4 ENGR Hours: 4-0-8

Prerequisite: ENGR2250, User-Oriented Collaborative Design Registration note: may count for Design Depth OR ME Elective

Medical devices can be anything from a tongue depressor to a pacemaker with a microchip to a room-sized MRI, and everything in between. In this course, we will briefly consider the range of artifacts that are considered (bio)medical devices, how they are used, and who they are used for. We will primarily focus on the unique design constraints of and methods used in developing medical devices. We will touch on topics such as regulation and approval of devices, writing user requirements, writing product requirements, manufacturing practices, bioethics, and the body's response to implanted materials and surgical interventions. The first half of the semester will be spent developing skills through a case study model. In the second half of the semester, students will complete a major design project, with an external partner, that is focused at a particular stage of product development.

This course is open to students of all majors, satisfies a design depth requirement, and can be used as a mechanical engineering elective. While the examples used are from the biomedical industry, the skills developed are relevant to other highly regulated fields as well (e.g. aerospace).

#### ENGR3240: Tell the Story of What you Make

Instructor: Sauder Credits: 4 ENGR Prerequisite: ENGR2250 User Oriented Collaborative Design

Registration note: may count as Design Depth

How do engineers creatively engage with multiple audiences and stakeholders for their work? Telling stories is critical for anyone who makes things: communicating technical work to non-experts, creating persuasive arguments for technology adoption, or projecting a future with better engineering in it. This course will cover how stories are built and how to craft your own, exploring communication design in multiple forms of media: print, images, film, music, and more. The course includes excursions to experience location-specific visual representation, multiple individual communication experiments, group collection of media, and a culminating project in which students will tell the story of one of their own projects. We'll look at how music videos, cereal boxes, advertisements, grocery shopping, infographics and even people's outfits (just to name a few) can inform how you might build an effective story about one of your own projects.

### **ENGR3570: Computer Networks**

Instructor: Morrow Credits: 4 ENGR Hours 4-0-8

Prerequisite: experience with Python or permission of instructor

Computer Networks is a course that traces the history of the Internet through the words of the visionaries, inventors and entrepreneurs who developed it. The course spans almost two hundred years from the creation of international telegraphy to the current network. Many pioneers from the digital computer era are recipients of the ACM Turing Award; for this course we have chosen Turing Award recipients whose accomplishments line up with the layers of standard OSI network computing model.

Labs: The goal of the labs is for students to develop an understanding of the internet by implementing it layer by layer using Python 3 on Raspberry pi computers. For example, Layer 1 -- the OSI Physical layer -- is initially implemented as Morse code sent between Raspberry pi network nodes by programming GPIO pins. Each lab corresponds to the layer of the Internet stack associated with the network pioneer currently being studied. Each lab provides the support modules needed to code the stack layer; a common framework for gluing the stack layers together is also provided.

### ENGR3533/MTH2133: Computational Bayesian Statistics

Instructor: Downey

Credits: 2 ENGR and 2 MTH

Students must sign up for both parts concurrently. This course satisfies the ProbStat requirement.

Bayesian statistics provide a powerful toolkit for modeling random processes and making predictions. The ideas behind these tools are simple, but expressing them mathematically can make them hard to learn and apply. This class takes a computational approach, which allows students with programming experience to use that knowledge as leverage. Students will work through a series of exercises in the book Think Bayes and help develop new material.

### CIE 2018B: Curriculum Innovation Experiment

**Quantitative Engineering Analysis II** 

Instructors: Christianson, Dusek, Geddes, Houston-Edwards, Nugent, Ruvolo

Credits: 8

**Note**: This is the second class of a two-class, 8-credit-each sequence. This two-class, 16-credit sequence is a designated alternative for the following courses: Linearity 1 and Linearity 2, the Physics Foundation course, Signals and Systems, and Dynamics. **Open only to students who took CIE 2018A in Spring 2018.** 

The application of quantitative analysis of mathematical models and/or data can enable, improve, and speed up the engineering design process. Using quantitative analysis to answer engineering questions, you'll be able to make the choices necessary to successfully complete an engineering design. Whether you are selecting the best part from a catalog, choosing an appropriate material, sizing a component, determining the effect of certain influences on your design, or optimizing your design within a parameter space, you often need to obtain (through experiment or calculation) and interpret quantitative information to inform your decisions. There are many different approaches to getting and interpreting the data you need: you may conduct an experiment, do a rough estimation, perform a detailed calculation based on mathematical models, or create a computer simulation. If you want to engineer effectively, you must be able to choose and use appropriate quantitative tools for a given situation.

In this class, you will be introduced to various approaches to perform quantitative engineering analysis through real-world examples. You will learn how to *select* between different tools and different approaches within the context of an engineering challenge, how to use many different tools for quantitative analysis, and how to acquire new tools on your own in the future.

## AHSE2097, ENGR2097, MTH2097, or SCI2097: Cross-disciplinary Research Methods

Instructors: Barrett, Huang, Morrow

Credits: 2

In this course students will learn about the research process and engage in a cross-disciplinary research community. Discussions will include topics such as: research ethics, technical writing, study design, effective communication, qualitative research methods, statistical methods, carrying out literature searches and reading primary literature, the replicability crisis, documentation and credit, and publishing. Throughout the course students will engage in discussions and reference and present their own research projects to a multidisciplinary audience.

Students must be engaged in a research project to reference and develop throughout this course. Research projects can include: faculty advised research, IS research, OSS, or research through a course taken concurrently.

## Other Academic Opportunities

Olin CW Story Slam – offered as an independent study Instructor(s)

Gillian Epstein & Jon Adler

#### **AHS Credit**

We are thrilled to be able to pilot our very same story slam experience as an experimental Independent Study for 2 AHS credits. Opt in for credits if you like...or not. Up to you!

## **Meetings and Performance**

One hour meeting every two weeks during Fall 2018 semester; Perform @ CW weekends Spring 2019 semester

### **Description**

Interested in developing a short, creative non-fiction story about you? Want to perform your story at our "moth"-style event on our campus during each of our Candidates' Weekends?

Moth: https://www.themoth.org

Olin Story Slam: <a href="https://www.youtube.com/watch?v=zPPQdvsouTA">https://www.youtube.com/watch?v=zPPQdvsouTA</a>

Join us to craft, practice, and perform stories that will capture our community's imagination. Bond with fellow students, unleash your creativity, receive individualized coaching while developing your storytelling voice, and get 2 AHS credits!

Sign Up by emailing gillian.epstein@olin.edu and then complete an IS proposal form.

Didn't find the course you're looking for? Check the course browser at <a href="https://my.olin.edu/ICS/Course Schedules.jnz">https://my.olin.edu/ICS/Course Schedules.jnz</a>

Area	Course #	Section #	Course Title	Instructor / Teaching Team	Time	Location	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
AHS	AHSE0112	01	AHSE0112: The Olin Conductorless Orchestra	Dabby, Diana	R 6:45-9:00pm	AC318	1	27	yes, small		AHS Elective
AHS	AHSE2199	01	AHSE2199: Special Topics in Arts, Humanities, Social Sciences: Creative Approaches to Emerging Technology	Onuoha, Mimi	W 12:30-3:00pm	AC326	4	18	yes; small	offered by the Mellon Grant Creative-in- Reference Sketch Model Initiative Contact Mellon grant lead Sara Hendren with questions.	AHS Elective
AHS	AHSE3190	01	AHSE3190: Arts Humanities Social Sciences Capstone Preparatory Workshop	Epstein, Gillian	n/a	n/a	1	50	n/a		AHS Capstone
BOW Cert	SUST2201	01	SUST2201: Introduction to Sustainability	Huang, Jean	W 3:30-6:30pm	AC213	4	15	yes, small	CORE requirement for 3CollegesBOW Sustainability Certificate	BOW Cert
CAPSTONE	ENGR4190	01-14	ENGR4190: SCOPE: Senior Capstone Program in Engineering	Hersey, Scott; Michalka, Sam; Sarang-Sieminski, Alisha; Stein, Lynn	W 9-6:00pm	varies	4	90	n/a		CAPSTONE
CAPSTONE	ENGR4290	01	· · · · · · · · · · · · · · · · · · ·	Hersey, Scott; Linder, Ben; Staff	T 3:30-6:30pm; R 3:30- 5:30pm	Weissman Foundry	4	13	yes, small		CAPSTONE
DSN	ENGR3220	01	ENGR3220: User Experience Design	Morales, Marco	MR 9-10:40am	AC213	4	28	yes, small		DSN Depth
DSN	ENGR3232	01		Sarang-Sieminski, Alisha	TF 1:30-3:10pm	AC326	4	20	yes, small		DSN Depth
DSN	ENGR3240	01	ENGR3240: Tell the Story of What you Make	Ferguson Sauder, Tim	MR 1:30-4:10pm	AC213	4	24	yes, small	Offered using EXPERIMENTAL Grading	DSN Depth
DSN	ENGR3290	01		Hersey, Scott; Linder, Ben; Staff	T 3:30-6:30pm; R 3:30- 5:30pm	Weissman Foundry	4	17	yes, 15		DSN Depth

Area	Course #	Section #	Course Title	Instructor / Teaching Team	Time	Location	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
E: Robo	ENGR3390	01	ENGR3390: Fundamentals of Robotics	Barrett, Dave	TF 1:30-3:10pm	AC128	4	25	yes, large		Core E:Robo
E: Robo	ENGR3590	01	ENGR3590: A Computational Introduction to Robotics	Ruvolo, Paul	TF 1:30-3:10pm	AC109	4	22	yes, small		Core E:Robo
E:C	ENGR2510	01	ENGR2510: Software Design	Hill, Ben	MR 10:50-12:30pm	AC304	4	24	yes, small		Core E:C, Core ECE
E:C	ENGR3520	01	ENGR3520: Foundations of Computer Science	Pucella, Riccardo	T 3:20-5:50pm	AC326	4	32	yes, small		Core E:C
E:C	ENGR3570	01	ENGR3570: Computer Networks	Morrow, Alex	MR 10:50-12:30pm	AC428	4	30	yes, small		Elective E:C
ECE	ENGR3410	01	ENGR3410: Computer Architecture	Hill, Ben	TF 10:50-12:30pm	AC304	4	32	yes, small		Core ECE
ENGR	ENGR1330		·	Andruskiewicz, Bruce	W 1-5:00pm	Machine Shop	4	6	yes, small		Elective
ENGR	ENGR2110	01	ENGR2110: Principles of Engineering	Faas, Daniela; Millner, Amon; Minch, Brad; Reifel, Stan	TF 9-10:40am	AC306	4	25	yes, small		Requirement - POE
ENGR	ENGR2110	02	ENGR2110: Principles of Engineering	Faas, Daniela; Millner, Amon; Minch, Brad; Reifel, Stan	TF 9-10:40am	AC309	4	25	yes, small		Requirement - POE
ENGR	ENGR2110	03	ENGP2110: Principles of Engineering	Faas, Daniela; Millner, Amon; Minch, Brad; Reifel, Stan	TF 10:50-12:30pm	AC306	4	25	yes, small		Requirement - POE

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ENGR	ENGR2110	04	ENGR2110: Principles of Engineering	Faas, Daniela; Millner, Amon; Minch, Brad; Reifel, Stan	TF 10:50-12:30pm	AC309	4	25	yes, small		Requirement - POE
ENGR	ENGR2199		ENGR2199: Special Topics in Engineering: Small Satellite Laboratory		T 3:20-5:30pm		4	18		Enroll in section 01 and then choose a corresponding working group, either ENGR2199 L, L1 or L2	
ENGR	ENGR2199 L	L1		Harris, Scott; Lee, Chris	M 3:20-5:30pm	AC304	0	18 total	yes, small	enrollment will be open to 6 rising seniors, 6 rising juniors and 6 rising sophomores  please note that we will be managing enrollment after each registration period in	Elective
ENGR	ENGR2199 L	L2	Small Satellite Laboratory Working Group		W 3:20-5:30pm		0	10 total		order to balance enrollment between class years	
ENGR	ENGR2199A		ENGR2199A: Special Topics in Engineering: Designing with Stakeholder Groups AC Reboot	Barrett, Annie; Goldenson, Jeff; Hoover, Aaron; Somerville, Mark	W 9-10:50am	AC213	2	by applicati on			ENGR Elective
ENTRP	AHSE2515	01	AHSE2515: Iterate	Bowen, Jim	MR 9-10:40am	AC318	2	21	yes, small	Session I	ENTRP Concentration
ENTRP	AHSE2515A	01	AHSE2515A: Iterate	Bowen, Jim	MR 9-10:40am	AC318	2	21	yes, small	Session II	ENTRP Concentration
FYR	OIE1000	01-'04	OIE1000: Olin First Year Introduction (OFYI)	Waranyuwat, Adva	W 9-10:50am	MH120 AC304 AC318 AC326 AC417	1	90	n/a		First Year Only
FYR: AHS	AHSE1100		AHSE1100: History of Technology: A Cultural & Contextual Approach	Martello, Rob	TF 10:50-12:30pm	AC318	4	15	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation
FYR: AHS	AHSE1122	01	AHSE1122: The Wired Ensemble -Instruments, Voices, Players	Dabby, Diana	TF 1:30-3:10pm	AC304; AC305	4	15	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation

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Area	Course #	Section #	Course Title	Instructor / Teaching Team	Time	Location	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
FYR: AHS	AHSE1135	01	AHSE1135: The Digital Eye: Photography, Vision, and Visual Communication	Donis-Keller, Helen	TF 10:50-12:30pm	AC313	4	14	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation
FYR: AHS	AHSE1199	01	AHSE1199: Writers' Workshop: Creativity and the Literary Imagination	Lynch, Caitrin; Taaffe, Lauren	TF 10:50-12:30pm	AC326	4	15	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation
FYR: AHS	AHSE1148	01	AHSE1148: Dirt to Shirt: Global Garments in Context	Lynch, Caitrin	TF 1:30-3:10pm	AC328	4	15	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation
FYR: AHS	AHSE1150	01	AHSE1150: What is 'I'?	Stein, Lynn	TF 1:30-3:10pm	AC313	4	15	no	Available to First Year Students Only; All First year students will also be booked for Wednesday related AHS sessions between 12:30 and 3pm; specific dates will be on each syllabus	AHS Foundation
FYR: ENGR	ENGR1125	01	ENGR1125: Introduction to Sensors, Instrumentation	Ferzoco, Alessandra; Minch, Brad; Storey, Brian; Vanasupa, Linda	MR 1:30-3:10pm	AC428	4	22	no		Requirement - ISIM
FYR: ENGR	ENGR1125	02	ENGR1125: Introduction to Sensors, Instrumentation and Measurement	Ferzoco, Alessandra; Minch, Brad; Storey, Brian; Vanasupa, Linda	TF 9-10:40am	AC428	4	22	no		Requirement - ISIM
FYR: ENGR	ENGR1125	03	ENGR1125: Introduction to Sensors, Instrumentation	Ferzoco, Alessandra; Minch, Brad; Storey, Brian; Vanasupa, Linda	TF 10:50-12:30pm	AC428	4	22	no		Requirement - ISIM
FYR: ENGR	ENGR1125	04	ENGR1125: Introduction to Sensors, Instrumentation and Measurement	Ferzoco, Alessandra; Minch, Brad; Storey, Brian; Vanasupa, Linda	TF 1:30-3:10pm	AC428	4	22	no		Requirement - ISIM
FYR: ENGR	ENGR1200	01	ENGR1200: Design Nature	Chachra, Debbie; Ferguson Sauder, Tim; Lee, Chris; Townsend, Jessica	MR 9:50-12:30pm	MH120; AC204, 206, 209	4	32	no		Requirement - DesNat
FYR: ENGR	ENGR1200	02	ENGR1200: Design Nature	Chachra, Debbie; Ferguson Sauder, Tim; Lee, Chris; Townsend, Jessica	MR 9:50-12:30pm	MH120; AC204, 206, 209	4	32	no		Requirement - DesNat

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FYR: ENGR	ENGR1200	03	ENGR1200: Design Nature	Chachra, Debbie; Ferguson Sauder, Tim; Lee, Chris; Townsend, Jessica	MR 9:50-12:30pm	MH120; AC204, 206, 209	4	32	no		Requirement - DesNat
FYR: Interdisciplinary	MTH1111 / SCI1111	01	MTH1111: Modeling and Simulation of the Physical World	Downey, Allen; Graeff, Erhardt; Wood, Alison; Woodard, Jason	MTR 3:20-5:00pm	MH120; AC204, 206, 209, 318	2+2	32	no		Requirement - ModSim
FYR: Interdisciplinary	MTH1111 / SCI1111	02	MTH1111: Modeling and Simulation of the Physical World	Downey, Allen; Graeff, Erhardt; Wood, Alison; Woodard, Jason	MTR 3:20-5:00pm	MH120; AC204, 206, 209, 318	2+2	32	no		Requirement - ModSim
FYR: Interdisciplinary	MTH1111 / SCI1111	03	MTH1111: Modeling and Simulation of the Physical World	Downey, Allen; Graeff, Erhardt; Wood, Alison; Woodard, Jason	MTR 3:20-5:00pm	MH120; AC204, 206, 209, 318	2+2	32	no		Requirement - ModSim
Interdisciplinary	CIE2018B	01	Curriculum Innov Experiment: Quantitative Engineering Analysis II	Christianson, Rebecca; Dusek, Jeff; Houston- Edwards, Kelsey; Nugent, Carrie; Ruvolo, Paul	MR 1:30-5:00pm	AC109	8	32	no	must have successfully completed CIE2018A QEA I in Spring 2018	Lin I, Lin II, Physics Fnd, Signals Systems, Dynamics
Interdisciplinary	CIE2018B	02	Curriculum Innov Experiment: Quantitative Engineering Analysis II	Christianson, Rebecca; Dusek, Jeff; Houston- Edwards, Kelsey; Nugent, Carrie; Ruvolo, Paul	MR 1:30-5:00pm	AC113	8	32	no	must have successfully completed CIE2018A QEA I in Spring 2018	Lin I, Lin II, Physics Fnd, Signals Systems, Dynamics
Interdisciplinary	ENGR3533/M TH2133	01	ENGR3533/MTH2133: Computational Bayesian Statistics	Downey, Allen	TF 1:30-3:10pm	AC318	2+2	25	yes, small	must enroll in both ENGR3533 and MTH2133	Math - ProbStat Requirement ; Elective E:C
Interdisciplinary	MTH2132 /SCI2032	01	MTH2132/SCI2032: Bayesian Inference and Reasoning	Mahajan, Sanjoy	TF 10:50-12:30pm	AC328	2+2	50	yes, small	must enroll in both MTH2132 and SCI2032	Math - ProbStat Requirement; SCI Elective
ME	ENGR2340	01	ENGR2340: Dynamics	Lee, Chris	TF 9-10:40am; W 9:30- 10:30am	AC328	4	40	yes, small		Core ME
ME	ENGR3310	01	ENGR3310: Transport Phenomena	Ferzoco, Alesandra; Storey, Brian	MR 10:50-12:30pm	AC417; AC409	4	32	yes, small		Core ME

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ME	ENGR3330	01	ENGR3330: Mechanical Design	Barrett, Dave	TF 10:50-12:30pm	AC128	4	28	yes, large		Core ME
мтн	MTH2110	01		Spence Adams, Sarah	MR 9-10:40am	AC326	4	33	yes, large		Math - Adv ECE; E:C
МТН	MTH2110	02		Spence Adams, Sarah	MR 10:50-12:30pm	AC326	4	33	yes, large		Math - Adv ECE; E:C
МТН	MTH2220	01	MTH2220: Linearity II	Hoffman, Aaron	MR 1:30-3:10pm	AC328	4	32	no		Requirement - Lin2
Research	AHSE2097, ENGR2097, MTH2097, SCI2097		Cross-disciplinary Research Methods	Barrett, Dave; Huang, Jean; Morrow, Alex	W 1:30-3:10pm required AC428; optional research lab time MR 6-8pm in AC417	AC318	2	25	yes, large	See course description as enrollment in this course requires enrollment in a specific research activity or research course	Elective
SCI	SCI1121	01	SCI1121: Electricity and Magnetism	Somerville, Mark	MR 9-10:40am	AC304	4	24	yes, small		SCI - Physics Foundation
SCI	SCI1240	01	SCI1240: Designing Better Drugs with Laboratory	Pratt, Joanne	TF 10:50-12:30pm; LAB R 3:20-6:00pm	AC417; AC406 lab	4	24	yes, small		SCI - Bio Foundation
SCI	SCI1240	02	SCI1240: Designing Better Drugs with Laboratory	Pratt, Joanne	TF 1:30-3:10pm; LAB W 12:30-3:10pm	AC417; AC406 lab	4	24	yes, small		SCI - Bio Foundation
SCI	SCI1410	01	SCI1410: Materials Science and Solid State Chemistry	Vanasupa, Linda	MW 3:20-6:00pm	AC413	4	21	yes, small		SCI - MatSci Chem Requirement
SCI	SCI1410	B1	SCI1410: Materials Science and Solid State Chemistry: Environmental and Societal Impact of Materials	Stolk, Jon	TR 3:20-6:00pm	AC413	4	21	yes, small	Offered using EXPERIMENTAL Grading	SCI - MatSci Chem Requirement

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Area	Course #	Section #	Course Title	Instructor / Teaching Team	Time	Location	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
ADMIN	AWAY1000	01	Study Away Program	Administration	n/a	n/a	12	n/a		Enroll in this course block to confirm your Study Away Semester	
ADMIN	OIP1000	01	The Olin Internship Practicum I	Phelps	n/a	n/a	1	n/a		See Post Graduate Planning to Enroll	
ADMIN	OIP1001	01	The Olin Internship Practicum II	Phelps	n/a	n/a	1	n/a		See Post Graduate Planning to Enroll	

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Color Key- Offering Blocks	ECE				ME			ENGR / [	DSN Cou	rses		ENGR	or Gene	ral Requ	irement							
				Mond	lay						Т	uesda	У					V	/ednes	day		
9:00 AM	MTH 2110- 01 Discrete Math		SCI 1121 Electricity and Magnetism	AHSE 2515 and AHSE2515A ITERATE	ENGR 3220 User Experience Design			ENGR 1125 - 02 Intro Sensors, Instru, Measurem	ENGR 234						ENGR 2110, sec 01 Principles of	ENGR 2110 sec 02 Principles of Engineerin	ENGR 2199A-01 Spec Topics: Designing with	OIE 1000 Olin First Year Int (OFYI)	troduction	ENGR 23 Dynamic 9:30-10:3 AC328	S	
10.40.404	AC326	ENGR 1200 ALL Sections Design Nature	AC304	SESS I and SESS II AC318	AC213			ent AC428	AC328						Engineerin g AC306	AC309	Stakeholde rs Group - AC Reboot 9-12noon	MH120 AC304 AC313 AC318 AC326				
10:40 AM 10:50 AM	MTH 2110- 02 Discrete Math	9:50- 12:30pm	ENGR 3310  Transport Phenomen a	ENGR 2510 Software Design	ENGR 3570  Computer Networks			ENGR 1125 - 03 Intro Sensors, Instru, Measurem ent	ENGR 3410  Computer Architecture	SCI 1240- 01  Designing Better Drug Lecture	ENGR 3330  Mechanical Design	MTH 2132/ SCI 2032 Bayesian Inference and Reasoning	AHSE1100: AC318 AHSE1135: AC313 AHSE1199: Topic: Story	AHS Fnd	ENGR 2110, sec 03  Principles of Engineerin	ENGR 2110 sec 04  Principles of Engineerin g	AC213	Open Meet	ing Time(	10:50-12:3	0pm	
12:30 PM	AC326	MH120, AC204, 206, 209	AC417; AC409	AC304	AC428			AC428	AC304	AC417	AC128	AC328	AC326		g AC306	AC309						
																		SCI1240-02  Designing Better Drugs LAB	AHS Foundation Special Class Session for Writing	AHS2199: Spec Top AHS Creative Approc to Emerg Tech	ENGR 1330	ENGR 4190
1:30 PM	ENGR 1125 - 01 Intro Sensors, Instru, Measurem ent  AC428	ME MATH  TBD place holder  AC318	MTH 2220 Linearity II	section 01 and 02  Quantitative Engineerin g Analysis I	Tell the Story of What You Make  1:30- 4:10pm			ENGR 1125 - 04 Intro Sensors, Instru, Measurem ent  AC428	SCI 1240- 02 Designing Better Drugs Lecture	ENGR 3390  Fundament als of Robotics	ENGR 3533	ENGR 3590  Computational Robotics	ENGR 3232 Biomedical Device Design	Ensemble AHSE114 AC328	2: Wired AC304, 305 8: Dirt to Shirt 0: What is I		AHSE2097 ENGR2097 MTH2097 SCI2097 Cross Disciplinary Research Method		Panel; Workshops and/or field trips location TBD		Fnd Machine Shop Operatio ns 1-5:00p	SCOPI
:10 PM :20 PM	MTH 1111/ S 1111 All Sections Modeling and Simulation MH120, AC20 206, 209, 318	d 		AC109 AC113	AC213	SCI 1410 - 01  Materials Science and Solid State Chemistry	ENGR 2199 L-L1  Small Satellite Laboratory  Workshop Section L1  AC304	MTH 1111/ S 1111 All Sections Modeling and Simulation MH120, AC204 206, 209, 318	d	Materials Science and Solid State Chemistry: Envt'l and Societal Impacts	ENGR 3520 Fnd Computer Science 3:20- 5:50pm AC326	ENGR and 42 Afford Design Entrp	290 Topic Smal Satel Labo T 3:20- must al L1 or L2 worksh	-01 cs: lite ratory 5:30p so choose			SUST2201  Intro to Sustainability : Babson, Olin, Wellesley Initiative  3:30-6:30	SCI 1410- 01  Materials Science and Solid State Chemistry	ENGR 2199 L-L2 Small Satellite Laboratory Workshop Section L2 AC304		Machine Shop	
						AC413			,	AC413		Weiss Ctr at Babso					AC213	AC413				
9:00:00		Cross Dis Research OPTIONA reserved lab time 6-8pm	Methods																			

Fall 2018 Course Offerings

AHSE				SCI				Math					INTEG	RATED (		G (colored v	
			Thur	sday								Frida	У				
MTH 2110- 01 Discrete Math	ENGR 1200 ALL Sections Design Nature	SCI 1121 Electricity and Magnetisi	AHSE2515	User Experiment Design				ENGR 1125 - 02 Intro Sensors, Instru, Measurem ent  AC428	ENGR 2340 Dynamics  AC328				n of these AHS Founda AHSE1100:His AHSE1135: Dig AHSE1145: Hu Connection AHSE1148: Dig AHSE1150: Will Avail Rms 109 318, 326	tion It of Tech Igital Eye Il man In to Shirt In that is I	ENGR 2110, sec 01  Principles of Engineerin g  AC306	ENGR 2110 sec 02  Principles of Engineerin g  AC309	9:00 AN
MTH 2110- 02 Discrete Math	9:50- 12:30pm MH120, AC204, 206,	ENGR 33  Transpor Phenome	t Software		rks			ENGR 1125 - 03 Intro Sensors, Instru, Measurem ent	ENGR 3410  Computer Architecture	SCI 1240- 01  Designing Better Drugs Lecture	ENGR 3330  Mechanical Design	MTH 2132/ SCI 2032 Bayesian Inference and Reasoning	n of these AHS Found AHSE1100:I AHSE1135: AHSE1145: Connection AHSE1148:	dation Hist of Tech Digital Eye Human Dirt to Shirt	ENGR 2110, sec 03  Principles of Engineerin g	ENGR 2110 sec 04  Principles of Engineerin g	10:50 AN
AC326	209	AC417; AC409	AC304					AC428	AC304	AC417	AC128	AC328	AHSE1150: Avail Rms 1	What is I 09, 318, 326	AC306	AC309	12:30 PN
ENGR 1125 - 01 Intro		MTH 2220	CIE2018B 01 and 02 Quantitative				ENGR 3240 Tell the	ENGR 1125 - 04 Intro	SCI 1240- 02 Designing	ENGR 3390 Fundament	MTH 2133/ ENGR 3533	ENGR 3590 Computati	ENGR 3232 Biomedical	AHSE1122: Ensemble A AC305			1:30 PN
Sensors, Instru, Measurem ent AC428	holder	\C328	Engineerin g Analysis II MR 1:30- 5pm				Story of What You Make  1:30- 4:10pm  AC213	Sensors, Instru, Measurem ent	Better Drugs  Lecture	als of Robotics AC128	Comp Bayesian Statistics	onal Robotics AC109	Device Design	and n of AHSE1100:I AHSE1135: AHSE1145: Connection AHSE1148: AHSE1150:	Human I Dirt to Shirt What is I		
MTH 1111/ SCI 1111 All Sections Modeling and Simulation MH120, AC204 206, 209, 318	ŀ		AC109 AC113	SCI1240-01 Designing Better Drugs LAB  AC406	SCI 1410 - B1  Materials Science and Solid State Chemistry: Envt'l and Societal Impacts  AC413	ENGR 3290; 4290 ADE 3:30-5:30p Weissman Center at Babson					"Do Som	ething" Dec	dicated Tim	e Avail rms 3	13, 328		3:10 PM 3:20 PM
Cross Discip Research M OPTIONAL reserved res lab time 6-8pm AC417	lethods AHSE Condu		nestra														6:00 P 

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	TENTATIVE SPRING 20	019 Co	urse Listing	
Discipline	Course Number and Title	Credits	Tentative Staffing	Curriculum Category
AHS	AHSE0112: The Olin Conductorless Orchestra	1	Dabby, Diana	AHS Elective
AHS	AHSE2112: Six Books that Changed the World	2	Martello, Rob	AHS Elective
AHS	AHSE2114: Science Fiction and Historical Context	2	Martello, Rob	AHS Elective
AHS	AHSE2155: Constructing and Performing the Self	4	Adler, Jon	AHS Elective
AHS	AHSE3190: Arts Humanities Social Sciences Capstone Preparatory Workshop	1	Epstein, Gillian	AHS Capstone
AHS	AHSE4190: Arts Humanities Social Sciences Capstone Project	4	Epstein, Gillian	AHS Capstone
BOW Cert	SUST3301: Sustainability Synthesis	4	Wood, Alison	BOW Cert
CAPSTONE	ENGR4190: SCOPE: Senior Capstone Program in Engineering	4	Hersey, Scott; Michalka, Sam; Sarang- Sieminski, Alisha; Stein, Lynn	CAPSTONE-SCOPE
CAPSTONE	ENGR4290: Affordable Design and Entrepreneurship Engineering Capstone	4	Hersey, Scott	CAPSTONE-ADE
Crosslisted	ENGR2810: Environmental Analysis and Science (new; crosslisted with SCI2310)	4	Hersey, Scott	Elective
Crosslisted	SCI2310: Environmental Analysis and Science (new; crosslisted with ENGR2810)	4	Hersey, Scott	SCI - MatSci Chem Requirement n of 1
DSN	ENGR2250: User-Oriented Collaborative Design	4	Adler, Jon; Ferguson Sauder, Tim; Graeff, Erhardt; Linder, Ben; Wood, Alison	Requirement - UOCD
DSN	ENGR3210: Sustainable Design	4	Linder, Ben	DSN Depth
DSN	ENGR3242: Quanititative Engineering Design	4	Lee, Chris	DSN Depth
DSN	ENGR3252: Technology, Accessiblity, and Design	4	Ruvolo, Paul	DSN Depth
DSN	ENGR3290: Affordable Design and Entrepreneurship	4	Linder, Ben	DSN Depth
E: Bio	ENGR3600: Topics in Bioengineering	4	Sarang-Sieminski, Alisha	Core BioE
E: Robo	ENGR3392: Robotics Systems Integration	4	Barrett, Dave; Dusek, Jeff	Core E:Robo

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TENTATIVE SPRING 2019 Course Listing						
Discipline	Course Number and Title	Credits	Tentative Staffing	Curriculum Category		
E:C	ENGR2510: Software Design	4	Hill, Ben; Millner, Amon; Stein, Lynn	Core ECE; Core E:C		
E:C	ENGR3525: Software Systems	4	Downey, Allen	Core E:C		
E:C	ENGR3599: Special Topics in Computing: TBD	4	Pucella, Riccardo	Elective E:C		
ECE	ENGR2410: Signals and Systems	4	Dabby, Diana	Core ECE		
ECE	ENGR2420: Intro Microelectronic Circuits with laboratory	4	Minch, Brad	Core ECE		
ECE	ENGR3420: Introduction to Analog and Digital Communication	4	Govindasamy, Siddhartan	Core ECE		
ECE	ENGR3430: Eclectronics	4	Minch, Brad	Elective ECE		
ECE	ENGR3440: Principles of Wireless Communication	4	Govindasamy, Siddhartan	Elective ECE		
Elective	ENGR2330: Introduction to Mechanical Prototyping	4	Faas, Daniela	Elective		
Elective	ENGR3199: Small Satellite Engineering	4	Lee, Chris	Elective		
ENGR	Engineering Elective TBD	4	Vanasupa, Linda	Elective		
ENGR	ENGR1330: Fundamentals of Machine Shop Operations	4	Andruskiewicz, Bruce	Elective		
ENGR	ENGR2160: DREAM Designing Resources for Empowerment (new)	4	Millner, Amon	Elective		
ENGR	New Infrastructural Context Course	4	Chachra, Debbie	Elective		
ENTRP	AHSE1515: Products and Markets	4	Chachra, Debbie; Lynch, Caitrin; Pratt, Joanne; Woodard, Jason	Requirement - P&M		
ENTRP	AHSE2515: Iterate	2	Bowen, Jim	ENTRP Concentration		
ENTRP	AHSE2515A: Iterate	2	Bowen, Jim	ENTRP Concentration		
ENTRP	AHSE3515: Launch	4	Bowen, Jim	ENTRP Concentration		

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TENTATIVE SPRING 2019 Course Listing						
Discipline	Course Number and Title	Credits	Tentative Staffing	Curriculum Category		
Experiment	Curriculum Innov Experiment: Quantitative Engineering Analysis I	TBD	Staff	Experiment-QEA1		
Interdisciplinary	AHSE2141/ENGR2141: Engineering for Humanity	2+2	Ben-Ur, Ela; Lynch, Caitrin	AHS Elective		
Interdisciplinary	AHSE2160/SCI1260: The Intersection of Biology, Art and Technology	4+4	Donis-Keller, Helen	AHS Elective; SCI - Bio Foundation		
Interdisciplinary	ENGR3531/MTH2131: Data Science	2	Downey, Allen	Elective E:C; Math - ProbStat Requirement		
ME	ENGR2320: Mechanics of Solids & Structures	4	Staff	Core ME		
ME	ENGR2350: Thermodynamics	4	Storey, Brian	Core ME		
МТН	MTH2210: Linearity I	4	Hoffman, Aaron	Requirement - Lin1		
МТН	MTH3120: Partial Differential Equations	4	Hoffman, Aaron	Math - Adv ME		
MTH	MTH3170: Nonlinear Dynamics and Chaos	4	Staff	Math - Adv ME		
Research	AHSE2097, ENGR2097, MTH2097, SCI2097: Cross Disciplinary Research Methods	2	Barrett, Dave; Huang, Jean; Morrow, Alex	Elective		
SCI	SCI1130: Mechanics	4	Mahajan, Sanjoy	SCI - Physics Foundation		
SCI	SCI1230: Think Like a Biologist with Laboratory	4	Huang, Jean	SCI - Bio Foundation		
SCI	SCI1410: Materials Science and Solid State Chemistry with Laboratory	4	Stolk, Jon; Vanasupa, Linda	SCI - MatSci Chem Requirement n of 1		
SCI	SCI2050: Art of Approximation in Science and Engineering	4	Mahajan, Sanjoy	SCI Elective		

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