

# Fall 2021 Supplement and Course Offerings List

(vol20, no1.4, August 30, 2021)

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For General Registration Information and FAQs, please visit our [web page](#).

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

Session	Add	Drop and Pass/No Credit	Withdraw
Full Semester (Sep 1 – Dec 10)	September 15, 2021	November 5, 2021	December 10, 2021
Session I (Sep 1 – Oct 20)	September 8, 2021	October 5, 2021	October 20, 2021
Session II (Oct 21 – Dec 10)	October 28, 2021	November 19, 2021	December 10, 2021

## Cross-Registration Deadlines To find cross-registration instructions, click [here](#).

	Babson	Brandeis	Wellesley
<b>Cross-registration open period</b>	4/26/2021 – 9/3/2021 at 7:30 a.m.	8/2/2021 – 9/13/2021	4/26/2021 – 9/17/2021 at 11:59 p.m.
<b>First day of classes</b>	8/30/2021	8/26/2021	9/8/2021
<b>Drop deadline</b>	9/3/2021 at 7:30 a.m.	11/12/2021	10/1/2021 at 11:59 p.m.

Questions? Contact the Registrar's Office at Olin College, [registrar@olin.edu](mailto:registrar@olin.edu).

## Registration Special Notes

### Course Schedule Blocks:

As you may have noticed, we are keeping 90 minute blocks with 30 minutes between blocks and without a common lunch block for the Olin Community. This is following COVID-19-related protocol. When we are able (in a future semester), we will increase the in-class time back to 100 minutes of instruction. We have returned to the Monday/Thursday, Tuesday/Friday class meeting pattern.

### Curriculum Category in the Offerings List (pdf):

Based on positive feedback, we are continuing to use the *curriculum category* in our offerings listing. This will help you know what the offering typically corresponds to for specific degree requirements. This column should also help Engineering degree students with flexible concentrations understand the generalized topic track of a particular course. Additionally, sometimes these categories change as Olin changes so be sure to reference them and to inquire if you have questions.

### Class of 2022 CAPSTONE Registrations:

Based on the results of the Capstone survey, you were notified by the capstone team if you have been assigned to ADE, SCOPE or EEC. The Registrar's Office has registered you for your assignment prior to your registration group. If you have questions about your assignment, please connect with Scott Hersey and Ben Linder. Or, if you have other questions, please contact [registrar@olin.edu](mailto:registrar@olin.edu).

### Thesis Option

A reminder for students and advisers that Olin has a year-long Thesis Research option available to students working with faculty mentors. The program provides an opportunity for students to conduct advanced research work over a duration of two consecutive semesters that culminates in a written thesis document. Enrollment in the thesis option is by faculty mentor approval. Students would register for an ISR-G Thesis Research in Semester 1 and ISR-G Thesis in Semester 2. See [Olin College of Engineering - Curricular and Experiential Learning Prototypes \(smartcatalogiq.com\)](https://smartcatalogiq.com) for details.

## Olin CW Story Slam

### **Instructor(s)**

Gillian Epstein & Jon Adler

### **AHS Credit**

We are thrilled to offer our story slam experience as a group Independent Study for 2 AHS credits. Opt in for credits if you like...or not. Up to you!

### **Meetings and Performance**

A one-hour meeting) every two weeks during Fall 2021 semester (day and time TBD based on group schedules); Perform at Candidates' Weekends Spring 2022 semester (specific dates TBD)

### **Description**

Interested in developing a short, creative non-fiction story about you? Want to perform your story at our 6<sup>th</sup> Candidates' Weekend Story Slam? We can't wait to collaborate!

Here are some wonderful examples from the past:

- Entire 2020 (Zoom) Story Slam: [https://www.youtube.com/watch?v=dhSKdatP2\\_A&t=1871s](https://www.youtube.com/watch?v=dhSKdatP2_A&t=1871s)
- Antonio Perez (2019): <https://www.youtube.com/watch?v=4E8rsNNReAA&t=54s>
- Hwei-Shin Harriman (2019): [https://www.youtube.com/watch?v=g9THZ\\_jkry0&t=10s](https://www.youtube.com/watch?v=g9THZ_jkry0&t=10s)

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!

### **Deliverables**

Students are required to produce iterative drafts leading to a final "story slam" piece, about 5 minutes in length. Students will perform this piece at all three CW in 2022.

**Have more questions or ready to sign up?**  
**Just email [gillian.epstein@olin.edu](mailto:gillian.epstein@olin.edu) and [jadler@olin.edu](mailto:jadler@olin.edu)**

### Rising Sophomores (Class of 2024): Some Details:

- The Quantitative Engineering Analysis (QEA) sequence continues into your 2<sup>nd</sup> year at Olin. All currently enrolled students in QEA2 have been preregistered into QEA3.
- Your time to take Principles of Integrated Engineering (PIE, formerly POE) is Fall 2021. There are 6 sections being offered for all rising sophomores and rising juniors. Please make sure you plan accordingly and enroll this fall. It will be PIE-EPIC!

### Discrete Mathematics Clarification **UPDATE**:

~~In the course survey we shared that we will be shifting when we offer Discrete Mathematics and I want to articulate this note again for clarification. We WILL continue to offer Discrete Mathematics every year (as we have since the beginning of Olin). This Fall 2021 (academic year 2021-22), there WILL be 2 sections of Discrete Mathematics with Professor Sarah Spence Adams. In the academic year of 2022-23 (the year after next), the rotation of Discrete will shift to every spring semester (spring 2023 being the start of the shift). There will be no year where we don't teach Discrete (2021-22 in the fall; 2022-23 in the spring).~~

In the course survey we shared that we will be shifting when we offer Discrete Mathematics. As a result of registration, we have, again, shifted. This change will occur in the 2023-24 academic year.

Here is the sequence:

Fall 2021 (academic year 2021-22) – 2 sections of Discrete Mathematics

Fall 2022 (academic year 2022-23) – 2 sections of Discrete Mathematics

Spring 2024 (academic year 2023-24) – sections of Discrete Mathematics

### ME Core update

- No ME requirements are changing next year and no courses are going away yet
- MEEP! prototype offered as elective
- Encourage rising sophomores to enroll in Mechanics of Solids and Structures
  - Lecture + tutorial format in fall 2021
  - May not run again 'til spring 2023
- Encourage '23.5s and up to enroll in Thermodynamics if they haven't already
  - May not run again in current form (may be 2+2 credits or integrated with Transport in future)

More info on proposed future changes:

[https://docs.google.com/presentation/d/1\\_glwRvhRj\\_GlzceBrUJC1nkSMuLH3FZikluDhHNJh0/edit?usp=sharing](https://docs.google.com/presentation/d/1_glwRvhRj_GlzceBrUJC1nkSMuLH3FZikluDhHNJh0/edit?usp=sharing)

Students can email Emily Tow or Jeff Dusek with questions.

### Microcontrollers Elective:

Stan Reifel is offering his elective again this fall. He will be meeting individually with students so there is no set time. If you are interested, please enroll and then a one-on-one schedule will be arranged directly with Stan.

### Environmental Consulting at Olin (ECO):

The inaugural offering of ECO was during our disrupted semester of Spring 2020. We are running this experimental course again. – Awesome!

This course is an Interdisciplinary Engineering course in Environmental Consulting at Olin. It is open to all students, except first years. **It can be taken even if the student previously completed ECO in Spring 2020.** Additionally, for students who would like to explore the entrepreneurial content related to ECO projects, there is an option to sign up for a 2 or 4 cr Iterate course along with ECO. Please contact Lawrence Neeley (lneeley@olin.edu) to explore this option.

### Waitlists for Courses with Two Numbers

If you want to join a waitlist for Data Science (MTH2131 and ENGR3531) or Machine Learning (MTH2188A and ENGR3599A) please email [registrar@olin.edu](mailto:registrar@olin.edu) after you register. We will maintain a waitlist as the system does not allow waitlists for connected courses.

## 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.

## **New, Updated, and Special Topics Courses**

### **AHSE1160-01: Arts, Humanities, Social Science Foundation**

#### ***Democracy and Media***

Instructors: Graeff

Credits: 4 AHS

Hours: 4-0-8

*Registration note: AHS FOUNDATION; restricted to first year students*

Every day, you have the opportunity to choose democracy. When we think of democracy, we usually think of a form of government: a representational democracy like the United States. But, the experience of participating in a representational democracy is not always democratic. Conversely, companies and colleges like Olin are not organized as democracies, and yet the people that work and study there have many opportunities to practice democracy. Democracy is something you, and those around you, can choose to create and practice. To achieve this, we must acknowledge that democracy is contextual and mediated. Dimensions such as gender, race, class, ideology, norms, economics, and institutional power all affect the political standing of citizens and issues. Media, too, has long shaped the experience of democracy: debate, writing, voting, and petitioning are ancient technologies. The design and use of contemporary information and communication technology dramatically shape how democracy plays out. This course will ask you to confront this tangle of interests, identity, technology, and power. We will ask ourselves the quintessential civic question: "What should we do?" and consider "What is my role and responsibility as a citizen? as an engineer? as a member of the Olin community?" You will explore ways to make the spaces you live and work in more democratic. You will practice using your voice and influence to make change through public narrative, collective action, and media.

### **AHSE1199A-01: Arts, Humanities, Social Science Foundation**

#### ***Infrastructure Studies***

Instructor: Chachra

Credits: 4 AHS

*Registration note: AHS FOUNDATION; restricted to first year students*

We live our lives embedded in systems that help take care of many of our basic needs, as well as some that are not so basic: warmth (or cooling), clean water, hygiene, and communications. At the same time, these systems provide the technological context for our engineering work. But we rarely notice infrastructure until something goes wrong. In this course, we'll investigate the systems that surround us, including water, sewage, electricity, telecommunications, transport, and more. We'll start thinking more broadly about infrastructure, asking questions like "what makes a system 'infrastructure', and why?". To do this, we'll draw from a wide range of fields and materials, from scholarly essays to videogames. And we'll consider our collective future: how might we make infrastructural systems more sustainable, resilient, and equitable? By the end of the semester, you will have a new awareness and understanding of these systems that underpin our lives and engineering work, and you will have the opportunity to document and share your own exploration of these systems.

### **AHSE2199:01: Special Topics in Arts, Humanities and Social Science**

#### ***Digital Photography: Seeing is Believing***

Instructor: Donis-Keller

Credits: 4 AHS

Hours: 4-0-8

*Registration note: AHS elective*

This course is all about the communication of ideas and developing an independent creative voice in the visual arts using digital photography as the medium of choice. Fine art photography and documentary photography are the twin focus areas with individual expression fostered and doing good in the world using photography will be prioritized. *Digital Photography: Seeing is Believing* will be a hands-on course taught in studio mode and will be project-based with weekly homework assignments that also includes several major projects allowing longer-term project engagement. Digital single-lens reflex (DSLR) cameras, digital editing tools and printing capabilities are provided and gaining technical facility with these tools is an important goal. We will consider the many interpretations of fine art photography from traditional landscape work to conceptual art. A second equally important focus is how photography can be used to do good in the world, in particular, to call attention to climate change and what to do about it. The work of contemporary fine art photographers and documentary photographers will be studied in depth and trips to museum and gallery exhibits will be scheduled as appropriate as will field trips with the class to capture images in interesting locations. Students with no prior experience with photography are strongly encouraged to enroll in this course and are as welcome as those who have already discovered a passion for creative expression using photography.

**AHSE2199A-01: Special Topics in Arts, Humanities and Social Sciences**

***Framing History through Comics: Icons, Identities, and Impacts***

Instructor: Martello

Credits: 2 AHS

*Registration notes: Session II course. AHS elective*

Comic books and graphic novels unlock the vast and epic potential of narrative storytelling. In *Framing History* we will explore how comics make history (what would you choose as the most impactful comics and graphic novels of all time?) as well as how they portray history. We will study a selection of classic graphic novels in different genres such as biography, autobiography, history, superhero, activism, children's fiction, and others. As we analyze the dynamic space where prose meets art, we will also learn how comics reflect their historical context while impacting so many aspects of our society in return.

*Fall 2021 Special Note:* This is the inaugural offering of *Framing History*, and as such, we will prototype many aspects of the class. Students will be asked to try out different readings and assignments and offer feedback. Our journey will feature many plot twists and we might have some cliffhangers along the way, but those who long for adventure will have a rare chance to co-design a course... and help write the sequel!

**AHSE2199B-01: Special Topics in Arts, Humanities and Social Sciences**

***Context and Consequences***

Instructor: Wood

Credits: 2 AHS

Hours: 2-0-4

*Registration note: AHS elective*

This course leverages Olin students' other curricular experiences to support student construction of critical reflective practice. In other words, this is a place to think about the other courses you are taking and the implications of what you are learning there, in the context of existing systems and communities. Through a range of approaches and voices, we will explore basic concepts of critical theory and practice applying this framework to our experiences. By understanding the social and hierarchical structures that surround us and our work, we will begin to articulate the consequences of actions and the impact of what we do as students, as citizens of the world, and as engineers.

**ENGR3180-01: Special Topics in Engineering:**

***Renewable Energy***

Instructor: Vanasupa

Credits: 4 ENGR

Hours: 4-0-8

*Prerequisites: all first year required courses.*

*Registration note: May count as ECE, ME, or SUST elective*

Exploration of the science and dynamics of renewable energy technologies and their implementation, including grid and storage technologies. A systems-level exploration of renewable energy technology on human populations, economic, social and political power structures will be included as an integral part of this class. Course includes a renewable energy project design and simulation. Topics are: systems dynamics, thermodynamics, grid energy systems, solar photovoltaic, solar thermal, geothermal, hydroelectric and wind systems. Skills developed include the design and simulation of the energy performance of a renewable energy system using the National Renewable Energy Laboratory simulator.

### **ENGR3299-01: Special Topics in Design Engineering**

#### ***Educational Design for Engineers***

Instructor: Zastavker

Credits: 4 ENGR

Hours: 3-0-9

*Registration note: satisfies Design Depth requirement*

*Recommended Requisite: This is an advanced design course. Previous experience in the teaching/mentoring/leadership space may be useful but are not critical. For example, AHSE2170: Teaching and Learning in Undergraduate Science and Engineering or Education Research/Independent Studies may be useful but is not critical.*

*Prerequisite: ENGR2250: UOCD*

Have you ever thought about what it may mean to teach? Fully teach, including design and implementation of a learning environment? Have you ever wondered what goes into creation of an effective learning environment for all learners?

This course will examine select topics in educational design, including learning and motivation theories of education, in undergraduate science and engineering. By engaging independently and collaboratively in reading, discussions, wonderings, and design activities, you will apply what you have learned and experienced to various learning contexts through your own praxis. It is only through this hands-on set of activities that you will be able to have a fully embodied experience of what it means to design and implement an effective learning ethos while taking into account the evolving higher education environment and current research into curriculum, educational design, assessment and feedback that supports student learning.

### **ENGR3499A-01: Special Topics in Electrical and Computer Engineering:**

#### ***Power Electronics***

Instructor: Arnet

Hours: 4-4-4

*Registration notes: ECE elective*

*Prerequisites: ISIM and Circuits*

In this course, the student will learn the fundamentals of power electronics in the context of DC-DC switched-mode power supplies. The material studied is multidisciplinary, covering the analysis and control of power-converter topologies, design and fabrication of magnetic components and realization of MOSFET powerstages. The theory is taught in an applied and design-oriented fashion through simulation-based analysis and hands-on and collaborative experimentation. It is a primary objective of this course to apply fundamental concepts with the aim of developing an intuitive big picture understanding and to encourage independent exploration.

The applied component of the class is centered around a low-voltage flyback converter. The lesson modules will gradually build up the necessary knowledge to design and build a custom flyback transformer, specify key powerstage components including snubber and clamping circuits and realize an analog closed-loop voltage controller.

Topics that will be introduced/revisited include:

- Modeling and simulation of switched-mode topologies
- Reading datasheets and extracting key information for modeling and design purposes
- Electromagnetic principles for the design of inductors and transformers
- Semiconductor operation and loss calculations
- Selection of powerstage components (MOSFET, filter capacitors, gate-drivers)
- Protection circuits and snubber design
- Calculating and measuring transfer functions

- Tuning and implementing analog control loops (loop shaping method)

Students will be asked to complete pre- and post-class assignments, and to provide weekly evidence of their explorative work by submitting engineering notes with original contents. Additionally, students will be teamed-up into groups to further investigate specific topics and present their findings to the rest of the class.

### **ENGR3499B: Special Topics in Electrical and Computer Engineering:**

#### ***Microcontrollers for the Real World***

Instructor: Reifel

Credits: 4 ENGR

Hours: 4-0-8

*Registration note: ECE elective*

*Prerequisites: ENGR1125 Introduction to Sensors, Instrumentation, and Measurement; ENGR2110 Principles of Engineering (or instructor's permission)*

*Website: <http://reifel.org/realworld/>*

In this course, students will learn to design a real-world controller using modular components. The class will focus on all aspects of integrating a microcontroller with a simple product. Each student will be given an electro-mechanical device that could be a future product. The student's task is the engineering of the product's electronics, printed circuit board, user interface, and software. Students will learn and use schematic capture, PCB layout, and C programming in the development of their controller. The style of instruction will be similar to mentorship (rather than lectures or group projects) with weekly one-on-one meetings for progress reports, discussions and advising. Students will work independently and can expect a significant workload with weekly deliverables.

### **ENGR3531-01 and MTH2131-01**

#### ***Data Science***

Instructor: del Rosario

Credits: 2 ENGR + 2 MTH

*Registration notes: must register for both parts. Satisfies ProbStat requirement.*

*Prerequisites: This version of Data Science has zero prereqs; SoftDes is not necessary for this course*

*Fall 2021:* Data Science is a powerful toolkit to extract usable insights from data. In this class, you will learn tools and gain understanding. You will use software tools to *liberate* data from published images and tables, wrangle messy datasets into machine learning (ML)-ready form, fit and interpret ML models, and visualize to extract meaning. You will also speak the language of uncertainty—statistics—to avoid getting fooled by models. You will criticize published findings and ask what is, and what is not, in the data. Assignments will include regular practice exercises, progressively puzzling real-data challenges, and a final project of your choice where you obtain, wrangle, and understand a dataset.

All coding will be in the R programming language with the Tidyverse package: You will *not* need prior R language experience, as we will start from the ground and progress to fluency. Note that this 4-credit course is listed as two concurrent 2-credit ENGR and MTH courses to reflect its programming and statistics content. This course satisfies the probability and statistics requirement.

### **ENGR3599-01: Special Topics in Computing**

#### ***Databases***

Instructor: Riccardo Pucella

Credits: 4 ENGR

*Registration note: Core-E:C E:C Elective*

This is an introduction to database systems. Topics covered include: the relational model, SQL-based querying, transactions, data structures, as well non-relational database models. The approach will be hands-on: rather than write code to interface to existing databases, we will write code to implement simplified versions of various database models and their query systems.

## **ENGR3599A/MTH2188A: Special Topics in Computing/Designated Alternative in Mathematics**

### ***Machine Learning***

Instructors: Michalka, Nugent

Credits: 2 ENGR, 2 MTH

Hours: 3-0-9

*Prerequisite: Software Design*

*Registration notes: Fulfills ProbStat requirement; E:C elective*

Machine learning technology is rapidly reshaping how we live our lives. Machine learning approaches have driven recent progress in an array of technologies that have the potential to realize huge positive impacts on our world (e.g., self-driving cars, language translation, personalized recommendation and search). However, the influence of machine learning does not end with these highly visible technologies. Machine learning algorithms are impacting our world in ways that are far less known to the general public, such as in job applicant evaluation, criminal justice, finance, politics, and medicine.

The principal aim of this course is to equip students with a multi-faceted and interdisciplinary skillset to understand, implement, and critically evaluate machine learning systems. In service of this goal, students will learn the major algorithmic and mathematical frameworks that undergird modern machine learning methods. Students will learn effective processes for implementing, testing, and refining machine learning systems across a range of application domains. Students will learn how the decisions that machine learning practitioners make interact with larger societal context by considering factors such as transparency, fairness, bias, and privacy. The course assignments will take a variety of forms, including problem sets, open-ended projects, and discussion-oriented readings.

Whether you want to develop new machine learning algorithms, apply machine learning to real world problems, or simply want to have a better understanding of what's happening in this rapidly evolving field, this course has something of value to offer you.

## **ENGX2199: Special Topics in Interdisciplinary Engineering**

### ***Environmental Consulting at Olin***

Instructor: Nugent, Rodgers

Credits: 4 ENGR

Hours: 4-0-8

*Registration note: May be repeated by students who completed ECO in Spring 2020.*

In this course, we will work to reduce the carbon emissions from a major greenhouse gas polluter-- Olin College. You will work as consultants to different Olin departments, learning about their challenges and implementing solutions to reduce emissions. In this course, you will learn about strategies to enact positive change-- strategies that you can take with you into the larger world for the rest of your life.

### **Special Spring 2022 Offering:**

*The intro sustainability course for the E:SUST concentration will be offered as part of an 8-credit integrated course block. In future semesters, 4-credit options for the intro sustainability requirement will be offered.*

**Didn't find the course you're looking for? Check the course browser at**

**[https://my.olin.edu/ICS/Course\\_Schedules.jnz](https://my.olin.edu/ICS/Course_Schedules.jnz)**



Area	Course #	Sect #	Course Title	Instructor / Teaching Team	Time	Location: MAC (unless noted otherwise)	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
AHS	AHSE0112	01	AHSE0112: The Olin Conductorless Orchestra	Dabby, Diana	R 6:30-8:30pm	318 326 328	1	30	NA		AHS
AHS	AHSE2114	01	AHSE2114: Science Fiction and Historical Context	Martello, Rob	TF 2-3:30pm	326	2	28	small	Session I; 2 credits	AHS
AHS	AHSE2199A	01	AHS2199A: Special Topics in Arts, Humanities and Social Sciences: <i>Framing History through Comics</i>	Martello, Rob	TF 2-3:30pm	326	2	28	small	Session II; 2 credits	AHS
AHS	AHSE2199	01	AHSE2199: Special Topics in Arts, Humanities and Social Sciences: <i>Digital Photography: Seeing is Believing</i>	Donis-Keller, Helen	TF 12-1:30pm	313	4	14	large		AHS
AHS	AHSE2199B	01	AHSE2199B: Special Topics in Arts, Humanities and Social Sciences: <i>Context and Consequences</i>	Wood, Alison; Bignoli, Callan	TF 10-11:30am	328	2	10	large		AHS ELECTIVE
AHS	AHSE3190	01	AHSE3190: AHS Preystone	Epstein, Gillian	NA	NA	1	50	NA		AHS
CAPSTONE	ENGR4190	01	ENGR4190: SCOPE: Senior Capstone Program in Engineering	Ferzoco, Alessandra; Hersey, Scott; Townsend, Jessica; Woodard, Jason	W 9-6:00pm F 8-9:30am	Varied	4	NA	NA	registration via Capstone survey	CAPSTONE
CAPSTONE	ENGR4290	01	ENGR4290: Affordable Design and Entrepreneurship Engineering Capstone	Graeff, Erhardt; Hersey, Scott; Linder, Ben; et al	T 3:30-6:30pm R 3:30-5:30pm	Weissman Foundry MH120 (T)	4	NA	small	registration via Capstone survey	CAPSTONE
CAPSTONE	ENGR4599	01	ENGR4599: Engineering Capstone Alternative	Harris, Scott; Miller, Scott	W 1-5:00pm	128	4	NA	NA	registration via Capstone survey	CAPSTONE
DSN	ENGR3240	01	ENGR3240: Tell the Story of What You Make	Ferguson Sauder, Tim	MR 1-3:30pm	128	4	25	small		DESIGN Dpth
DSN	ENGR3260	01	ENGR3260: Design for Manufacturing	Barrett, Dave	MR 10-11:30am	128	4	20	small	Student must elect lab A or B, along with the standard M/R 10-11:30am	ME Elective DESIGN Dpth
DSN	ENGR3260 L	A B	Design for Manufacturing LAB	Barrett, Dave	Lab A: M 12-1:30pm Lab B: R 2-3:30pm	Machine Shop	0	10 per lab	small	Student must elect lab A or B, along with the standard M/R 10-11:30am	ME Elective DESIGN Dpth
DSN	ENGR3290	01	ENGR3290: Affordable Design and Entrepreneurship	Graeff, Erhardt; Hersey, Scott; Linder, Ben; et al	T 3:30-6:30pm R 3:30-5:30pm	Weissman Foundry	4	5	large		DESIGN Dpth

Area	Course #	Sect #	Course Title	Instructor / Teaching Team	Time	Location: MAC (unless noted otherwise)	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
DSN	ENGR3299	01	ENGR3299: Special Topics in Design Engineering: Educational Design for Engineers	Zastavker, Yevgeniya	MR 12-1:30pm	318	4	24	small		DESIGN Dpth
E:C	ENGR3515	01	ENGR3515: Data Structures and Algorithms	Downey, Allen	MR 2-3:30pm	318	4	40	large		Core E:C
E:C	ENGR3540	01	ENGR3540: Complexity Science	Downey, Allen	TF 10-11:30am	318	4	40	large		Core E:C
E:C	ENGR3599	01	ENGR3599: Special Topics in Computing: <i>Databases</i>	Pucella, Riccardo	M 4-6:30pm	326	4	28	small		E:C Elective Core E:C
ECE	ENGR3410	01	ENGR3410: Computer Architecture	Uttamchandani, Avinash	M 4-7:00PM R 4-5:30pm	304	4	30	small		Core ECE
ECE	ENGR3420	01	ENGR3420: Introduction to Analog and Digital Communication	Lohmeyer, Whitney	T 8:30-11:30am	428	4	30	NA		Core ECE
ECE	ENGR3499A	01	ENGR3499A: Special Topics in Electrical & Computer Engineering: <i>Power Electronics</i>	Arnet, Beat	MR 10-11:30am	304	4	20	NA		ECE Elective
ECE	ENGR3499B	01	ENGR3499B: Special Topics in Electrical & Computer Engineering: <i>Microcontrollers for the Real World</i>	Reifel, Stan	self-scheduled w/ instructor	NA	4	6	small	reach out to instructor for details	ECE Elective
ENGR	ENGR1330	01	ENGR1330: Fundamentals of Machine Shop Operations	Andruskiewicz, Bruce	W 1-5:00pm	Machine Shop	4	6	small		ELECTIVE
ENGR	ENGR2110	01 02	ENGR2110: Principles of Integrated Engineering (PIE)	Lee, Chris; Malley, Melinda; Millner, Amon; Minch, Brad; Reifel, Stan	MR 10-11:30am	306 309	4	30+30	small		Required ENGR
ENGR	ENGR2110	03 04	ENGR2110: Principles of Integrated Engineering (PIE)	Lee, Chris; Malley, Melinda; Millner, Amon; Minch, Brad; Reifel, Stan	MR 12-1:30pm	306 309	4	30+30	small		Required ENGR
ENGR	ENGR2110	05 06	ENGR2110: Principles of Integrated Engineering (PIE)	Lee, Chris; Malley, Melinda; Millner, Amon; Minch, Brad; Reifel, Stan	TF 10-11:30am	306 309	4	30+30	small		Required ENGR
ENGR	ENGR3180	01	ENGR3180: Renewable Energy	Vanasupa, Linda	TF 2-3:30pm	318	4	30	large		ME Elective E:Sust Elective ECE Elective

Area	Course #	Sect #	Course Title	Instructor / Teaching Team	Time	Location: MAC (unless noted otherwise)	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
ENGR	ENGX2199	01	ENGX2199: Environmental Consulting at Olin (ECO)	Nugent, Carrie; Rodgers, Claire	MR 10-11:30am	213	4	28	small		ELECTIVE
ENTRP	AHSE2515	01	AHSE2515: Iterate	Neeley, Lawrence	TF 12-1:30pm	428	2	24	small	Session I; 2 credits	ENTRP
ENTRP	AHSE2515	02	AHSE2515: Iterate	Neeley, Lawrence	TF 2-3:30pm	428	2	24	small	Session I; 2 credits	ENTRP
ENTRP	AHSE2515A	01	AHSE2515A: Iterate	Neeley, Lawrence	TF 12-1:30pm	428	2	24	small	Session II; 2 credits	ENTRP
ENTRP	AHSE2515A	02	AHSE2515A: Iterate	Neeley, Lawrence	TF 2-3:30pm	428	2	24	small	Session II; 2 credits	ENTRP
FYR	AHSE1100	01	AHSE1100: AHS Foundation: History of Technology: A Cultural & Contextual Approach	Martello, Rob	TF 10-11:30am	326	4	18	NA	Available to First Year Students Only	AHS Fnd
FYR	AHSE1122	01	AHSE1122: AHS Foundation: The Wired Ensemble -Instruments, Voices, Players	Dabby, Diana	TF 2-3:30pm	304 305	4	15	NA	Available to First Year Students Only	AHS Fnd
FYR	AHSE1155	01	AHSE1155: AHS Foundation: Identity from the Mind & the Brain: Who Am I and How Do I Know	Adler, Jon	TF 10-11:30am	128	4	16	small	Available to First Year Students Only	AHS Fnd
FYR	AHSE1155	02	AHSE1155: AHS Foundation: Identity from the Mind & the Brain: Who Am I and How Do I Know	Adler, Jon	TF 2-3:30pm	128	4	16	small	Available to First Year Students Only	AHS Fnd
FYR	AHSE1160	01	AHS1160: AHS Foundation: Democracy and Media	Graeff, Erhardt	TF 2-3:30pm	417	4	20	NA	Available to First Year Students Only	AHS Fnd
FYR	AHSE1199	01	AHSE1199: AHS Foundation: Infrastructure Studies	Chachra, Debbie	MR 2-3:30pm	328	4	18	NA	Available to First Year Students Only	AHS Fnd
FYR	ENGR1200	all sections	ENGR1200: Design Nature	Chachra, Debbie; Ferguson Sauder, Tim; Townsend, Jessica	MR 10-12:30pm	204 206 209 MH120	4	90	NA	Available to First Year Students Only	DESIGN Fnd
FYR	OIE1000	01	OIE1000: Olin First Year Introduction OFYI	Waranyuwat, Adva	W 2-3:30pm	MH120	1	90	NA	Available to First Year Students Only	Required FYR

Area	Course #	Sect #	Course Title	Instructor / Teaching Team	Time	Location: MAC (unless noted otherwise)	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
FYR: Interdisciplinary	MTH1111_SCI1111	01-03	MTH1111_SCI1111: Modeling and Simulation of the Physical World	del Rosario, Zachary; Matsumoto, Steve; Wood, Alison	MWR 4-5:30pm	204 206 209 213 MH120	2+2	92	NA	Available to First Year Students Only	Required ENGR
Interdisciplinary	ENGX2000	01	ENGX2000: Quantitative Engineering Analysis 1	Geddes, John; Lohmeyer, Whitney; Michalka, Sam	TW 12-1:30pm	318 326 328	4	90	NA		Required ENGR
Interdisciplinary	ENGX2010	01	ENGX2010: Quantitative Engineering Analysis 3	Dusek, Jeff; Malley, Melinda; Tow, Emily	TF 12-1:30pm	113 126 128	4	90	NA		Required ENGR
Interdisciplinary	MTH2131_ENGR3531	01	MTH2131_ENGR3531: Data Science	del Rosario, Zachary	MR 12-1:30pm	326	2+2	30	small		ProbStat
Interdisciplinary	MTH2188A_ENGR3599A	01	MTH2188A_ENGR3599A: Machine Learning	Michalka, Sam; Nugent, Carrie	TF 10-11:30am	MH120	2+2	48	large		ProbStat
ME	ENGR2320	01	ENGR2320: Mechanics of Solids & Structures	Dusek, Jeff	R 8-9:30am	328	4	45	small	Student must elect group A, B, or C along with the standard R 8-9:30am lecture	Core ME
ME	ENGR2320 L	A B C	ENGR2320: Mechanics of Solids & Structures	Dusek, Jeff	A: M 8-9:30am B: T 8-9:30am C: T 2-3:30pm	328	0	15 per group	small	Student must elect group A, B, or C along with the standard R 8-9:30am lecture	
ME	ENGR2350	01	ENGR2350: Thermodynamics	Ferzoco, Alessandra	TF 10-11:30am	417	4	32	large		Core ME
ME	ENGR3330	01	ENGR3330: Mechanical Design	Barrett, Dave	MR 8-9:30am	128	4	28	small		Core ME
MTH	MTH2110	01	MTH2110: Discrete Math	Spence Adams, Sarah	MR 10-11:30am	326	4	32	large	See supplement for updated information regarding future Discrete Math offerings	ADV MATH
MTH	MTH2110	02	MTH2110: Discrete Math	Spence Adams, Sarah	MR 2-3:30pm	326	4	32	large	See supplement for updated information regarding future Discrete Math offerings	ADV MATH
SCI	SCI1240	01	SCI1240: Designing Better Drugs	Pratt, Joanne	TF 12-1:30pm W 2-4:30pm (lab)	417 406(lab)	4	21	small		BIO
SCI	SCI1410	01	SCI1410: Materials Science and Solid State Chemistry: <i>Materials and the Practice of Experimentation</i>	Neal, Matt	MR 12-3:30pm	413	4	21	large		MATSCI_CHEM_ENV Engr

Area	Course #	Sect #	Course Title	Instructor / Teaching Team	Time	Location: MAC (unless noted otherwise)	Credits	Enroll Limits	Waitlist	Notes	Curriculum Category
SCI	SCI1440	01	SCI1440: Materials Creation, Consumption, and Impact	Stolk, Jon	TW 4-7:00pm	413	4	21	large	<b>Experimental Grading</b>	MATSCI_CHEM_ENV Engr
SCI	SCI1440	02	SCI1440: Materials Creation, Consumption, and Impact	Stolk, Jon	MR 4-7:00pm	413	4	21	large	<b>Experimental Grading</b>	MATSCI_CHEM_ENV Engr
ADMIN	AWAY1000	01	Study Away Program	Administration	NA	NA	12	NA	NA	Enroll in this course block to confirm your Study Away semester	
ADMIN	OIP1000	01	The Olin Internship Practicum I	Phelps, Sally	NA	NA	1	NA	NA	See Post Graduate Planning to Enroll	
ADMIN	OIP1001	01	The Olin Internship Practicum II	Phelps, Sally	NA	NA	1	NA	NA	See Post Graduate Planning to Enroll	

Color Key- Offering Block/ Del Mode	ECE	ME	ENGR / DSN Courses	ENGR/Foundation Requirement	INTEGRATED OFFERING (colored via discipline blending)										
	Monday			Tuesday		Wednesday									
8:00 AM		ENGR 3330 Mechanical Design MAC128	ENGR 2320 Mechanics of Solids & Structures Group A MAC328		ENGR 2320 Mechanics of Solids & Structures Group B MAC328										
8:30 AM				ENGR 3420 Intro Analog and Digital Communication 8:30-11:30am MAC428											
10:00 AM	ENGR 1200 ALL Sections Design Nature 10-12:30pm MAC 204/206/209 MH120	ENGR 2110 01 & 02 Principles of Integrated Engineering MAC 306/309	MTH 2110-01 Discrete Math MAC326	ENGR 3499A Special Topics in Elect & Computer Engr: Power Electronics MAC304	ENGRX2199 Environmenta l Consulting at Olin (ECO) MAC213	ENGR 3260 Design for Manufacturing MAC128	ENGR 2110 05 & 06 Principles of Integrated Engineering MAC 306/309	AHSE 1155 01 Identity from the Mind and the Brain MAC128  AHSE 1100 History of Technology: A Cultural & Contextual Approach MAC326	ENGR 3540 Complexity Science MAC318	ENGR 3509A and MTH 2188A Machine Learning MH120	ENGR 2350 Thermodynam ics MAC417	AHSE 2199B Special Topics in AHS: Context & Consequence s MAC328	Academic Life Mtgs 10-11:30am		
11:30 AM		ENGR 2110 03 & 04 Principles of Integrated Engineering MAC 306/309	SCI 1410 Materials and the Practice of Experimentati on MAC413	ENGR 3531 and MTH 2131 Data Science MAC326	ENGR 3260 L Design for Manufacturing LAB A MAC318	ENGR 3299 ENGR3299: Special topics in Design Engineering: Educational Design for Engineers MAC318	ENGX 2010 Quantitative Engineering Analysis 3 MAC113/126/ 128	ENGX 2000 Quantitative Engineering Analysis 1 TW 12- 1:30pm MAC318/326/ 328	SCI 1240 Designing Better Drugs MAC417	AHSE 2515 01 Session I: Iterate MAC428  AHSE 2515A 01 Session II: Iterate MAC428	AHSE 2199 Special Topics in AHS: Digital Photography: Seeing is Believing MAC313	ENGX 2000 Quantitative Engineering Analysis 1 TW 12- 1:30pm MAC318/326/ 328			
1:30 PM	ENGR 3240 Tell the Story of What You Make MAC128														
2:00 PM	1-3:30pm MAC128	AHSE 1199 AHS Fnd Topics: Infrastructure Studies MAC328	ENGR 3515 Data Structures and Algorithms MAC318	MTH 2110-0 2 Discrete Math MAC326			AHSE 1155 02 Identity from the Mind and the Brain MAC128  AHSE 1160 AHS Fnd Topics: Democracy & Media MAC417  AHSE1122 The Wired Ensemble MAC304/305	ENGR 2320 Mechanics of Solids & Structures Group C MAC328	AHSE 2515 02 Session I: Iterate MAC428  AHSE 2515A 02 Session II: Iterate MAC428	AHSE2114 Session I Science Fiction and Historical Context MAC326  AHSE2199A Session II: Special Topics in AHS: Framing History through Comics MAC326	ENGR 3180 Renewable Energy MAC318	OIE 1000 Olin First Year Introduction (OFY) MH120	SCI 1240 Designing Better Drugs LAB 2-4:30pm MAC406	ENGR4599 Engineering Capstone Alternative 1-5pm MAC128	ENGR 1330 Fundamentals of Machine Shop Operations 1-5pm Machine Shop
3:30 PM															
4:00 PM	MTH 1111/ SCI 1111- All Sections ModSim MAC 204/206/209/2 13/MH 120	ENGR 3599 Special Topics in Computing: Databases 4-6:30pm MAC326	ENGR 3410 Computer Architecture M: 4-7:00pm MAC304	SCI 1440-02 Materials Creation, Consumption and Impact MR 4-7pm MAC413					SCI 1440-01 Materials Creation, Consumption and Impact TW 4-7pm MAC413	ENGR 3290 & 4290 Affordable Design & Entrp Tues 3:30-6:30p Thurs 3:30- 5:30p Weissman Foundry MH120	MTH 1111/ SCI 1111 All Sections ModSim MAC 204/206/209/2 13/MH 120	SCI 1440-01 Materials Creation, Consumption and Impact TW 4-7pm MAC413			
5:30 PM	Reserved for Collaborative BOW Courses														
6:30 PM	Reserved for Collaborative BOW Courses														
8:00 PM	Reserved for Collaborative BOW Courses														

ENGR 4190  
SCOPE  
9:00-6:00pm

AHSE		SCI				Math					Color Key- Offering Blocks			
Thursday						Friday								
ENGR 3330 Mechanical Design MAC128		ENGR 2320 Mechanics of Solids & Structures Lecture MAC328		ENGR 4190 SCOPE						8:00 AM				
										9:30 AM				
ENGR 1200 ALL Sections Design Nature 10-12:30pm MAC 204/206/209 MH120	ENGR 2110 01 & 02 Principles of Integrated Engineering MAC 306/309	MTH 2110-01 Discrete Math MAC326	ENGR 3499A Special Topics in Elect & Computer Engr: Power Electronics MAC304	ENGR 3260 Design for Manufacturing MAC128	ENGR2199 Environment al Consulting at Olin (ECO) MAC213	ENGR 2110 05 & 06 Principles of Integrated Engineering MAC 306/309	AHSE 1165 01 Identity from the Mind and the Brain MAC128  AHSE 1100 History of Technology: A Cultural & Contextual Approach MAC326	ENGR 3540 Complexity Science MAC318	ENGR 3599A and MTH 2188A Machine Learning MH120	ENGR 2350 Thermodyna m MAC417	AHSE 2199B Special Topics in AHSE: Context & Consequen s MAC328	10:00 AM		
												11:30 AM		
		ENGR 2110 03 & 04 Principles of Integrated Engineering MAC 306/309	SCI 1410 Materials and the Practice of Experimentation MAC413	ENGR 3531 and MTH 2131 Data Science MAC326	ENGR 3299 ENGR3299: Special topics in Design Engineering: Educational Design for Engineers MAC318	ENGR 2010: Quantitative Engineering Analysis 3 MAC113/126/ 128	SCI 1240 Designing Better Drugs MAC417	AHSE 2515 01 Session I: Iterate MAC428  AHSE 2515A 01 Session II: Iterate MAC428	AHSE 2199 Special Topics in AHSE: Digital Photography: Seeing is Believing MAC313			12:00 PM		
ENGR 3240 Tell the Story of What You Make 1-3:30pm MAC128			AHSE 1199 AHS Fnd Topics: Infrastructure Studies MAC328	MTH 2110-02 Discrete Math MAC326	ENGR 3260L Design for Manufacturing LAB B	ENGR 3515 Data Structures and Algorithms MAC318	AHSE 1165 02 Identity from the Mind and the Brain MAC128  AHSE 1160 AHS Fnd Topics: Democracy & Media MAC417  AHSE1122 The Wired Ensemble MAC304/305	AHSE 2515 02 Session I: Iterate MAC428  AHSE 2515A 02 Session II: Iterate MAC428	AHSE2114 Session I Science Fiction and Historical Context MAC326  AHSE2199A Session II: Special Topics in AHSE: Framing History through Comics MAC326	ENGR 3180 Renewable Energy MAC318			1:30 PM	
												2:00 PM		
MTH 1111/SCI 1111 All Sections ModSim MAC 204/206/209/21 3/MH 120	ENGR 3410 Computer Architecture MAC304	SCI 1440-02 Materials Creation, Consumption and Impact MR 4-7pm MAC413		ENGR 3290 & 4290 ADE Tues 3:30- 6:30p Thurs 3:30-5:30p Weissman Foundry								3:30 PM		
												4:00 PM		
		AHSE 0112 Olin Conductorless Orchestra Thurs: 6:30-8:30pm MAC318/326/328										5:30 PM		
												6:00 PM		
												7:30 PM		

# SPRING 2022 Course Offerings - updated 4.26.21 - subject to change

Course Name	Curriculum Role	Instructor	Notes
ME Math	ADV MATH	Geddes, John	
AHSE2155: Constructing and Performing the Self	AHS	Adler, Jon	
AHSE0112: The Olin Conductorless Orchestra	AHS	Dabby, Diana	
AHSE2131: Responsive Drawing and Visual Thinking	AHS	Donis-Keller, Helen	
AHSE3190: AHS Prepstone	AHS	Epstein, Gillian	
AHSE4190: Arts, Humanities, Social Science Capstone Project	AHS	Epstein, Gillian	
AHS Elective Wildcard	AHS	Martello, Rob	See E:SUST course
AHS Elective Wildcard	AHS	Martello, Rob	
AHSE2199: Grand Challenge Scholars Program	AHS	Wood, Alison	
BIO Wildcard: Biomes, Biodiversity and Climate Change (BCB)	BIO	Donis-Keller, Helen	
BIO Wildcard	BIO	Huang, Jean	See E:Sust Course
BIO Wildcard	BIO	Huang, Jean	
ENGR4190: SCOPE: Senior Capstone Program in Engineering	CAPSTONE	Ferzoco, Alessandra; Hersey, Scott; Townsend, Jessica; Woodard, Jason	registration via Capstone survey
ENGR4290: Affordable Design and Entrepreneurship Engineering Capstone	CAPSTONE	Graeff, Erhardt; Hersey, Scott; Linder, Ben; et al	registration via Capstone survey
ENGR4599: Engineering Capstone Alternative	CAPSTONE	Harris, Scott; Miller, Scott	Tentative
ENGR2510: Software Design	Core E:C	Graeff, Erhardt; Matsumoto, Steve; Millner, Amon	
ENGR3525: Software Systems	Core E:C	Matsumoto, Steve	
ENGR3520: Foundations of Computer Science	Core E:C	Pucella, Riccardo	
ENGR3390: Fundamentals of Robotics	Core E:Robo	Barrett, Dave	
ENGR3392: Robotics Systems Integration	Core E:Robo	Malley, Melinda	
E:SUST Course	Core E:Sust	TBD	8 credit offering for Introduction to Sustainability plus student choice
ENGR2XXXB: Engineering Systems Analysis: Signals	Core ECE	Dabby, Diana	
ENGR2420: Intro Microelectronic Circuits with laboratory	Core ECE	Minch, Brad	
ME Core Wildcard: 8 credit BIG THING	Core ME	Dusek, Jeff; Lee,Chris	
ENGR2XXXA: Engineering Systems Analysis: Dynamics	Core ME	Lee, Chris	



Course Name	Curriculum Role	Instructor	Notes
ENGR3310: Transport Phenomena	Core ME	Tow, Emily	
ENGR3240: Tell the Story of What you Make	DESIGN Dpth	Ferguson Sauder, Tim	
ENGR3290: Affordable Design and Entrepreneurship	DESIGN Dpth	Graeff, Erhardt; Hersey, Scott; Linder, Ben; et al	
ENGR3210: Sustainable Design	DESIGN Dpth	Linder, Ben	
AHSE2170: Teaching & Learning	ELECTIVE	Zastavker, Yevgeniya	
ENGR2250: User-Oriented Collaborative Design	DESIGN Fnd	del Rosario, Zachary; Linder, Ben; Zastavker, Yevgeniya; Guest	
ENGR3440: Principles of Wireless Communication	ECE Elective	Lohmeyer, Whitney	
ENGR1330: Fundamentals of Machine Shop Operations	ELECTIVE	Andruskiewicz, Bruce	
ENGR2330: Introduction to Mechanical Prototyping	Elective	Faas, Daniela	
AHSE2515: Iterate	ENTRP	Neeley, Lawrence	
AHSE1515: Products and Markets	ENTRP Fnd	Chachra, Debbie; Neeley, Lawrence; Pratt, Joanne	
SCI1430: Plastic Planet	MATSCI_CHEM_EN V Engr	Stolk, Jon	See E:SUST course
SCI1XXX: Paper Pancea (new number TBD)	MATSCI_CHEM_EN V Engr	Vanasupa, Linda	
ENGR3370: Controls	ME Elective/ECE Elective	Guest	Tentative
ENGR3531_MTH2131: Data Science	ProbStat	Downey, Allen	
MTH2136_SCI2136: AstroStats	ProbStat	Nugent, Carrie	Tentative
MTH_ENGR: Decision Making Sustainable Systems	ProbStat	Wood, Alison	TBD
ENGX2005: Quantitative Engineering Analysis 2	Required ENGR	del Rosario, Zachary; Geddes, John; Malley, Melinda	
ENGR1125: Introduction to Sensors, Instrumentation and Measurement	Required ENGR	Minch, Brad; Nugent, Carrie; Vanasupa, Linda	
Collaborative work with faculty (12-ish credit student XLP)	TBD	TBD	Tentative