



Advisement Newsletter

December 9, 2020

Best wishes for success with your final exams, a Merry Christmas, and a Happy New Year!

Newsletter will resume winter semester.

Upcoming Events:

ECEn Department Christmas Party!

Thursday, December 10, 2020 | 7pm | Virtual Party

You don't want to miss this year's Annual ECEn Christmas Party! First off, just attending automatically enters you to **win a one of multiple gift cards!** In addition there will be a **talent show**, ugly sweater and best Christmas zoom background **competitions**, and a professor Kahoot with **prizes** for the top winners! All those who participate (professors and students) in the talent show will receive a **\$10 prize!** After the talent show and professor trivia Kahoot, you can kick back and chill with your friends while playing various **Jack box minigames and Among Us!** This party is for all ECEn students, freshmen through graduate students and professors!

7:00 - 7:20 Talent Show*

7:20 - 7:35 Professor Kahoot

7:35 - 7:40 Prizes/Awards

7:40 - 8:00 Games (we may continue to play past 8:00)

*It's too late to sign up for the talent show, but you can still come and enjoy games and visit with friends in the department. **To join in the fun, please RSVP here:** [Qualtrics RSVP Survey](#)

ZOOM Link: <https://byu.zoom.us/j/98968215468?pwd=aEJvR2dSNThQeEw1eXNqTkQ0UVFDdz09>

We hope to see you all there!

Experiential Learning Opportunities:

Research Opportunities:

IMMERSE Applications due January 15th!

IMMERSE is an undergraduate research program run by the ECEn Department. IMMERSE hires students after their 1st, 2nd, or 3rd years in the program to work on research projects with department faculty and other students. The program formally kicks off at the beginning of the Spring Semester but you must apply online by January 15, 2021. There is a screening and interview process before hiring decisions are made. We expect between 40 and 50 students to be hired by IMMERSE in 2021. If you have any interest in graduate school, IMMERSE provides excellent experience and can give you a significant boost when applying to graduate programs. All ECEn faculty are affiliated with IMMERSE and will be looking for student researchers.

For more information about IMMERSE: <http://IMMERSE.byu.edu>

To apply for the program click [here](#).



University of Utah Summer Program for Undergraduate Research (SPUR)

The Office of Undergraduate Research at the University of Utah is pleased to announce that the student application for the 2021 Summer Program for Undergraduate Research (SPUR) is now available! For more information or to apply, visit <https://our.utah.edu/spur/>. The deadline to apply is 11:59pm (MT) on Sunday, January 31, 2021.

SPUR provides undergraduates with an intensive 10-week research experience under the mentorship of a University of Utah faculty member. SPUR 2021 will begin on May 26 and end on August 5. Program benefits include: a \$4,000-5,000 stipend, on-campus housing*, travel reimbursement*, social programming, professional development events, and publication and presentation opportunities.

*If you have any questions or would like more information, please contact Megan Shannahan at megan.shannahan@utah.edu or 801-581-8070.

Competitions:

Join BYU Engineering alumni and students in the first-ever BYU Engineering Rube Goldberg Challenge!

Submit a video of your 15-second Rube Goldberg machine to be included in an epic virtual Rube Goldberg machine video. Win cool prizes like Bose headphones, BYU merch, and more! Get your family and friends to help! Open to BYU Engineering alumni and students only. For every submission, the BYU College of Engineering will donate \$10 toward BYU Engineering student diversity & inclusion initiatives. For competition details, click [here](#).

Student Innovator of the Year (SIOY) Competition

What's your "million-dollar idea?" Compete for a piece of \$50,000 to make your idea a reality. Past SIOY competitors have gone on to get funding from ABC's hit TV show, Shark Tank!

The BYU College of Engineering hosts a student competition each year in partnership with the Marriott School's Rollins Center for Entrepreneurship and Technology. The annual SIOY competition, open to all BYU students, has kickstarted now-successful companies Owlet, Khione, and MyoStorm over its 10-year history. Students receive up to \$400 in funding to kickstart their idea and compete for a piece of \$50,000 to make their idea a reality. Competitors apply Fall 2020 and compete Winter 2021.

Deadlines Changed:

Final Application Deadline: February 15, 2021

Apply today! Learn more at <https://engineering.byu.edu/sioy/>.

Employment & Internship Opportunities:

For the latest jobs and internship postings, please visit **Handshake** - BYU's online job board. Employers who want to hire BYU graduates or offer internships to current students post job openings and campus

events to this website, making them accessible to students. Just like LinkedIn, employers can view student profiles and students can network as they apply for jobs and internships. For the most up-to-date information on companies and employers, visit the Handshake website. To create a student Handshake profile, go to handshake.byu.edu and log in with your BYU NetID and password. Don't forget to download the Handshake app! Available for both iOS and Android.

Winter 2021 TA Positions Still Available

We are still looking for Teaching Assistants for the following courses:

- 1 or 2 TAs for ECEn 487
- 1 or 2 TAs for ECEn 485
- 1 or 2 TAs for ECEn 446
- 1 or 2 TAs for ECEn 424
- 1 or 2 TAs for ECEn 390
- 2 or 3 TAs for ECEn 360
- 1 or 2 TAs for ECEn 323
- 1 or 2 TAs for ECEn 301
- 1 or 2 TAs for ECEn 240/301 Lab

These are paid positions with opportunities to work with department professors and students. If you're interested or have questions, please directly contact Dr. Daniel Smalley (smalley@byu.edu).

University Career Center

If you would like EVEN MORE help in your job or internship hunt, the Career Center at BYU is happy to help! You can call 801.422.3000 to schedule a Zoom appointment (or phone appointment if you prefer) to get help, resources, and ideas they have to share on the job hunt! The career services are free, and you can meet with them as often as you would like!

BYU Career and Internship Fair

Thursday, January 28, 2021

BYU STEM Fair: Engineering

Thursday, February 4, 2021

Message from Tony Jewkes, Career Director, Engineering & Technology

As we progress through the semester with students still in need of help finding jobs and internships, please feel free to promote my services. Each week I maintain hours each day to meet with students one-on-one to help with their career search needs. Appointments can be made in the Student Services suite in 246 EB, in the Career Studio in the WSC or by calling 801-422-6535.

[Please refer to ECEn Department boards near 450 EB and 460 CB for Non-BYU Summer Research Opportunities, Internships, and Employment!](#)

Scholarships:

2021 BYU Scholarships

Remember to [apply for BYU scholarships](#) by February 1, 2021. This scholarship application is for spring, summer, fall 2021 and winter 2022 university academic, need-based, and private scholarships. If you want to be considered for need-based scholarships, you will also need to complete the [2021-2022 FAFSA](#) by January 20, 2021.

You may think that you shouldn't fill out the application because you won't qualify, but we encourage everyone to complete it despite your GPA. The more of the application that you complete, the more you can be considered for. Also, your college or department may use the university application for department scholarships.

Please refer to ECEn Department Advisement Board outside of 450 EB for non-BYU scholarship opportunities.

New Elective Course: Machine Learning for Engineers ChEn 493R

(ECEn students will register under ECEn 493R section 002 winter semester.)

There is a new class (ChE493R, 3 credit technical elective) next semester on Machine Learning for Engineers. This is an interdisciplinary (Civil, Mechanical, Electrical, Chemical) college initiative to bring more analytics and data science into the curriculum with elective courses. There are no pre-reqs for the course although experience in programming does help. It will be focused on foundations, applications, and a group project.

For ECEn students, **this class will sub for CS 472** (under requirement 5 on the current program requirements). You would not take this class if you have already taken or plan to take CS 472. Also, to note, CS 472 will fill an elective requirement for the CS minor, where this one will not.



Python

BYU

Machine Learning
for Engineers

Ch En 493R
MWF 12-12:50 PM
325 EB Classroom Learning

Short Course Preview
https://apmonitor.github.io/data_science

Foundations (Theory and Math)
Applications (Hands-on Learning)
Team Project (Collaborative)

Machine Learning for Engineers:

Machine learning is a convergence of linear algebra, statistics, optimization, and computational methods to allow computers to make decisions and take action from data. Examples of machine learning are now pervasive and are expected to further influence transportation, entertainment, retail, and energy industries. This engineering course reviews theory and applications of machine learning to engineering applications with a survey of unsupervised and supervised learning methods. It begins with several case studies that provide an intuition for machine learning with theory and methods for classification, regression, and dimensionality reduction. A second phase of the course is a hands-on group project. The engineering problems and theory will guide the student towards a working fluency in state-of-the-art methods implemented in Python. Course web-site (under development): <https://apmonitor.com/pds>

Did you know that the Electrical and Computer Engineering Department has a Slack Channel? [Click here to join!](#)



SLACK
(verb) to shirk or evade work or duty
(👥) A way to make sure you're never behind on work!



Follow the QR code and join the ECE department Slack channel to help you stay up to date on important announcements so you never get behind!



BYU ECE IS NOW ON SOCIAL MEDIA!

Be sure to follow us on Facebook and Instagram so you'll never have to miss out on fun and important announcements again!

BYU Electrical & Computer Engineering