

# **ABE 29000 - Making the Most of ABE!**

## **Summer Experiences**

## **ABE Advising and Degree Information**

Nate Engelberth  
[nengelbe@purdue.edu](mailto:nengelbe@purdue.edu)  
ABE 217

# Internship

# Research

# Other Experience

Industrial Roundtable

Mon, Sept 12 - Info Sessions

Tues-Wed, Sept 13-14 - Job Fair

Thur-Fri, Sept 15-16 - Interviews

Ag Career Fair

Mon, October 3rd - Employer Panel

Tues, October 4th - Career Fair

# Prepare yourself!

## What do you want to do?

Identify Skills

Resume

Social Media

Interview Tips

Research

Networking

# Internships & Co-Ops

Resources:

Job Fair

CCO

OPP

Info Sessions

ABE Job Board/Online

Networking



Dress nicely

Elevator Pitch - Sell yourself!

Attend Info Sessions

Be sure to follow any instructions on how to  
apply!

International Students - CPT/OPT

C

C

O



Recruit

## Student Resources & Toolkit

resumes cover letters  
job search interview  
connect grad school  
law & medicine



**GET AHEAD OF THE GAME**

Learn how to build your resume and craft the perfect cover letter so that you can score your dream job or internship this season. Check out the CCO handbook.

Choose a Major & Plan Your CAREER

Calendar



10  
SEP

AITP Computing  
Career Fair  
9:00am - 3:00pm

15 - 16  
SEP

Industrial Roundtable  
10:30am - 4:30pm

17  
SEP

Krannert  
Undergraduate Fall  
Career Fair  
10:00am - 2:00pm

22  
SEP



Services



Stats

OPP



# Info Sessions

# ABE Job Board/Online

# Networking

## Academics

[Undergraduate Program](#)[Undergraduate Advising](#)[Undergraduate Degree Requirements](#)[ABET](#)[Graduate Program](#)[Student Organizations](#)[Purdue Student Soybean Product Innovation Competition](#)

## Current Students - Job Opportunities

### CCO Dynamic Job Search Results

Agricultural Engineering & Biological Engineering

[Mechanical Engineer](#) Full Time  
Kubica Corp (Novi, Michigan)  
Posting Date: Aug 29, 2016

---

[Mechanical Engineer Intern \(1441\)](#) Internship / Co-op  
ITW  
Posting Date: Aug 29, 2016

---

[Mechanical Engineer Intern \(1440\)](#) Internship / Co-op

### Undergraduate Links

[MyPurdue](#)[Degree Requirements](#)[ABE Senior Design Projects & ASM Capstone Projects](#)[ABE Outstanding Students](#)[Undergraduate Research Opportunities](#)[University Calendar](#)

Full-Time (Company; Position or Job Description; Date Posted)

— WCI Family former Operations Manager, 10-Aug-2016

Indiana INTERNnet  
Indiana Job Central  
IndianaCAREERConnect.com

Dice.com  
Engineer.info  
Engineering and Manufacturing Jobs Site  
EngineerJobs  
EngineeringJobs.net

EcoJobs.com

AgCareers  
AgriCareersInc.com



Research

**Research Experience for Undergraduates**

**Summer Undergraduate Research Fellowship**

**Discovery Park Undergraduate  
Research Internship**

Ad-Hoc



Research

**Research Experience for Undergraduates**

**Summer Undergraduate Research Fellowship**

**Discovery Park Undergraduate  
Research Internship**

# Search for an REU Site

[Astronomical Sciences](#)  
[Atmospheric and Geospace Sciences](#)  
[Biological Sciences](#)  
[Chemistry](#)  
[Computer and Information Science and Engineering](#)  
[Cyberinfrastructure](#)  
[Department of Defense \(DoD\)](#)  
[Earth Sciences](#)  
[Education and Human Resources](#)  
[Engineering](#)  
[Ethics and Values Studies](#)  
[International Science and Engineering](#)  
[Materials Research](#)  
[Mathematical Sciences](#)  
[Ocean Sciences](#)  
[Physics](#)  
[Polar Programs](#)  
[Social, Behavioral, and Economic Sciences](#)

## SEARCH BY RESEARCH AREAS/KEYWORDS:

**Enter full or partial research areas/keywords separated by commas:  
(e.g. geophysics, ecology, nano, robot, ethics)**

## AND/OR STATE:

All:



Research

**Research Experience for Undergraduates**

**Summer Undergraduate Research Fellowship**

**Discovery Park Undergraduate  
Research Internship**

**Ad-Hoc**



[SURF Home](#) | [Applicants](#) | [Summer 2013](#) | [Faculty and Mentors](#)

## Summer Undergraduate Research Fellowships

The SURF program is helping students across engineering, science, and technology disciplines **discover a world of opportunity** available to them through research. By closely working with other creative and innovative people, **students explore, discover, and transform ideas into reality** to advance society and improve people's lives. The interdisciplinary nature of the research drives students to learn new concepts and skills for real-world impact.

### SURF Program Benefits

- **Receive pay to conduct hands-on research** under the direction of a faculty member and a graduate student
- **Attend professional development and research seminars**
- **Present research discoveries** at the SURF Symposium
- **Enjoy social activities** with other SURF students
- **Celebrate at the end-of-summer banquet**



### SURF

[SURF Home](#)

[History](#)

[Photo galleries](#)

[Make a gift to SURF](#)

[Our sponsors](#)

[Other opportunities for undergraduates](#)

### Questions?

[Contact Us](#)

# **Research Experience for Undergraduates**

## **Summer Undergraduate Research Fellowship**

### **Discovery Park Undergraduate Research Internship**

#### **Ad-Hoc**

# Discovery Park Undergraduate Research Internship Program

## What is the DURI program?

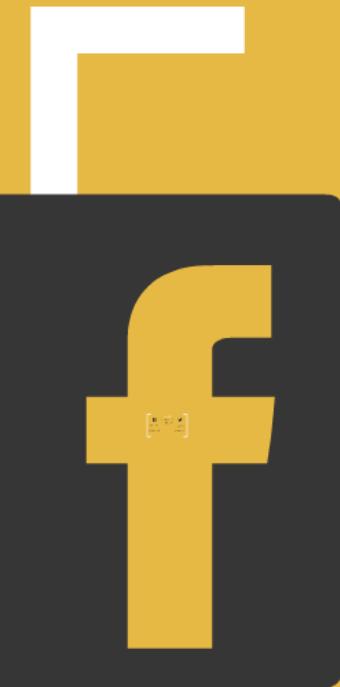
The Discovery Park Undergraduate Research Internship (DURI) program is designed to involve Purdue undergraduates in the interdisciplinary research environment of Discovery Park. The program provides opportunities for students to work with faculty affiliated with Discovery Park on cutting edge research projects that involve combining two or more disciplinary strengths. Working closely with faculty, students experience the excitement, challenge, and power of truly interdisciplinary research in the fast-paced, entrepreneurial environment that is Purdue's Discovery Park.

DURI offers 50 part-time (6-10 hours/week) student internship slots per academic semester. A list of DURI [internship opportunities](#) is available on this website and students are invited to [login](#) and submit the simple online application form for a maximum of five projects. Please click [here](#) to view past project descriptions.

## DURI Program Highlights

- Earn 1 credit for the internship core seminar series, GS490A
- Potentially earn research credits through a project's sponsoring department
- Receive a \$500 scholarship per semester in DURI
- Take part in year-end Undergraduate Research Forum and Poster Session

# Social Media



# Results!



Total Students - 50

Found - 40

Questionable - 4



Time Spent - ~ 90  
minutes

Found - 20

Questionable - 1

# Social Media



# Recap How to Achieve Your Goal

Prepare:  
Resume, Research, Your Story

Use every resource:  
CCO, OPP, Networking, ABE

# ABE Degree Info

Degree Requirements and Information				
Degree Program		Degree Information		
Pre-ABE		<a href="#">Plan of Study</a>		
Agricultural Engineering	Agricultural Systems Management	<a href="#">Plan of Study</a>	<a href="#">Selective Options</a>	<a href="#">Handbook</a>
	Machine Systems Environmental and Natural Resources Engineering	<a href="#">Plan of Study</a>	<a href="#">Selective Options</a>	<a href="#">Handbook</a>
Biological Engineering	Biological and Food Processing Engineering	<a href="#">Plan of Study</a>	<a href="#">Selective Options</a>	<a href="#">Handbook</a>
	Cellular and Biomolecular Engineering	<a href="#">Plan of Study</a>	<a href="#">Selective Options</a>	<a href="#">Handbook</a>
	Pharmaceutical Processing Engineering	<a href="#">Plan of Study</a>		<a href="#">Handbook</a>

Academic Advising

Degree Requirements  
and myPurduePlan

Registration

Final Thoughts

# Academic Advising

Jake DeLion - ABE 216

Nate Engelberth - ABE 217

Yvonne Hardebeck - ABE 201

Faculty Advisors

## Advising Expectations

### **From Us:**

Support  
Information  
Confidentiality  
Timely

### **From You:**

Communication  
Openness  
Preparedness  
Accountability

# Degree Requirements

## myPurduePlan (Demo)

Fall 2014

### Biological Engineering: Food and Biological Processing Engineering

<https://ag.psu.edu/oap/Pages/major.aspx>

Credits	Course number	Course Title	Prerequisites	Credits	Course number	Course Title	Prerequisites
<b>Fall 1st Year</b>							
4	CHM 11500	General Chemistry	prefor calculus	4	CHM 11600	General Chemistry	CHM 11500
4	ENGL 10600	First-Year Composition		3	COM 11400	Fundamentals of Speech Communication	
2	ENGR 13100	Transforming Ideas to Innovation I		3	CS 15900	Programming Applications for Engineers	prefor ENGR 13100
4	MA 16500	Plane Analytic Geometry and Calculus I	ALEKS 85+	2	ENGR 13200	Transforming Ideas to Innovation II	MA 16600
4	PHYS 17200	Modern Mechanics	MA 16500	4	MA 16600	Plane Analytic Geometry and Calculus II	ENGR 13100
18				16			
<b>Fall 2nd Year</b>							
4	ABE 20100	Thermodynamics of Biological Systems I	CHM 11600	3	ABE 20200	Thermodynamics of Biological Systems	ABE 20100
1	ABE 29000	Sophomore Seminar		3	ABE 30100	Numerical and Computational Modeling in Biological Engineering	
4	BIOL 11000	Fundamentals of Biology I		3	ABE 30300	Applicability of Physics and Chemistry to Biological Processes	
4	CHM 25700 or (CHM 25200 and CHM 25501)	Organic Chemistry or (Organic Chemistry I and Organic Chemistry Lab I)	CHM 11600	3	ABE 30400	Bioprocess Engineering laboratory	
4	MA 26100	Multivariate Calculus	MA 16600	3	ABE 30700	Momentum Transfer in Food and Biological Systems	
17				3	ABE 30800	Heat and Mass Transfer in Food and Biological Systems	
16				3	ABE 31400	Design of Electronic Systems	
<b>Fall 3rd Year</b>							
3	ABE 30300	Applications of Physics and Chemistry to Biological Processes	ABE 20200, CHM 25700 or (CHM 25200 and CHM 25501), pref or ABE 30100	3	ABE 30100	Numerical and Computational Modeling in Biological Engineering	ABE 20200/MA 26200
3	ABE 30700	Momentum Transfer in Food and Biological Systems	ABE 20200, MA 26100, CHM 25700 or (CHM 25200 and CHM 25501)	3	ABE 30400	Bioprocess Engineering Laboratory	ABE 30800
3	ABE 37000	Biological/Microbial Kinetics and Reaction Engineering	ABE 30100, BIOL 22100, CHM 25700 or (CHM 25200 and CHM 25501), MA 26200	3	ABE 30800	Heat and Mass Transfer in Food and Biological Systems	ABE 30700
4	BIOL 22100	Introduction to Microbiology	BIOL 11000, CHM 25700	3	ABE 31400	Design of Electronic Systems	MA 26200
3	MA 36300	Equations for Engineering and the Sciences	MA 26200	3	ABE 45700	Transport Operations in Food and Biological Engineering I	ABE 30800
16				3		Economics Selective	
<b>Fall 4th Year</b>							
3	ABE 46000	Sensors and Process Controls	MA 26200	3	ABE 55800	Process Design for Food and Biological Systems	ABE 55700
1	ABE 49000	Professional Practice in Agricultural and Biological Engineering	ABE 29000	3	ABE 58000	Process Engineering of Renewable Resources	ABE 37000
3	ABE 55700	Transport Operations in Food and Biological Engineering II	ABE 45700	3	-----	Biological or Food Science Selective	
3	-----	Humanities or Oral Communication Selective		3	-----	Statistical Modeling and Quality Enhancement Selective	
3	-----	Humanities or Social Science Selective		3	-----	Fundamentals of Biology I	
3	-----	Humanities or Social Science Selective		3	-----	Introduction to Microbiology	
13				3	-----	NUTR 20500 or CHM 25700 or CHM 25200 and CHM 25501	
16				3	-----	Food Science I or Biochemistry	
129 semester credits required for Bachelor of Science degree. 2.0 GPA required for Bachelor of Science degree.							
The highlighted course is considered critical; timely progress toward the degree depends upon steady progress through each course in the plan of study, but this course, in particular, should be completed by the semester indicated.							
Consultation with an advisor may result in an altered plan customized for an individual student.							
Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here outlines this program and course sequences.							

Fall 2014

### Biological Engineering: Food and Biological Processing Engineering

<https://ag.psu.edu/oap/Pages/major.aspx>

Credits	Course number	Course Title	
<b>Departmental Major Courses (129 credits)</b>			
<b>Required Major Courses (45 credits)</b>			
4	ABE 20100	Thermodynamics of Biological Systems I	
3	ABE 20200	Thermodynamics of Biological Systems II	
1	ABE 25000	Scientific Seminar	
3	ABE 30100	Numerical and Computational Modeling in Biological Engineering	
3	ABE 30300	Applicability of Physics and Chemistry to Biological Processes	
3	ABE 30400	Bioprocess Engineering laboratory	
3	ABE 30700	Momentum Transfer in Food and Biological Systems	
3	ABE 30800	Heat and Mass Transfer in Food and Biological Systems	
3	ABE 31400	Design of Electronic Systems	
3	ABE 37000	Biological/Microbial Kinetics and Reaction Engineering	
3	ABE 40000	Transport Operations in Food and Biological Engineering I	
3	ABE 49000	Sensors and Process Controls	
1	ABE 49000	Professional Practice in Agricultural and Biological Engineering	
3	ABE 55700	Transport Operations in Food and Biological Engineering II	
3	CHM 11500	General Chemistry (satisfies Science #1 for core)	
4	CHM 11600	General Chemistry (satisfies Science #2 for core)	
<b>Other Departmental Program Courses (84 credits) (See Advising Resources)</b>			
2	ENGR 13100	Transforming Ideas to Innovation I	
4	CHM 25700	General Chemistry I (satisfies Science #1 for core)	
4	CHM 25700 or CHM 25200 and CHM 25501	General Chemistry II (satisfies Science #2 for core)	
4	CHM 25700 or CHM 25200 and CHM 25501	Organic chemistry or (Organic chemistry I and Organic chemistry Lab I)	
4	MA 16500	Plane Analytic Geometry and Calculus I (satisfies Quantitative Reasoning for core)	
4	MA 16600	Plane Analytic Geometry and Calculus II	
4	MA 26100	Multivariate Calculus	
4	MA 26200	Linear Algebra and Differential Equations	
3	MA 30100	Equations for Engineering and the Sciences	
3	PHYS 17200	Programming Applications for Engineering	
3	CS 15900	Statistical Modeling and Quality Enhancement	
3	CHE 32000	Fundamentals of Biology I	
3	BIOL 21200	Introduction to Microbiology	
3	NUTR 20500 or CHM 25700 or CHM 25200 and CHM 25501	Food Science I or Biochemistry	
3	BIOL 22100	Biological or Food Science Selective	
3	BIOL 11000	Professional Practice in Biological or Food Science Selective	
3	MA 26200	Transport Operations in Food and Biological Engineering for Biological or Food Science Selective	
3	ENGL 10600	First-Year Composition (satisfies Written Communication for core)	
3	COM 11400	Fundamentals of Speech Communication (satisfies Oral Communication for core)	
3	-----	Literacy Selective (for core)	
3	-----	Fundamentals of Communication (satisfies Oral Communication for core)	
3	-----	Written or Oral Communication Selective	
3	-----	Economics Selective (satisfies Human Culture Behavioral/Social Science for core)	
3	-----	UCC Humanities Selective (satisfies Human Cultures Humanities for core)	
3	-----	Humanities or Social Science Selective	
3	-----	Humanities or Social Science Selective	
3	-----	Humanities or Social Science Selective (30000+ level)	
<b>University Core Requirements:</b>			
Human Culture Humanities:		Science, Technology, and Society:	
Human Culture Behavioral/Social Science:		Written Communication:	
Information Literacy:		Oral Communication:	
Science #1:		Quantitative Reasoning:	
Science #2:			
<b>College of Agriculture &amp; University Level Requirements:</b>			
2.0 GPA required for Bachelor of Science degree.			
2.0 GPA required for Bachelor of Science degree from Purdue			
6 credits International Understanding:			
6 credits Multicultural Awareness:			
6 credits of Hum or Social Science Selective 30000+ level:			
6 credits of Hum and/or Social Sciences outside the College of Agriculture:			
129 semester credits required for Bachelor of Science degree.			
2.0 GPA required for Bachelor of Science degree.			

# Final Thoughts

Study Abroad

If you have questions - ask!  
We're here to help.

(Don't wait until the last minute!)