

**INTRO:**

Welcome to the Department of Mechanical Engineering's Research Experience for Undergraduates Survey

Dear <TITLE> <LNAME>:

Thank you for your time today. The Department of Mechanical Engineering has asked the Survey Research Center at the University of Arkansas to solicit your opinions about the Mechanical Engineering Research Experience for Undergraduates in which you have just participated.

This evaluation asks about your experiences this summer and asks for some personal information in order to facilitate analysis. The contact information you give will be separated from the evaluation data set. Neither your name nor your contact information will be associated with your answers. Findings will be reported in the aggregate. Your responses will be kept confidential. If there is anything to which you do not want to respond, please mark the appropriate selection and the survey will proceed.

Your participation is very important to the Department of Mechanical Engineering. What you say in the survey will influence the program in the coming years. Experiences you've had over the past eight weeks, whether good or ill, are vital to the development of REUs at the University of Arkansas.

If you have any questions about this study, please call Matt Gordon (mhg@uark.edu) at (479) 575-4458 or Joe Rencis (jjrencis@uark.edu) at (479) 575-4153. You can reach the Research Center by calling (479) 575-4222 or by e-mail at survey@uark.edu. Any of us would be happy to answer any questions you may have. We appreciate you taking the time now and in the spring to complete this survey.

Sincerely,

Matt Gordon  
REU Director

Joe Rencis  
REU Co-Director

P.S. If you have questions or concerns about your rights as a research participant, please contact Ro Windwalker at the University's Institutional Review Board at (479) 575-3845 or by e-mail at irb@uark.edu.

I will take the survey ..... GO  
I would like to resume my earlier survey .....CN => /LASTQ  
I do not wish to take the survey at this time .....INT98

---

---

**INSTR:**

Unless noted, the questions require only one response. If you make a mistake, click on the correct choice and the previous answer will disappear. If you forget to respond to a question, an error message will appear next to the question. Please do not use your browser's back or forward buttons while answering. The survey should take fewer than 15 minutes to complete. If you are interrupted or if the server times you out, you may use your pin to log back in and complete the survey. If you encounter a problem while taking the survey, please call the Survey Research Center locally at 575-4222 or toll-free at 888-621-1209 and ask for the REU Support Staff.

---

---

**Q1:**

*The REU Application Process*

Please think back to before you applied for this REU: How did you initially hear about the University of Arkansas' Mechanical Engineering Research Experience for Undergraduates (REU)?

- Response:..... 1 O  
Prefer not to respond..... 9
- 
- 

**Q2:**

How did you obtain further information about this REU?

- Response:..... 1 O  
Prefer not to respond..... 9
- 
- 

**Q3:**

*The REU Application Process*

How timely was information provided to you by the University of Arkansas?

- Very timely..... 1  
Somewhat timely ..... 2  
Timely ..... 3  
Slightly timely ..... 4  
Not at all timely ..... 5  
Not applicable..... 7  
Prefer not to respond..... 9
- 
- 

**Q4:**

What, if any, additional information would you like to have seen before you applied?

- Response:..... 1 O  
No additional information was necessary ..... 2  
Don't know ..... 8  
Prefer not to respond..... 9
- 
- 

**Q5:**

*The REU Application Process*

After you applied to the summer research program, how timely was the notification process?

- Very timely..... 1  
Somewhat timely ..... 2  
Timely ..... 3  
Slightly timely ..... 4  
Not at all timely ..... 5  
Not applicable..... 7  
Prefer not to respond..... 9
- 
- 

**Q6:**

What additional information, if any, would you like to have seen after you were accepted?

- Response:..... 1 O  
No additional information was necessary ..... 2  
Don't know ..... 8  
Prefer not to respond..... 9
- 
-

**Q7:**

*The REU Application Process*

For how many REU programs did you apply this summer?  
Prefer not to respond..... 999

---

---

**Q8:**

To how many programs were you accepted?  
Prefer not to respond..... 999

---

---

**Q9:**

*Day Zero*

Initial arrival on campus: How did you travel to the University of Arkansas?  
Drove your own car ..... 1  
Carpooled with another REU participant..... 2  
A member of your family or friend drove you ..... 3  
Flew into Northwest Arkansas Regional Airport (XNA) ..... 4  
Other, please specify: ..... 5 O  
Prefer not to respond..... 9

---

---

**Q10:**

Did you have any problems with checking in to Maple Hill?  
Problems: ..... 1 O  
No problems checking in ..... 2  
Prefer not to respond..... 9

---

---

**Q11:**

*Day Zero*

How would you assess the Sunday night Welcome Event at University House?  
Very valuable..... 1  
Somewhat valuable..... 2  
Valuable..... 3  
Slightly valuable ..... 4  
Not at all valuable..... 5  
Don't remember it ..... 6  
Not applicable..... 7  
Prefer not to respond..... 9

---

---

**Q12:**

What, if anything, would you change about the events on that first Sunday?  
Suggestions: ..... 1 O  
No suggestions..... 2  
Don't know ..... 8  
Prefer not to respond..... 9

---

---

**Q13:**

*First Week*

How helpful was the orientation session where you received your ID card and first check?

- Very helpful..... 1
- Somewhat helpful ..... 2
- Helpful..... 3
- Slightly helpful ..... 4
- Not at all helpful ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

---

---

**Q14:**

How useful did the library orientation prove to be over the course of the summer?

- Very useful ..... 1
- Somewhat useful ..... 2
- Useful ..... 3
- Slightly useful..... 4
- Not at all useful ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

---

---

**Q15:**

*First Week*

How useful did the campus tour prove to be over the course of the summer?

- Very useful ..... 1
- Somewhat useful ..... 2
- Useful ..... 3
- Slightly useful..... 4
- Not at all useful ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

---

---

**Q16:**

How useful did the research facilities tour prove to be over the course of the summer?

- Very useful ..... 1
  - Somewhat useful ..... 2
  - Useful ..... 3
  - Slightly useful..... 4
  - Not at all useful ..... 5
  - Not applicable..... 7
  - Prefer not to respond..... 9
- 
-

**Q17:**

*First Week*

In which of the following activities did you participate? (Select all that apply)

- Library orientation..... 1
- Campus tour..... 2
- Research facilities tour ..... 3
- GRE/GMAT Practice tests ..... 4
- Prefer not to respond..... 9  => /Q19

**Q18:**

Which of the following activities would you recommend for the program next year? (Select all that apply)

- Library orientation..... 1
- Campus tour..... 2
- Research facilities tour ..... 3
- GRE/GMAT Practice tests ..... 4
- Prefer not to respond..... 9

**Q19:**

*Activities*

Which of the following Nanotechnology Seminars did you attend? (Select all that apply)

- Dr. Huang and "MEMS-based Warm Gas Thruster System for  
 CubeSat Orbital Maneuver Applications"..... 1
- Dr. Tung and "BioNano Technology - An Introduction" ..... 2
- Dr. Spearot and "Atomistic Modeling"..... 3
- Patricia Kirkwood's "Library Seminar" ..... 4
- Dr. Rencis and "Graduate School Opportunities at the UA and ME"..... 5
- Dr. Wejinya - Carbon Nanotubes for Nanodevices and Nanotechnology  
 Applications - An Overview ..... 6
- Prefer not to respond..... 9  => /Q21

**Q20:**

Which of those would you recommend for the program next year?

- Dr. Huang and "MEMS-based Warm Gas Thruster System for  
 CubeSat Orbital Maneuver Applications" ..... 1
- Dr. Tung and "BioNano Technology - An Introduction" ..... 2
- Dr. Spearot and "Atomistic Modeling"..... 3
- Patricia Kirkwood's - Library Seminar ..... 4
- Dr. Rencis and "Graduate School Opportunities at the UA and ME"..... 5
- Dr. Wejinya - Carbon Nanotubes for Nanodevices and Nanotechnology  
 Applications - An Overview ..... 6
- Prefer not to respond..... 9

**Q21:**

*Activities*

How much did your awareness of various research areas in engineering mechanics and materials increase as a result of the presentations by Mechanical Engineering faculty? Did your awareness increase:

- A great deal..... 1
- A lot..... 2
- Neither a lot nor a little..... 3
- A little..... 4
- Not at all..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q22:**

How, if at all, could the Mechanical Engineering faculty improve upon these presentations?

- Suggestions:..... 1
- No suggestions..... 2
- Don't know ..... 8
- Prefer not to respond..... 9

**Q23:**

*Activities*

Which of the following Dinner and Dialogues programs did you attend? (Select all that apply)

- Dean Collis Geren and "Little Brown Spider" ..... 1
- Dr. Chris Evans "Research Careers"..... 2
- Dr. Lynn Meade "Public Speaking" ..... 3
- Shani Farr & Vicky Hartwell "How to Apply to Grad School" &  
 "Funding Your Graduate Degree"..... 4
- Dr. Brewer - "Research Ethics" ..... 5
- Dr. Suzanne McCray - "How to Apply for NSF Predocs and  
 Other Awards" ..... 6
- Prefer not to respond..... 9  => /Q25

**Q24:**

Which of those would you recommend for the program next year?

- Dean Collis Geren and "Little Brown Spider" ..... 1
- Dr. Chris Evans "Research Careers"..... 2
- Dr. Lynn Meade "Public Speaking" ..... 3
- Shani Farr & Vicky Hartwell "How to Apply to Grad School" &  
 "Funding Your Graduate Degree"..... 4
- Dr. Brewer - "Research Ethics" ..... 5
- Dr. Suzanne McCray - "How to Apply for NSF Predocs and  
 Other Awards" ..... 6
- Prefer not to respond..... 9

**Q25:**

*Activities*

Which of the following "Night Out with..." did you attend? (Select all that apply)

- Mechanical Engineering: Bowling ..... 1
- Physics: Movie Night ..... 2
- Chemistry: Devil's Den..... 3
- Carver: Arkansas Naturals..... 4
- Prefer not to respond..... 9 X => /Q27

**Q26:**

Which of these would you recommend for the program next year?

- Mechanical Engineering: Bowling ..... 1
- Physics: Movie Night ..... 2
- Chemistry: Devil's Den..... 3
- Carver: Arkansas Naturals..... 4
- Prefer not to respond..... 9 X

**Q27:**

*Activities*

If you have any ideas for Dinner and Dialogues, Nights Out or other activities that should be included in future years, please note them here.

- Suggestions:..... 1 O
- No suggestions..... 2
- Don't know ..... 8
- Prefer not to respond..... 9

**Q28:**

*Research Experience*

To what extent were you pleased or disappointed with the research position that you were offered?

- Very pleased ..... 1
- Somewhat pleased ..... 2
- Neither pleased nor disappointed..... 3
- Somewhat disappointed..... 4
- Very disappointed..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q29:**

How well did your research placement match your interests and/or your intended major?

- Very closely matched ..... 1
- Closely matched ..... 2
- Both closely and loosely matched ..... 3
- Loosely matched..... 4
- Did not match at all ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q30:**

*Research Experience*

To what extent did you participate and/or contribute in a real way to the research? Were you able to:

- Actually participate in the research ..... 1
- Participate somewhat ..... 2
- Watch only ..... 3
- Take care of tasks unrelated to the research ..... 4
- Not applicable ..... 7
- Prefer not to respond ..... 9

**Q31:**

Please explain what your research position entailed.

- Response: ..... 1 O
- Prefer not to respond ..... 9

**Q32:**

*Research Experience*

How many meetings per week were held with your advisor?

- Prefer not to respond ..... 99

**Q33:**

What was the average time duration of each meeting?

- Response: ..... 1 O
- Prefer not to respond ..... 9

**Q34:**

How would you describe the number of meetings you had with your advisor during the summer? Were there:

- Too many ..... 1
- Somewhat too many ..... 2
- An appropriate number of meetings ..... 3
- Somewhat too few ..... 4
- Far too few meetings ..... 5
- Not applicable ..... 7
- Prefer not to respond ..... 9

**Q35:**

*Research Experience*

How would you describe the duration of the meetings? Were they:

- Too long ..... 1
- Somewhat too long ..... 2
- Just the right length ..... 3
- Somewhat too short ..... 4
- Far too short ..... 5
- Not applicable ..... 7
- Prefer not to respond ..... 9

**Q36:**

In terms of your entire REU experience, how meaningful were the regular meetings with your faculty advisor?

- Very meaningful..... 1
- Somewhat meaningful..... 2
- Meaningful enough..... 3
- Slightly meaningful..... 4
- Not at all meaningful..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q37:**

*Research Experience*

How able was your supervising faculty member in assisting you with any problems you may have encountered?

- Very able to assist..... 1
- Somewhat able to assist..... 2
- Neither somewhat nor barely able to assist..... 3
- Barely able to assist..... 4
- Not at all able to assist..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q38:**

To what extent did your faculty supervisor influence your experience? Was your faculty advisor's influence:

- Very positive..... 1
- Somewhat positive..... 2
- Neither positive nor negative..... 3
- Somewhat negative..... 4
- Very negative..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q39:**

*Research Experience*

How valuable a resource was your graduate student mentor in your research experience?

- Very valuable..... 1
- Valuable..... 2
- Neither valuable nor of little value..... 3
- Of little value..... 4
- Not at all valuable..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q40:**

*Research Experience*

How likely or unlikely is it that you will present the research you conducted this summer to colleagues at your home institution this fall?

- Very likely ..... 1
- Likely..... 2
- Neither likely nor unlikely ..... 3
- Unlikely ..... 4
- Very unlikely ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q41:**

How likely or unlikely is it that you will continue with research in your assigned area in the future?

- Very likely ..... 1
- Likely..... 2
- Neither likely nor unlikely ..... 3
- Unlikely ..... 4
- Very unlikely ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q42:**

*Research Experience*

What are the two most important things you learned through this REU?

- Response:..... 1 O
- Prefer not to respond..... 9

**Q43:**

*Room and Board*

How would you rate your on-campus housing assignment?

- Excellent ..... 1
- Good ..... 2
- Neither good nor poor..... 3
- Poor ..... 4
- Very poor ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q44:**

How would you rate the on-campus dining options?

- Excellent ..... 1
- Good ..... 2
- Neither good nor poor..... 3
- Poor ..... 4
- Very poor ..... 5
- Not applicable..... 7
- Prefer not to respond..... 9

**Q45:**

<i>Room and Board</i>	
Was the stipend you received enough to cover your expenses while you were in Fayetteville?	
Very sufficient .....	1
Sufficient .....	2
Neither sufficient not insufficient .....	3
Insufficient.....	4
Very insufficient.....	5
Not applicable.....	7
Prefer not to respond.....	9

**Q46:**

What suggestions do you have for next year?	
Suggestions:.....	1 O
No suggestions.....	2
Don't know .....	8
Prefer not to respond.....	9

**Q47:**

<i>Program Outcomes</i>	
To what degree did your participation in this program help to reinforce or undermine your decision to enter or continue in the field of engineering?	
Strongly reinforce .....	1
Reinforce .....	2
Neither reinforce nor undermine .....	3
Undermine .....	4
Strongly undermine .....	5
Not applicable.....	7
Prefer not to respond.....	9

**Q48:**

To what extent has your research experience encouraged you to consider studying engineering on the graduate level?	
Strongly encouraged.....	1
Encouraged.....	2
Both encouraged and discouraged .....	3
Discouraged.....	4 => /Q51
Strongly discouraged.....	5 => /Q51
Not applicable.....	7
Prefer not to respond.....	9

**Q49:**

*Program Outcomes*

How informative did you find the session on graduate school opportunities?

Very informative.....	1
Somewhat informative.....	2
Informative .....	3
Slightly informative.....	4
Not at all informative.....	5
Not applicable.....	7
Prefer not to respond.....	9

---

---

**Q50:**

How could we improve the graduate school opportunities session?

Suggestions:.....	1	O
No suggestions.....	2	
Don't know .....	8	
Prefer not to respond.....	9	

---

---

**Q51:**

*Program Outcomes*

To what extent has your experience this summer encouraged you to apply to the University of Arkansas?

Strongly encouraged.....	1
Encouraged.....	2
Both encouraged and discouraged.....	3
Discouraged.....	4
Strongly discouraged.....	5
Not applicable.....	7
Prefer not to respond.....	9

---

---

**Q52:**

How helpful did you feel that the Program Coordinators, Dr. Gordon and Dr. Rencis, were as resources?

Very helpful.....	1
Somewhat helpful.....	2
Helpful.....	3
Slightly helpful.....	4
Not at all helpful.....	5
Not applicable.....	7
Prefer not to respond.....	9

---

---

**Q53:**

*Program Outcomes*

To what degree would you recommend this summer research program to other students?

Highly recommend .....	1	
Somewhat recommend .....	2	
Neither recommend nor dissuade .....	3	=> /Q56
Somewhat dissuade.....	4	=> /Q55
Highly dissuade .....	5	=> /Q55
Not applicable.....	7	=> /Q56
Prefer not to respond.....	9	=> /Q56

**Q54:**

Assuming you found the program rewarding, what was the best part?

Response:.....	1	<input type="radio"/>	=> /Q56
Prefer not to respond.....	9	<input type="radio"/>	=> /Q56

**Q55:**

*Program Outcomes*

In case you did not find the program rewarding, what are the shortcomings?

Response:.....	1	<input type="radio"/>
Prefer not to respond.....	9	<input type="radio"/>

**Q56:**

How do you feel the program could improve?

Suggestions:.....	1	<input type="radio"/>
No suggestions.....	2	
Don't know .....	8	
Prefer not to respond.....	9	

**Q57:**

Please feel free to provide us with any additional comments you might have about the program.

Comments:.....	1	<input type="radio"/>
No comments.....	2	
Prefer not to respond.....	9	

**Q58:**

*About You*

Please supply the following information which will be used for analysis: During your REU, who was your research professor or faculty mentor?

**Q59:**

Who was your graduate student mentor?

**Q60:**

*About You*

What is or was your undergraduate institution?

**Q61:**

What is or was your major?

**Q62:**

In fall 2009, what will your year in school be?

- Freshman ..... 1
- Sophomore..... 2
- Junior ..... 3
- Senior..... 4
- Graduate student..... 5
- No longer in school..... 6
- Not applicable..... 97
- Prefer not to respond..... 99

**Q63:**

*About You*

What is your gender?

- Male..... 1
- Female ..... 2
- Prefer not to respond..... 9

**Q64:**

In what year were you born?

- Prefer not to respond..... 9999

**Q65:**

With which ethnic background(s) do you most strongly identify? (Select all that apply)

- African-American ..... 1
- American Indian ..... 2
- Alaskan Native ..... 3
- Asian..... 4
- Pacific Islander ..... 5
- Caucasian..... 6
- Hispanic or Latin American..... 7
- Do not know ..... 8
- Prefer not to respond..... 9 X