



UNIVERSITY OF
ARKANSAS
COLLEGE OF ENGINEERING

FRESHMAN
ENGINEERING
PROGRAM

2017-2018 Teaching Assistant Application

Applications are due online by Friday, April 7, 2017 by 5pm.

FRESHMAN ENGINEERING PROGRAM MISSION

The mission of the Freshman Engineering Program at the University of Arkansas is to nurture the academic success, professional development, and individual growth of first-year engineering students by establishing the foundation for their excellence in the study of engineering. The program includes both academic and student services components. In this program, new freshman engineering students complete a common academic experience and then choose their specific engineering major for their sophomore year.

POSITION TITLE

Teaching Assistant

POSITION FUNCTION

To support the courses associated with the Freshman Engineering Program including Introduction to Engineering I & II, Introduction to Engineering (online), Success in Engineering Study, Engineering Applications of Mathematics, and the FEP Honors Innovation Experience.

ORGANIZATIONAL STRUCTURE

Teaching Assistants report directly to the FEP Associate Director of Academics and are responsible to the course instructors.

DESIRED PERSONAL CHARACTERISTICS

- Positive attitude
- Strong work ethic
- Punctuality
- Good time management skills
- Good communication and interpersonal skills
- Responsible and mature
- Flexibility
- Commitment to a high standard of personal values and a code of ethics
- Pride in the University of Arkansas and College of Engineering
- Ability to work as an effective and productive team member
- Ability to serve as a positive role model
- Willingness to do whatever it takes to get the job done

QUALIFICATIONS

- Students selected to be teaching assistant will need to be graduate students in the College of Engineering during both the fall and spring semesters.
- Students must be in good judicial standing with the University of Arkansas.

PREFERRED QUALIFICATIONS

- Students who have previous Teaching Assistant experience
- Students who participated in the Freshman Engineering Program.

EMPLOYMENT TERMINATION

A Teaching Assistant employment may be terminated if it is determined during the 2017-2018 academic year that he/she is not maintaining ethics befitting a paraprofessional, not meeting academic and disciplinary qualifications, not performing satisfactorily, not able to work productively with others, not attending required trainings and meetings, or jeopardizing the success of the Freshman Engineering Program.

Teaching Assistant Schedule

FALL 2017

Begin Monday, August 14, 2017 (1-week before classes)

End Friday, December 14, 2017 (End of Finals week)

FEP Welcome Carnival

Thursday, August 24, 2017 5:00 pm – 8:00 pm

SPRING 2018

Begin Monday, January 8, 2018 (1-week before classes)

End Friday, May 11, 2018 (End of Finals week)

Engineering Honors Symposium

Saturday, April 21, 2018 7:00 am – 5:00 pm (date tentative)

FEP Banquet

Sunday, April 29, 2018 5:00-8:00 pm

Teaching Assistant Responsibilities

CLASSROOM SUPPORT

Teaching assistants will be responsible at least one section of an FEP course. With regard to classroom conduct, teaching assistants are expected to:

- review all materials before class this includes completing student assignments;
- arrive to class at least 10 minutes before class begins;
- assist in the setup of any materials needed for the classroom including but not limited to handouts, project equipment, and Response Card (clicker) system;
- be attentive throughout the class meeting, help the instructor as needed, and enforce the FEP Conduct Policy;

- turn off and stow all electronic devices other than calculators
- remain in class until all clean-up is complete, the next teaching assistant arrives, and/or they dismissed by the instructor.

Guest Speakers

On occasions when guest speakers are present, instructors may not attend the entire class period. Teaching assistants may be additionally responsible for introducing the speaker and conducting the class. As per the FEP Conduct Policy, students should not be admitted 5 minutes after class begins. Teaching Assistants may also remove students or deduct attendance points for students who are disruptive or inattentive.

OFFICE HOURS

Teaching Assistants will be assigned specific office hours within the FEP Center. With respect to office hours, teaching assistants are expected to:

- arrive on time
- help students with any questions regarding FEP
- assist students with check-in and the checkout of project materials as necessary
- remain in the office for the appointed time, leaving only after the next teaching assistant has arrived or as necessary to make another scheduled event (class or meeting).

GRADING

Teaching Assistants will be responsible for grading one or more sections of an FEP course. With regards to grading, teaching assistants (unless otherwise instructed) are expected to:

- grade assignments in accordance with the FEP Assignment Policy;
- submit grades to Blackboard within one week after the Zero hour, returning graded work when appropriate;
- answer student queries with regards to grades;
- help the instructor maintain the Blackboard course page.

MEETINGS AND OTHER DUTIES

Teaching assistants are also responsible for attending meetings and performing other duties as required by FEP which support the courses and students. Including but not limited to:

- FEP Welcome Picnic: Thursday, August 27th 4pm-8pm, The Gardens
- Departmental Recruiting Sessions: Evenings during February 2016
- Honors Research Symposium: Saturday, April 23, 2016 8am-4pm Arkansas Union
- Annual FEP Banquet: Sunday, May 1, 2016 6pm-8pm Arkansas Union Ballroom

SALARY

Teaching assistants are granted full tuition for graduate school in the college of engineering as well as a \$1200 stipend per month.

Freshman Engineering Courses 2017-18

GNEG 1111/GNEG 1121 Introduction to Engineering I & II (Precalculus or Higher)

The most common course sequence taken by freshman engineers is GNEG 1111 (fall) & GNEG 1121 (spring). Includes basic problem solving skills, Microsoft Excel training, and hands-on projects based on theme of section selected. Students select a one theme form Fall with alternate for Spring. Themes available: Biosystems, Electronics, Robotics, & Structures. Most of the other content is taught through video tutorials with in-class work time for the assignments. There are off-sequence versions of these classes for students who begin in College Algebra or repeat Precalculus

GNEG 1201 Fundamentals of Success in Engineering Study (College Algebra Students)

This course is provided for students who begin in College Algebra. Students are exposed to campus resources, study skills, and reinforce math concepts.

GNEG 1103 Introduction to Engineering

This course is designed for transfer students. This 8-week, online course is taught each semester and summer. It contains similar content to GNEG 1111 & 1121 without the hands-on projects.

GNEG 1301H, 1311H, & 1322H FEP Honors Research Experience (Calculus II or higher)

Advanced students may choose to take these courses instead of GNEG 1111/1121. Students will be exposed to research in the college of engineering during GNEG 1301H (fall 1st 8-week), begin research with a partner and faculty member in GNEG 1311H (fall 2nd 8-week), and complete research during GNEG 1322H (spring). The course culminates with presentation at the FEP Honors Symposium.

GNEG 1401H, 1411H, & 1422H FEP Honors Innovation Experience (Calculus II or higher)

Advanced students may choose to take these courses instead of GNEG 1111/1121. Students will be exposed to higher level problem solving during GNEG 1401H (fall 1st 8-week), begin working with a group to solve a large problem in GNEG 1411H (fall 2nd 8-week), and complete their solution during GNEG 1422H (spring). The course culminates with presentation at the FEP Honors Symposium.

GNEG 1515 Engineering Applications of Mathematics (qualify for MATH 1284 or MATH 1203)

This course replaces Precalculus (MATH 1284) and Introduction to Engineering I (GNEG 1111) for students who qualify. Commonly referred to as E-Math, this course teaches the concepts covered in precalculus along with basic introduction to derivatives and integrals by using engineering examples. Students will experience hands-on learning as well use of computer software to solve problems.

Friday Drills

All courses listed above (except GNEG 1103) will have a Friday Drill component. During Friday drills in the fall, students are exposed to the various engineering majors, study abroad, academic integrity, and other outside speakers. In the spring, topic center mostly around professional development including resume writing, StrengthsQuest, and interview skills. Attendance & participation counts towards their course grade.

Peer Mentoring

All courses listed above (except GNEG 1103) will require students to have a peer mentor. Peer mentors are sophomore, junior, & senior students who meet with the student for 30 minutes each week. Peer mentors have a weekly topic related to helping the student make a smooth transition to campus life, but also serve as a friendly peer to discuss matters with which the student may be struggling.

Teaching Assistant Recruitment Timeline

APPLICATION

Applicants must submit a complete Teaching Assistant Application online no later than **5pm on Friday, April 7, 2017**.

INTERVIEW

All applicants will receive notification about their application status informing them if they have been selected for an interview by **Wednesday, April 12**. Individual interviews will be held with FEP Associate Director of Academics and FEP Instructors on **Friday, April 14, 2017**. Business casual attire is required.

SELECTION

All applicants who participate in the interview process will receive notification indicating selection decisions by **5pm Friday, April 21, 2017** via their University of Arkansas e-mail account.

SELECTION RESPONSE

All applicants who are offered a position are required to **ACCEPT** or **DECLINE** position offer by **5pm Friday, April 28, 2017**.