

2024 SUMMER ORIENTATION



**UNIVERSITY OF
ARKANSAS**

College of Engineering

STUDENT GUIDEBOOK

This guidebook will...



Teach you about the **First-Year Engineering Program (FEP) curriculum**



Introduce you to services provided by **Engineering One-Stop (EOS)**



Provide information to prepare you for **one-on-one advising**



Be a **resource after orientation**

Still have questions...



Students contact EOS by phone
479-575-4540

or send an email from your
UARK account to
eos@uark.edu

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UNIVERSITY OF
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FIRST-YEAR ENGINEERING PROGRAM OVERVIEW

The First-Year Engineering Program (FEP) is a two-semester program required for all incoming students starting in the College of Engineering and all transfer students who have not completed Calculus I.

The First-Year Engineering Program strives to:

- Equip students with critical thinking skills to solve real-world engineering problems independently and collaboratively.
- Prepare students to understand engineering degree requirements and career pathways.
- Empower students by fostering awareness of self, culture, and community.
- Connect students to academic support to help them make satisfactory degree progress.

Introduction to Engineering I and II serve as your first-year experience courses at the University of Arkansas and take place of University Perspectives in your curriculum. With small class sizes, students enjoy personalized attention, fostering close relationships with both faculty members and peers. This setting allows for meaningful interactions, facilitating collaborative learning experiences.

The two-semester curriculum includes the following:

- Introduction to Engineering I and II
- Two mathematics courses
- Science courses based on student's math progress
- Composition I and II
- At least one state minimum core elective

Students are initially declared as Engineering First-Year students. Students will announce their major during a celebration in March. After March, only students enrolled in Calculus I or higher will officially have their majors changed. Students taking Precalculus in the spring will officially have their major changed once they complete Calculus I.

ENGINEERING ONE-STOP OVERVIEW

Engineering One-Stop (EOS) enhances student access to academic coaching, peer mentoring, academic advising, study abroad advising, career connections, and scholarship and financial aid counseling for all engineering students. EOS partners with FEP and the engineering departments to provide support for students throughout their undergraduate career.

Below are types of support students can find in Engineering One-Stop:

ACADEMIC ADVISING

- Understanding requirements for majors and minors
- Planning courses for future semesters
- Making changes to schedule like dropping a class

SCHOLARSHIP AND FINANCIAL AID COUNSELING

- Learning about various financial aid sources
- Assistance with application process for financial aid
- Understanding how classes and GPA impact scholarship or financial aid eligibility

ACADEMIC COACHING

- Individualized support with adjustment to college
- Developing and improving college-level study habits
- Managing time, priorities, and creating balance
- Creating a study plan for exams and finals

PEER MENTORING

- Transitioning to college
- Getting involved on campus
- Succeeding as an engineering student

STUDY ABROAD ADVISING

- Discovering best study abroad programs for future goals
- Understanding the various funding opportunities available for study abroad
- Navigating applying and attending programs abroad

CAREER CONNECTIONS

- Major and career exploration
- Preparing for job and graduate applications
- Professional development and networking events

ACADEMIC ADVISING

Academic advising is an active, ongoing exchange between students and their advisors. Your advisor can help you explore programs of studies, understand academic policies and procedures, select appropriate classes, and ensure you are meeting the requirements for your degree. Your advisor can also help you connect with university resources, make thoughtful decisions related to your academic experiences, and maximize educational and career opportunities.

DURING ORIENTATION

All students will learn about engineering curriculum then meet one-on-one with an academic advisor to plan classes. Students do not have to decide on a specific engineering major at this time. Academic advisors will help students select classes that meet requirements for multiple engineering majors.

NEED HELP AFTER ORIENTATION?

We will assign academic advisors in early August for students attending summer orientation and mid-January for students attending January orientation. If students need assistance before their academic advisor has been assigned, they can contact Engineering One-Stop by phone at 479-575-4540 or email at eos@uark.edu to get connected to an advisor. We will also hold walk-in advising hours during the first week of classes in the fall and spring from 8:30 am-4:30 pm to help with schedule changes or other scheduling concerns. We will notify students via email and Blackboard about the walk-in advising process.

SHARED ADVISING MODEL

The College of Engineering engages in a shared advising model to assist students in building a strong academic support network throughout their collegiate experience. Students are assigned to either a FEP or EOS academic advisor in the fall semester with most students being assigned to an EOS academic advisor in the spring semester. Depending on their chosen major and course trajectory, students will begin meeting with a faculty advisor in their academic department after 1-2 years of study. For more information, please visit engineering-one-stop.uark.edu/academic-advising.php.

ENGINEERING ACADEMIC COACHING PROGRAM

Engineering Academic Coaches provide individualized academic support to students in the College of Engineering to improve student persistence and degree completion. Academic coaches offer services to build skills and self-advocacy by co-creating a success plan that considers life experiences, academic goals, and professional aspirations. Scheduled one-on-one appointments are available Monday through Friday or during weekly drop-in hours.

Coaching services are designed to support students' successful transition to the university. They include:

- Networking and Making Connections
- Effective Study Techniques
- Getting the most out of coursework and lectures
- Test Preparation
- Wellness and Balance
- Time Management
- Test Anxiety
- Navigating Campus Resources

Academic coaches can also connect students to appropriate services on campus, such as:

- Counseling and mental health services (CAPS)
- Tutoring and writing support (Student Success Center)
- Career guidance (Engineering Career Connections)
- Academic accommodations (Center for Educational Access - CEA)

Students who could benefit from academic coaching are encouraged to attend between 2-4 meetings throughout the semester, although meeting frequency will depend on students' individual goals. Students can make appointments by logging into UASuccess and searching for "Engineering Academic Coaching" under "My Success Network." Drop-in hours vary by semester, but will be posted in the ENGR Academic Coaching Blackboard page before classes begin. For more information, visit engineering-one-stop.uark.edu/academic-coaching.php.

PEER MENTORING PROGRAM

To help first-year students ease the transition from high school to college, each student is paired with an upper-class engineering student who helps with academic, professional, and personal development. Students are required to meet weekly with their Peer Mentor through the fall and spring semesters. Peer Mentors are able to share their first-hand experience to answer questions regarding topics such as academics, extracurricular activities, school/life balance, and more. Peer Mentors are a great resource for first-year students to share their ideas or discuss problems or frustrations.

During orientation students complete a survey to be matched with their Peer Mentor based on personal and academic interests.

WHAT KINDS OF TOPICS WILL PEER MENTORS COVER IN ONE-ON-ONE MEETINGS?

The transition from high school level studying and course work to the university level is expected to be a challenge by the majority of our incoming students, but many seem to underestimate the true degree of difficulty in this change – even the best and brightest students can struggle during this first year. To help students adjust to this new and often demanding workload, Peer Mentors will guide their mentees through topics such as time management, developing relationships with professors, and effective study habits. Peer Mentors help students to build an understanding of the campus resources and strengthen our first-year students professionally, through resume building and interview prep. **While they will have a topic of the week to cover, ultimately these meetings are dependent upon the students' needs and questions during that given week – they are here to be a resource and guide FOR YOU!**

"I once arrived to a peer mentor meeting incredibly dishearten with a failing exam grade and felt as though I could not possibly make it through engineering. However, Brianna shared her freshman experience where she too failed an exam. She told me that I am not defined by an exam grade and to keep going forward. At the end of the semester I was able to pull my grades up and received an A in the class I was sure I was going to fail."

"One week, I felt very discouraged about finding an internship, so she shared a few experiences with me about her personal journey in dealing with companies (failure and success) which was encouraging. I realized that every failure brings me one step closer to my next success. Because of this, I feel more confident in attending the next career fair or seeking an internship on my own."

"Cady is the reason that I survived my first semester as an engineering major. When I was struggling with my classes, she led me to resources such as Class + and gave me little tips on how to thrive in my difficult classes. She suggested resources such as visiting the Physics Library or the Calc Corner. Cady saw that I was struggling, not because I was incapable of passing my classes, but because I needed extra support. She was my support system."

ENGINEERING OFFICE OF CAREER CONNECTIONS

White Engineering Hall 307 | Monday - Friday, 8:00 a.m. - 5:00 p.m.
engineering.uark.edu/career-connections/index.php

WHO WE ARE

College of Engineering students have their own career professionals designated to assist in all aspects of career readiness and preparation through the Engineering Career Connections Office!

WHAT WE DO

We offer guidance through in-person and virtual career coaching over:

- Major Exploration
- Resume/Cover Letter Reviews
- Career Assessments
- Job/Internship Search
- Interviewing Assistance
- LinkedIn Profile Reviews and Free Headshots
- Salary Negotiation
- and more!

We also host many networking professional development opportunities:

- **September and March STEM Career Fairs:** Companies recruit for internships and full-time openings.
- **Engagement:** Various professional development and employer information sessions will occur throughout the academic year.

HOW YOU CAN CONNECT WITH US

Ask us any career-related questions (big or small):

- **Text us:** Text your question(s) to (479) 279-6655, and we will communicate with you via text message.
- **Email us:** Email our career coach, Sarah Langley, at slh02@uark.edu.

LOOKING FOR AN ON CAMPUS JOB OR WORK STUDY POSITION?

- **The Hourly/Student Job Board – Handshake** promotes student employment opportunities on-campus. All students are welcome to apply for positions for which they qualify. Search for openings here: uark.joinhandshake.com. Filter by “On Campus” to easily find University of Arkansas opportunities.
- **Federal Work Study** is a federal program that offers students the opportunity to work part-time in order to gain experience, earn income, and offset educational expenses. Students who complete their FAFSA may be eligible to receive federal aid from the Office of Financial Aid. Search for work study eligible jobs on Handshake by filtering by “Work Study.” Visit finaid.uark.edu/work_study_for_students/index.php for more information.

DID YOU KNOW? *Having relevant experience in this competitive job market is critical. Engineering Career Connections highly suggests that students participate in an internship experience during college. The College of Engineering recognizes the value of participating in an internship. To support that, students can enroll in an internship/cooperative education course to take alongside their experience.*

GENERAL ENGINEERING COURSES

GNEG 12001 FUNDAMENTALS OF SUCCESS IN ENGINEERING STUDY

The Fundamentals of Success in Engineering Study course is required for students who place in College Algebra. This course is designed to help students who are not as far along in the math sequence develop skills and habits which will benefit them in their engineering study and strengthen their fundamental math skills. This includes introducing students to campus resources, examining study skills, reinforcing mathematical concepts, and connecting students to the engineering majors at the University of Arkansas. Students who complete this course and pass their math course will begin with the Introduction to Engineering course sequence the following semester.

Students enrolled in GNEG 12001 will delay completing GNEG 11201 until the fall of their second year.

GNEG 11101 & 11201 INTRODUCTION TO ENGINEERING I AND II

The Introduction to Engineering course sequence incorporates the learning and application of skills required of engineers through project planning techniques, project management, conflict resolution, process planning, critical thinking, and analysis. These skills are introduced through lessons taught in a variety of active learning formats and hands-on projects.

As engineers of the 21st century the use of computing and basic programming are vital. Parts of the Introduction to Engineering course sequence will focus on programming.

Students will also have the opportunity to work on themed projects that utilize skills more directly related to their potential major.

Students in the Honors College may elect to take honors versions of GNEG 111H1 & GNEG 112H1.

Note: Only students who place into Precalculus or higher math course may enroll in GNEG 11101.

GNEG DRILLS

All students in GNEG courses also attend drills, which are utilized to introduce the various engineering majors, career competencies, and college-level time management and study strategies to support student success.

HONORS COLLEGE

JOINING THE HONORS COLLEGE

Incoming first-year engineering students have two ways to qualify for the Honors College:

- Automatic Admission – 28 ACT Composite (1310 SAT) and 3.75 high school GPA
- Application Review – 3.9 high school GPA.

May 15 was the deadline for new freshmen to be admitted to the Honors College.

Students who qualify for honors but missed the deadline will be sent an application link in the fall. Students who did not meet the qualifications can apply after earning a 3.5 UofA GPA. Students must be in the Honors College to enroll in Honors courses.

Visit the Honors College website for more information and to apply online.

honorscollege.uark.edu

ENGINEERING HONORS GRADUATION REQUIREMENTS

- Complete a minimum of 12 hours of Honors courses at the UofA. Honors credit earned from AP courses or other institutions does NOT count towards these minimum honors requirements.
- A minimum of 6 of these 12 hours must be in engineering. The available engineering honors courses are found in the departmental requirements on our Engineering Honors Program website.
- For the honors courses outside of engineering, students can take sections of State Minimum Core courses as well as honors physics.
- Participate in an undergraduate research or design experience, and prepare an undergraduate thesis.
- Fulfill any additional departmental requirements.

To retain status in the Engineering Honors Program, a student must maintain a minimum cumulative GPA of 3.50.

GRANT FUNDING FOR STUDY ABROAD, RESEARCH AND INTERNSHIPS

Students in the Honors College may apply for grants to fund research, internships and study abroad programs. By the time of application, students must have completed 6 honors hours on the UofA campus.

One of the best times for engineering students to study abroad is the summer after their first-year year. For this reason, students in their first semester at the university are eligible to apply or study abroad funding for summer after their first-year year as long as they are enrolled in at least hour of honors coursework in their first semester on campus, and complete a total of six hours of honors coursework by the end of their second semester on campus. Students who wait to apply for grant funding in subsequent semesters must have completed six honors hours to be eligible to apply. Honors credit earned from AP courses do NOT count towards these minimum honors hours requirements.

More information about Honors College grants and specific requirements can be found on the Honors College website under Resources.

FIRST-YEAR ENGINEERING HONORS EXPERIENCE

Engineering first-year students looking to gain experience above and beyond what is covered in the typical Introduction to Engineering I and II sequence may apply to participate in the FEP Honors Experience if they are in the Honors College and have AP credit for Calculus 1. The AP math requirement will be waived for students graduating from Arkansas School for Math, Science and the Arts or other schools that do not offer AP math.

Honors Research Experience (HRE) - For the fall semester, students enroll in GNEG 131H1 Honors Research Experience I. These students attend weekly research seminars delivered by University of Arkansas faculty and learn to utilize library resources to conduct background research on engineering topics. Students also begin working in teams on undergraduate research projects defined and mentored by a member of the College of Engineering faculty. Students continue their research in the spring semester in GNEG 132H1 Honors Research Experience II.

Honors Innovation Experience (HIE) - For the fall semester, students enroll in GNEG 141H1 Honors Innovation Experience I. These students will explore topics in innovation and entrepreneurship including lean start-ups, intellectual property, venture capital, product costs, and marketing channels via seminars presented by industry professionals. Students will work in interdisciplinary teams of engineering and business students and have University of Arkansas faculty mentors with experience in innovation or entrepreneurship to help them with innovative design projects. Students will consider product market and business development plans. In the spring semester, students continue to develop their innovative design in GNEG 142H1 Honors Innovation Experience II.

In April, students in HRE and HIE participate in the Honors Engineering Symposium. For the symposium, each team of students participates in a poster session and delivers a 15-minute technical presentation. All symposium activities are judged by a panel comprised of former symposium participants.

Students who are admitted into HRE or HIE will also be required to enroll in the Honors Experience theme for GNEG 111H1 Honors Introduction to Engineering I along with their desired Honors Experience course. In this section of GNEG 111H1, students will complete self-paced online work to cover the skills introduced in GNEG courses. Students will attend in-person drills.

HOW TO APPLY FOR HONORS EXPERIENCE?

An application link to participate in Honors Experience was sent to all qualified students in May. Students who have not previously applied can discuss participating in this program during one-on-one advising. Acceptance will be based on seat availability.

Projects from past symposium and application can be found at first-year-engineering.uark.edu/engr-honors-experience/index.php

GENERAL INFORMATION ABOUT CLASSES

After meeting one-on-one with an academic advisor and building their schedule, students should not change their schedule unless their math placement changes based on test scores or transfer credit. Sections of classes will be filling throughout the summer, which makes changes more complicated.

Most students will enroll in 14-16 hours for the fall semester. Students are responsible for knowing whether they have a scholarship that has specific semester or year requirements for credit hours or GPA. If there are specific semester requirements, students must be enrolled in the correct number of credit hours by the 11th day of classes (Tuesday, September 3). Students should share their scholarship requirements with their academic advisor during orientation, and again during fall advising, to ensure they are advised for the correct number of credit hours.

DETERMINING CREDIT HOURS FOR A COURSE

- The last digit of a course number is the number of hours a course is worth. Example, MATH 24004 is worth 4 credit hours.
- Credit hours do not always equal hours spent in class or time required to study for the class.

CHEM 14103 University Chemistry I

CHEM 14103 is worth 3 credit hours and is required for all engineering majors. Engineering students are NOT required to take the lab (CHEM 14101).

- Student will have CHEM 14103 D001 Drill on their schedule. Tests are given on Tuesday nights from 6:30-8:00pm. Students only attend on Tuesday nights for weeks when tests are given.
- During the first week of classes, students will sign up for required Supplemental Instruction (SI) for chemistry. These are weekly study sessions for historically challenging courses. More information can be found on Student Success website success.uark.edu/supplemental-instruction/.

PHYS 20304 University Physics I

PHYS 20304 is worth four credit hours and is required for all engineering majors. The credit hours include the lecture, lab and test time found on the schedule.

- PHYS 20304 meets for 50 minutes 3 days a week for lecture.
- Lab meets twice a week for 1 hour and 50 minutes each day.
- Tests are given on Thursday nights from 7:30-10:30pm. Students only attend on Thursday nights for weeks when tests are given.

STATE MINIMUM CORE REQUIREMENTS

The University of Arkansas requires common coursework across all undergraduate degrees. All students must complete 35 hours of State Minimum core. These must be completed by graduation and are not direct pre-requisites to any engineering specific courses. The General Education curriculum contains six goals broken down into eleven learning outcomes to prepare students for the challenges and opportunities of the 21st century.

On the next page, we only list courses that satisfy the State Minimum Core requirements while also meeting General Education learning outcomes without adding hours to your engineering degree. Please note the listing assumes students have no incoming credit. Academic advisors will help students determine how incoming credit will fulfill requirements. The listing is dynamic, and subject to change as courses are added and dropped. Students should regularly check the University Course Requirements section of the Catalog of Studies for changes.

catalog.uark.edu/undergraduatecatalog/gened/

ENGLISH

- All engineering degrees require ENGL 10103 and ENGL 10303.
- Students with ACT English scores of 30 or greater or SAT Evidence-Based Reading and Writing scores of 690 or greater are exempt from taking ENGL 10103 and ENGL 10303.

SOCIAL SCIENCE

- Students must take three Social Science courses of which one must satisfy learning outcome 4.1.
- Courses must be taken from at least two subjects.
- The following degrees require an economics course:
 - Chemical and Mechanical engineering require ECON 21003 or ECON 21403
 - Electrical engineering requires ECON 21003, ECON 22003 or ECON 21403
 - Industrial engineering requires ECON 21403 or both ECON 21003 and ECON 22003
- Students interested in Premed should take SOCI 10103 and PSYC 20003 to prepare for the MCAT.

HUMANITIES

- All majors EXCEPT Computer Science and Computer Engineering satisfy learning outcomes 3.2 and 5.1 by taking one of the courses listed.
- Computer Science and Computer Engineering require PHIL 31003 Ethics and the Professions.

ENGLISH (2 COURSES)

- ENGL 10103 Composition I
- ENGL 10303 Technical Composition II

FINE ARTS (1 COURSE)

- ARCH 10003 Basic Course in the Arts: Architecture Lecture
- ARHS 10003 Basic Course in the Arts: Art Lecture
- COMM 10003 Basic Course in the Arts: Film Lecture
- DANC 10003 Basic Course in the Arts: Movement and Dance
- LARC 10003 Basic Course in the Arts: The American Landscape
- MUSC 10003 Experiencing Music
- MUSC 10103 Music and Society
- MUSC 13303 Popular Music
- THTR 10003 Basic Course in the Arts: Theatre Appreciation
- THTR 10103 Musical Theatre Appreciation

HUMANITIES (1 COURSE)

- CLST 10003 Intro to Classical Studies: Greece
- CLST 10103 Intro to Classical Studies: Rome
- PHIL 20003 Intro to Philosophy
- PHIL 21003 Intro to Ethics

HISTORY (1 COURSE)

- HIST 20003 History of the American People to 1877
- HIST 20103 History of the American People 1877 to Present
- PLSC 20003 American National Government

SOCIAL SCIENCE (1 COURSE TO SATISFY 4.1 OUTCOME)

- ANTH 10203 Intro to Cultural Anthropology
- COMM 10203 Communication in a Diverse World

- GEOS 21003 World Regional Geography
- HDF5 14003 Life Span Development
- HDF5 24103 Family Relations
- HIST 11193 Institutions and Ideas of World Civilizations I
- HIST 11293 Institutions and Ideas of World Civilizations II
- HIST 20903 Animals in World History
- INST 28103 Intro to International Relations and Global Studies
- PLSC 20103 Intro to Comparative Politics
- PLSC 28103 Intro to International Relations and Global Studies
- RESM 28503 Leisure and Society
- SOCI 10103 General Sociology
- SOCI 20303 Social Problems

SOCIAL SCIENCE (2 COURSES)¹

- AGE1 11003 Principles of Agricultural Microeconomics
- AGE2 21003 Principles of Agricultural Macroeconomics
- ECON 21003 Principles of Macroeconomics
- ECON 22003 Principles of Microeconomics
- ECON 21403 Basic Economics: Theory and Practice
- EDST 20003 Intro to Educational Studies
- GEOG 11103 Human Geography
- HDF5 26003 Rural Families and Communities
- HIST 20003 History of American People to 1877
- HIST 20103 History of American People 1877 to Present
- PLSC 20003 American National Government
- PLSC 21003 State and Local Government
- PSYC 20003 General Psychology
- STEM 20003 Art of STEM Communication

¹Students may also take additional courses from the Social Science 4.1 groups.

CREDIT BY ADVANCED-STANDING PROGRAMS

ADVANCED PLACEMENT PROGRAM (AP)

AP examinations listed below are for classes specific to engineering requirements for State Minimum Core and General Education Requirements. Students will discuss actual and anticipated AP scores one-on-one with an academic advisor during orientation. A complete list can be found in the Academic Regulations section of the Catalog of Studies. catalog.uark.edu/undergradatecatalog/

AP Examination	UA Course	Minimum Score
English		
Language and Composition	ENGL 10103	3
Language and Composition	ENGL 101H3	5
Math		
Precalculus	MATH 13004	3
Calculus AB	MATH 24004	3
Calculus AB	MATH 240H4	5
Calculus BC	MATH 24004 & MATH 25004	3
Calculus BC	MATH 240H4 & MATH 250H4	5
Calculus AB Subscore	MATH 24004	3
Statistics	MATH 21003	3
Science		
Biology	BIOL 10103/10101	4
Biology	BIOL 101H3/101H1	5
Chemistry	CHEM 14103/14101 & CHEM 14203/14201	4
Chemistry	CHEM 14103/14101 & CHEM 142H3/142H1	5
Physics 1: Algebra-Based with Cal AB or BC score of 3	PHYS 20304	4
Physics 1: Algebra-Based with Cal AB or BC score of 3	PHYS 203H4	5
Physics C Mechanics	PHYS 20304	3
Physics C Mechanics	PHYS 203H4	5
Physics C, E & M	PHYS 20404	3
Physics C, E & M	PHYS 204H4	5

Fine Arts		
Art History	ARHS 10003	3
Art History	ARHS 100H3	4
Music Theory	MUSC 10003	3
Humanities		
Literature and Composition	ENGL 11103	3
Literature and Composition	ENGL 111H3	5
U.S. History/Government		
U.S. Government and Politics	PLSC 20003	3
U.S. Government and Politics	PLSC 200H3	5
U.S. History	HIST 20003 or HIST 20103	3
U.S. History	HIST 20003 and HIST 20103	5
Social Science		
European History	HIST 11293	3
Government and Politics: Comparative	PLSC 20103	3
Human Geography	GEOG 11103	3
Macroeconomics	ECON 21003	3
Microeconomics	ECON 22003	3
Psychology	PSYC 20003	3
World History	HIST 11193 or HIST 11293	3
World History	HIST 11193 and HIST 11293	5
Other Engineering Course		
Computer Science A	CSCA 20004	3

INTERNATIONAL BACCALAUREATE (IB) AND COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Students may also earn college credit by completing IB exams or taking CLEP tests. CLEP credit can only be earned for MATH 11003 College Algebra and MATH 24004 Calculus I. No CLEP credit is awarded for MATH 13004 Precalculus.

Information on the requirements for the IB exam and CLEP tests can be found in the Academic Regulations section of the Catalog of Studies.

catalog.uark.edu/undergradatecatalog/academicregulations/

MATH AND SCIENCE REQUIREMENTS

MATH REQUIREMENTS FOR ENGINEERING

Progression through the math sequence is essential for students to be able to take required sophomore-level engineering courses. Students who have not completed Calculus II prior to their second year may delay starting discipline-specific courses.

Math Course	Engineering Majors
MATH 24004 Calculus I	Required for All Majors.
MATH 25004 Calculus II	Required for All Majors.
MATH 26004 Calculus III	Required for All Majors EXCEPT Biomedical, Industrial, and Computer Science.
MATH 25804 Differential Equations	Required for All Majors EXCEPT Industrial and Computer Science.
MATH 26103 Discrete Mathematics	Required for Computer Science and Computer Engineering.
MATH 30803 Linear Algebra	Required for Biomedical Engineering and Computer Science.
MATH 31003 Combinatorics	Required for Computer Science.

SCIENCE REQUIREMENTS FOR ENGINEERING

All engineering majors require at least four science courses except Computer Science and Industrial Engineering which only require three. Biological, Biomedical, and Chemical engineering require additional science courses.

Science Course	Engineering Majors
CHEM 14103 University Chemistry I <i>(Lab is not required for engineering students.)</i>	Required for All Majors.
PHYS 20304 University Physics I	Required for All Majors.
CHEM 14203/14201 University Chemistry II with lab	Required for Biological, Biomedical and Chemical Engineering. Science elective for all majors.
PHYS 20404 University Physics II	Required for all majors EXCEPT Civil, Industrial and Computer Science. Science elective for Civil, Industrial and Computer Science.
BIOL 10103/10101 Principles of Biology with lab	Required for Biological and Biomedical Engineering. Science elective for all majors EXCEPT Chemical Engineering.
GEOL 11103/11101 General Geology with lab	Required for Civil Engineering. Science Elective for all majors EXCEPT Biological, Biomedical and Chemical Engineering.

Students pursuing Biological, Biomedical, and Chemical engineering with credit for PHYS 20404 and CHEM 14203/14201 can talk with their academic advisor about other science courses for the fall.

DETERMINING FALL MATH PLACEMENT

Students' schedules will be determined by their math class. Qualifications for each math class can be met by fulfilling one of the requirements in the table below. For more information on the ALEKS Math Placement test, visit mathplacement.uark.edu.

Students who have not completed Calculus II prior to their second year may delay starting discipline-specific courses.

Desired Math Course		Qualification (must meet one of these criteria)			
Number	Name	Prerequisite Course (C or better)	ALEKS Math Placement Score	ACT Math	SAT Math
MATH 11003 & MATH 00202	College Algebra with 2 hour lab		<30	<19	<510
MATH 11003 & MATH 00101	College Algebra with 1 hour lab		30	19	510
MATH 11003	College Algebra		46	22	540
MATH 13004	Precalculus Mathematics	MATH 11003	60	26	620
MATH 24005	Calculus I with Review	MATH 13004 or MATH 12003 <i>Or 2 on the Calculus AB or BC Exam</i>	70	28	660
MATH 24004	Calculus I	MATH 13004 or MATH 12003 <i>Or 2 on the Calculus AB or BC Exam</i>	76	28	660
MATH 25004	Calculus II	MATH 24004 or MATH 24005			
MATH 26004	Calculus III	MATH 25004			
MATH 25804	Differential Equations	MATH 25004			
MATH 26103	Discrete Math	MATH 24004 or MATH 24005			
MATH 30803	Linear Algebra	MATH 24004 or MATH 24005			

TEMPORARY MATH OVERRIDES INTO HIGHER COURSE

Some students may qualify for a temporary override into a higher math class than indicated by ACT or math placement scores. Temporary overrides are only granted for:

1. Pending AP credit from Calculus AB, Calculus BC, or IB Calculus exams.
2. Pending transcripts from another institution with college credit for a prerequisite.
3. Pending and verified higher ACT or SAT math scores that have not been sent to UofA

See page 21 for more information about overrides.

COURSE SCHEDULING FOR CALCULUS I OR HIGHER

Students who begin in Calculus I are on track with math. The semester schedules below represent two possible alternatives. For most students, we recommend taking one science in the first semester to give more time to focus on math and developing overall college-level study skills. All students will meet one-on-one with an academic advisor to determine the best schedule that also incorporates any incoming credit.

One Science	Two Sciences
GNEG 11101 Introduction to Engineering I	GNEG 11101 Introduction to Engineering I
MATH 24004 Calculus I	MATH 24004 Calculus I
CHEM 14103 University Chemistry I	CHEM 14103 University Chemistry I
State Minimum Core	Science Elective with Lab
ENGL 10103 Composition I	ENGL 10103 Composition I
14 hours	15 hours

MATH 24004 CALCULUS I

Students enrolled in MATH 24004 Calculus I will choose both a lecture and a corresponding drill section. The lecture section will meet on Mondays, Wednesdays, and Fridays in a large lecture and will be taught by a professor. Your drill section will meet on Tuesdays and Thursdays in a small lecture, taught by a graduate student. The drill section is more conducive to one-on-one student interaction. Drill attendance is required.

MATH 24005 CALCULUS I WITH REVIEW

Students may alternatively choose MATH 24005 Calculus I with Review. This class is designed for students who need to review College Algebra and Precalculus skills while mastering Calculus I concepts. Instead of large lecture and small drill format of MATH 24004, this course has a smaller lecture taught 5 days a week by a professor.

STUDENTS WITH CALCULUS CREDIT

Students who have or anticipate AP, IB, or transfer credit for Calculus I or higher will discuss their initial math course with an academic advisor.

COURSE SCHEDULING FOR PRECALCULUS

Students who begin in Precalculus have one additional semester of math.

The fall semester schedules below represent two possible alternatives. Some students will choose to take one science in the fall to give more time to focus on math and developing overall college-level study skills. All students will meet one-on-one with an academic advisor to determine the best schedule that also incorporates any incoming credit.

One Science	Two Sciences
GNEG 11101 Introduction to Engineering I	GNEG 11101 Introduction to Engineering I
MATH 13004 Precalculus	MATH 13004 Precalculus
CHEM 14103 University Chemistry I	CHEM 14103 University Chemistry I
State Minimum Core	Science Elective with Lab
ENGL 10103 Composition I	ENGL 10103 Composition I
14 hours	15 hours

It's important for students to start in the math course that is right for them. We provide students with information on how math progress impacts science progress, eligibility for major-specific courses and ultimately degree progress so they can make an informed choice. By starting in Precalculus students may extend graduation by one or two semesters depending on their chosen major.

MATH OPTIONS TO CONSIDER

1. Begin in Precalculus this fall
 - Consider taking a math course next summer at UofA or local college
2. Attempt to place into Calculus I this fall
 - Take ALEKS math placement exam to improve math preparedness and attempt to qualify for Calculus I
 - If time permits, take Precalculus or Plane Trigonometry this summer at UofA or local college

Students will talk with orientation academic advisor about options for this summer and fall. During the academic year, students will continue to learn about math progress to help make informed decision for next summer.

COURSE SCHEDULING FOR COLLEGE ALGEBRA

Students who begin in College Algebra have two additional semesters of math.

The fall semester schedules below represent two possible alternatives. All students will meet one-on-one with an academic advisor to determine the best schedule that also incorporates any incoming credit.

One Science	No Science
GNEG 12001 Success in Engineering Study	GNEG 12001 Success in Engineering Study
MATH 11003 College Algebra ¹	MATH 11003 College Algebra ¹
Science Elective with lab (4 hours)	State Minimum Core Elective (3 hours)
State Minimum Core Elective (3 hours)	State Minimum Core Elective (3 hours)
ENGL 10103 Composition I	ENGL 10103 Composition I
14 – 16 hours¹	13-15 hours¹

¹Some students may be required to also take MATH 00101 or MATH 00202 which adds 1-2 more hours

All students will enroll in MATH 11003 College Algebra. ACT math, SAT math, or ALEKS math placement score will determine if students must enroll in an additional math lab. The lab requirement also determines the number of class days per week. See page 15 for the requirements.

- No Lab required - Attend lecture 3 days a week
- MATH 00101 required - Attend lecture 4 days a week
- MATH 00202 required - Attend lecture 5 days a week

It's important for students to start in the math course that is right for them. We provide students with information on how math progress impacts science progress, eligibility for major-specific courses and ultimately degree progress so they can make an informed choice. By starting in College Algebra students may extend graduation by at least two semesters depending on their chosen major.

MATH OPTIONS TO CONSIDER

1. Begin in College Algebra this fall
 - Consider taking a math course next summer at UofA or local college
2. Attempt to place into Precalculus this fall
 - Take ALEKS math placement exam to improve math preparedness and attempt to qualify for Precalculus
 - If time permits, take College Algebra this summer at UofA or local college
3. Attempt to place into Calculus I this fall
 - Take ALEKS math placement exam to improve math preparedness and attempt to qualify for Calculus I

Students will talk with orientation academic advisor about options for this summer and fall. During the academic year, students will continue to learn about math progress to help make informed decision for next summer.

SUMMER TEMPORARY MATH OVERRIDE PROCESS

Some students may qualify for a temporary override into a higher math class and possibly other courses than indicated by ACT, SAT or math placement scores.

Temporary overrides are only granted for:

1. Pending AP credit from Precalculus, Calculus AB, Calculus BC, or IB Calculus exams.
2. Pending transcripts from another institution with college credit for a prerequisite.
3. Pending and verified higher ACT or SAT math scores that have not been sent to UofA

Students who are granted a temporary override consent to an agreement to have the pre-requisites posted to their student account by Thursday, August 1.

- Students will be administratively dropped from classes associated with the override if pre-requisites are not on file by the Thursday, August 1 deadline.
- Email communication about overrides will be sent to the students UARK email address.

FOR OVERRIDES BASED ON AP OR IB CREDIT

- Students need to confirm with College Board and IB that test scores are being sent to the University of Arkansas.
- In July, students need to confirm that they have earned the minimum AP test scores needed to meet requirements for math override. See page 12-13 for minimum scores needed.

FOR OVERRIDES BASED ON COLLEGE CREDIT

- Students should confirm that they have paid to send transcripts from the college or university where credit has been earned. Information on sending transcripts can be found on the Registrar's website registrar.uark.edu/transfer-and-test-credit/
- It is NOT the responsibility of the high school to send transcripts for students who received college credit through dual enrollment.

CONFIRMING THAT TEST SCORES OR TRANSCRIPTS HAVE BEEN RECEIVED

- Students can view their posted transfer credit in UAConnect. From Student Home page, click on Academic Records tile, then click Transfer Credit to see what credits have been received and posted. In the same tile, click on Other Academics then Academic Test Summary to see ACT, SAT, AP, CLEP, IB and ALEKS test scores.
- For students who meet the requirements and transcripts or test scores have been received by the UofA by the deadline, no further action is needed.

FOR OVERRIDES WHERE THE FINAL REQUIREMENTS ARE NOT MET

- Students will receive an email on Thursday, August 1 notifying them that they will be administratively dropped from any classes they are enrolled in but not eligible for.
- Students should see pages 14-17 for schedules based on math they will now qualify for.
- Students who qualify for a math class lower than Calculus I are encouraged to take the online math placement test. mathplacement.uark.edu
- Classes begin on Monday, August 19 and the final day to add a full semester classes is Friday, August 23.

QUESTIONS ABOUT OVERRIDES OR CLASS SCHEDULE

Students should contact EOS by phone 479-575-4540 or send an email from UARK email to eos@uark.edu

UACONNECT AND SCHEDULE PLANNER

For more assistance and instructions with UAConnect and Schedule Planner, go to help-uconnect.uark.edu. Then go to Knowledge Centers > Student.

1. Log on to UAConnect uconnect.uark.edu using your university login and password
 - Complete RazAlert info if necessary
2. From your Student Homepage, click on the **Manage Classes** tile and then **Schedule Planner** on the left side of the screen
3. Click the **Click Here** button to open Schedule Planner
 - If a new window or tab does not open, you may need to “Temporarily allow pop-ups”
4. Select **Fall 2024 (Undergraduate)** for the **Term** and click **Save and Continue** button
5. Only have **Univ of Ark (Fayetteville)** checked for the **Select Campus** page and click **Save and Continue** button.
6. **Uncheck Intercession** for the **Select Session** and click **Save and Continue** button
7. Select **Open Classes Only** for **Select Course Status** and click **Save and Continue** button.
8. Click the **Add Course** button in the **Courses** section
9. Add courses by choosing the subject and course from the drop down menus. Click **Add Course** button to add the individual course.
10. Once you have added all courses including required labs, check the first checkbox in the **Courses** section.
 - See section below about courses currently on your schedule.
11. Click **Generate Schedules** button in the **Schedules** section near the bottom of the screen
12. **View** possible schedules (See section on Refining your schedule search)
13. When you find the schedule you want, click the **Send to Shopping Cart** button. Confirm that this is schedule you want to send by clicking the Continue button.
14. Click back on the original browser tab that says **Schedule Planner**. Then click the button that says **Course Enrollment**.
15. On the next page, you will click the **Import Cart** button to import the classes individually from Schedule Planner. You will have to click the **Next** button to accept each class.
16. Once you have accepted each class, you will be back to the page for Adding Classes. You will see those classes in the middle section labeled **Fall 2024 Shopping Cart**. Click the **Proceed to Step 2 of 3** button to add those classes.
 - If you need to change your math placement (ex. From PreCalculus to Calculus I) then you will need to **SWAP** your math classes first. See Swap instructions.
17. On the next page it will confirm all the classes in your shopping cart. Click the **Finish Enrolling** button.
 - If you get green checkmarks for each class you are done.
 - If you get any red X's, contact the EOS office for assistance.

ANY CLASSES CURRENTLY ON YOUR SCHEDULE ARE LISTED IN THE “CURRENT FALL 2024 SCHEDULE” AREA.

To use the section of a course currently on your schedule, make sure the box is checked for the course in this area. To look at other section options, uncheck the box in this area for the course and use the Add Course functionality in steps 8 and 9 above.

REFINING YOUR SCHEDULE SEARCH (TOO MANY OPTIONS)

1. Add **Breaks** using the menu on the right of the screen
 - Use this for required practices or meetings
 - Use it to adjust times you wish to not have class (if you have options). Note that CHEM 14103 and PHYS 20304 have required class time on Tuesday and Thursday evening for tests, respectively. Do not add a break during these evenings if you intend to enroll in these courses.
2. Choose specific sections for one or more courses using the **Options** buttons in the **Courses** section.

SWAPPING A CLASS IN UACONNECT

1. From the **Manage Classes** tile, click the **Enroll** link on the left. Then click the **SWAP** tab at the top of the page.
2. If more than one term is open for enrollment, you will have to select the **Fall 2024** term and click the **Continue** button.
3. Under the **Swap This Class** section, click the drop-down arrow to select the class you wish to drop from your current schedule.
4. Under the **With This Class** section, click the drop-down arrow next to **Select from Shopping Cart** to select the class from your shopping cart. Then click **Select** button.
5. The next screen lists both classes for you to confirm your swap. Click the **Finish Swapping** button.
 - If you get a green checkmark on the next screen, your swap worked. If you get a red X, then the swap did not happen. Possible reasons are class is closed, class conflict, or prerequisites are not met. If you need help, contact the EOS office for assistance.
 - If you need to continue adding classes, then click the **Add** link at the top of the page.

EDITING DRILL OR LAB TIMES IN UACONNECT

If you want to keep the lecture time but change the drill time for your math class or lab time for your physics class, you can use the **EDIT** function. From the **Enroll** page, click the **EDIT** tab at the top of the page. You will be prompted to select a drill or lab associated with your currently schedule lecture.

DROPPING A CLASS IN UACONNECT (USE SWAP WHEN POSSIBLE)

1. From the **Enroll** page, click the **Drop** tab at the top of the page
2. If more than one term is open for enrollment, you will have to select the **Fall 2024** term and click the **Continue** button.
3. Select the check box of each class you wish to drop.
4. Click the **Drop Selected Classes** button to remove class(es) from your schedule.
5. The next page will show the status of this process.
 - If you get a green checkmark on the next screen your drop worked.
 - If you get a red X, then the drop did not happen. The most common reason is the class is a co-requisite with another class on your schedule. You may need to do a SWAP instead or drop the co-requisites. If you need help, contact the EOS office for assistance.

LAPTOP REQUIREMENTS

Entering first-year engineering students are required to have a laptop. Students are strongly encouraged to obtain a computer that meets or exceeds the college requirements:

Processor	Intel Core i5 or better
Memory	16GB+ RAM
Storage	1 TB solid-state storage
Operating System	Windows
Battery Life	10 hours or more
Resolution	1920 × 1080 or larger
Wi-Fi	802.11ac or later standard
Warranty	3 years with Accidental Damage Protection
Accessories	Webcam, Microphone, and Speakers, and USB port or adapter

NOTE: The University provides Office 365 to students. Chromebooks, iPads, and other ARM based devices do not meet the minimum requirements for the College of Engineering.

The Tech Store serves as the on campus resource for Apple and Dell repairs, sales and support. Visit their website for more details. techstore.uark.edu

Students have access to a wide range of applications, from multimedia and productivity to mathematics and statistical analysis. You can find a list for information on how to request, purchase and download university-supported software on the IT Services website. its.uark.edu

Tech Spot computer labs are located across campus and offer printing, charging stations and access to a wide range of software. its.uark.edu/printing-labs/computer-labs/tech-spot-labs.php

REMINDERS FOR AFTER ORIENTATION

If you registered for College Algebra or Precalculus today, we strongly encourage you to take the Math Placement Test to increase your math preparedness and possibly your starting math class for the fall.

THURSDAY, AUGUST 1

Deadline for transcripts to be received for students granted a temporary math override

MONDAY, AUGUST 12

Attend Engineering Open House to meet faculty, staff, and peers to help prepare you for your first week and semester.

IMPORTANT ACADEMIC CALENDAR DATES

Every semester has an official calendar with important academic semester dates and deadlines. We have listed important dates and deadlines for the beginning of the fall semester. Students can view the full semester calendar on the Registrar's website.

registrar.uark.edu/academic-dates/academic-semester-calendar/

MONDAY, AUGUST 19

First day of classes

FRIDAY, AUGUST 23

Last day to add a full semester class

SUNDAY, AUGUST 25

Last day to drop a full semester class or all classes with 100% fee adjustment (\$45 fee for withdrawing)

FRIDAY, AUGUST 30

Last day to drop a full semester class without a "W" on transcript

MONDAY, SEPTEMBER 2

Labor Day, no classes

Last day to drop a full semester class or all classes with 75% fee adjustment (\$45 fee for withdrawing)

TUESDAY, SEPTEMBER 3

11th day of classes (important date for scholarships with semester hour requirements)

MONDAY, SEPTEMBER 9

Last day to drop a full semester class or all classes with 50% fee adjustment (\$45 fee for withdrawing)

Continue to check your **university email account** regularly over the summer.

Visit the **Tech Store website** for all technology purchasing, repairs and support needs.

techstore.uark.edu

I M P O R T A N T D A T E S

Thursday, August 1

Deadline for Math Overrides

Monday, August 12

1:00 - 3:00 pm

College of Engineering Open House

Monday, August 19

First Day of Classes

Friday, August 23

Last Day to add a full semester course



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