# 2023 Summer Orientation Student Guidebook



**College of Engineering** 

# 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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**College of Engineering** 

## **First-Year Engineering Program Overview**

The First-Year Engineering Program (FEP) is a two-semester program required for all incoming freshmen 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 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.

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 in March during a Decision Day celebration. After Decision Day, 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, 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.

THE HIT

FEP and EOS partner strategically to provide proactive support for all new freshmen entering the College of Engineering. Particular emphasis is placed on academic, personal and career success. The Peer Mentoring Program is a major component of this partnership to help students transition successfully into the College of Engineering.

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

#### **Academic Advisor**

- Understanding requirements for major
- Planning courses for future semesters
- Making changes to schedule like dropping a class
- Learning about minors

#### Scholarship and Financial Aid Counselor

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

## Academic Coach

- · Developing and improving college-level study habits
- Learning study strategies
- Building a game plan for exams and finals
- Managing stress

#### **Peer Mentor**

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

## What is 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.

#### **During the Semester**

We will assign academic advisors mid-August for students attending summer orientation and mid-January for students attending January orientation. Students will meet with assigned academic advisors to discuss current classes, majors of interest, and plan for next semester. If students need assistance before their academic advisor has been assigned, they can contact EOS by phone 479-575-4540 or send an email from their UARK email to eos@uark.edu.

## Walk-in Advising

During the first week of classes in the fall and spring, we will have walk-in advising from 8:00 am – 5:00 pm to help with schedule changes or other scheduling concerns. Students do not need to meet with their assigned academic advisor during this week. 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. Engineering Academic Coaches provide individualized academic support to students in the College of Engineering to improve student persistence and degree completion. The coaches offer services to build skills and self-advocacy by co-creating a success plan that considers life experiences, academic goals, and long-term professional aspirations. Scheduled one-on-one sessions are available Monday through Friday or during weekly drop-in hours.

**IN HILL** 

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

- Learning Strategies
- Effective Studying Techniques
- Getting the most out of homework and class
- Test Preparation
- Emotional Wellness
- Organization Skills
- Time Management
- Test Anxiety
- Navigating campus resources

The coach can also connect students to appropriate services on campus, such as:

- Counseling and mental health services (CAPS)
- Tutoring
- Career Guidance (ENGR Career Services)
- Learning Accommodations (CEA)

Students who could benefit from academic coaching are encouraged to attend between 2-4 meetings throughout the semester, although each student is evaluated on a case-by-case basis. 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 **first-year-engineering.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."

# **General Engineering Courses**

#### GNEG 1111 & 1121 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 flipped classroom format and projects.

THE HIT

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 1111 & GNEG 1121.

Note: Only students who place into Precalculus or higher math course may enroll in GNEG 1111.

## **GNEG 1201 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 1201 will delay completing GNEG 1121 until the fall of their second year.

## **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
- A minimum of 6 of these 12 hours must be in engineering. The available engineering honors courses are found in the departmental requirements section below.
- 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 freshman year. For this reason, freshmen in their first semester at the university are eligible to apply in their first semester as long as they are enrolled in at least three honors hours in their first semester on campus, apply for funds that same semester, and complete a total of six honors hours by the end of their second semester on campus. Students who wait to apply to the grant in the second or 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.

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.

TURNET

**Honors Research Experience (HRE)** - For the fall semester, students enroll in GNEG 1311H 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 1321H Honors Research Experience II.

Honors Innovation Experience (HIE) - For the fall semester, students enroll in GNEG 1411H 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 1421H Honors Innovation Experience II.

In April, students in HRE and HIEparticipate 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 1111H Honors Introduction to Engineering I along with their desired Honors Experience course. This section of GNEG 1111H will not include the programming component; instead, students will complete self-paced, online work to master fundamental engineering skills. 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/honorsexperience.php* 

# **First-Year Engineering Honors Experience**

## **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 1013 and ENGL 1033.
- 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 1013 and ENGL 1033.

#### SOCIAL SCIENCE

- Students must take three Social Science courses of which 1 must satisfy learning outcome 4.1.
- Courses must be taken from at least 2 subjects.
- The following degrees require an economics course:
  - o Chemical and Mechanical engineering require ECON 2013 or ECON 2143
  - o Electrical engineering requires ECON 2013, ECON 2023 or ECON 2143
  - o Industrial engineering requires ECON 2143 or both ECON 2013 and ECON 2023
- Students interested in Premed should take SOCI 2013 and PSYC 2003 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 3103 Ethics and the Professions.

#### English (2 courses)

ENGL 1013 Composition I
 ENGL 1033 Technical Composition II

#### Fine Arts (1 course)

ARCH 1003: Basic Course in the Arts: Architecture Lecture

- ARHS 1003 Basic Course in the Arts: Art Lecture
- COMM 1003 Basic Course in the Arts: Film Lecture
- DANC 1003 Basic Course in the Arts: Movement and Dance
- LARC 1003 Basic Course in the Arts: The American Landscape
- MLIT 1003 Experiencing Music
- MLIT 1013 Music and Society
- MLIT 1333 Popular Music
- THTR 1003 Basic Course in the Arts: Theatre Appreciation
- THTR 1013 Musical Theatre Appreciation

#### Humanities (1 course)

CLST 1003 Intro to Classical Studies: Greece
 CLST 1013 Intro to Classical Studies: Rome
 PHIL 2003 Intro to Philosophy
 PHIL 2103 Intro to Ethics

#### History (1 course)

- HIST 2003 History of the American People to 1877
   HIST 2013 History of the American
- People 1877 to Present
  PLSC 2003 American National
- Government

# Social Science (1 course to satisfy 4.1 outcome)

- ANTH 1023 Intro to Cultural Anthropology
   COMM 1023 Communication in a Diverse World
   GEOS 2003 World Regional Geography
   HDFS 1403 Life Span Development
   HDFS 2413 Family Relations
   HIST 1113 Institutions and Ideas of World Civilizations I
- HIST 1123 Institutions and Ideas of World Civilizations II

#### HIST 2093 Animals in World History

- INST 2813 Intro to International Relations and Global Studies
- □ PLSC 2013 Intro to Comparative Politics
- PLSC 2813 Intro to International Relations and Global Studies
- RESM 2853 Leisure and Society
   SOCI 2013 General Sociology
- SOCI 2033 Social Problems

#### Social Science (2 courses)<sup>1</sup>

□ AGEC 1103 Principles of Agricultural Microeconomics AGEC 2103 Principles of Agricultural Macroeconomics ECON 2013 Principles of Macroeconomics ECON 2023 Principles of Microeconomics ECON 2143 Basic Economics: Theory and Practice EDST 2003 Intro to Educational Studies GEOS 1123 Human Geography □ HDFS 2603 Rural Families and Communities HIST 2003 History of American People to 1877 HIST 2013 History of American People 1877 to Present PLSC 2003 American National Government □ PLSC 2203 State and Local Government PSYC 2003 General Psychology □ STEM 2003 Art of STEM Communication

<sup>1</sup> Students 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. <u>catalog.uark.edu/undergraduatecatalog/</u>

AP Examination	UA Course	Minimum Score
English		
Language and Composition	ENGL 1013	3
Language and Composition	ENGL 1013H	5
Math		
Calculus AB	MATH 2554	3
Calculus AB	MATH 2554H	5
Calculus BC	MATH 2554 & MATH 2564	3
Calculus BC	MATH 2554H & MATH 2564H	5
Calculus AB Subscore	MATH 2554	3
Science		
Biology	BIOL 1543/1541L	4
Biology	BIOL 1543H/1541M	5
Chemistry	CHEM 1103/1101L & CHEM 1123/1121L	4
Chemistry	CHEM 1103/1101L & CHEM 1123H/1121M	5
Physics 1: Algebra-Based with Cal AB or BC score of 3	PHYS 2054	4
Physics 1: Algebra-Based with Cal AB or BC score of 3	PHYS 2054H	5
Physics C Mechanics	PHYS 2054	3
Physics C Mechanics	PHYS 2054H	5
Physics C, E & M	PHYS 2074	3
Physics C, E & M	PHYS 2074	5
Fine Arts		
Art History	ARHS 1003	3
Art History	ARHS 1003H	4
Music Theory	MLIT 1003	3

Humanities			
Literature and Composition	WLIT 1113	3	
Literature and Composition	WLIT 1113H	5	
U.S. History/Government			
U.S. Government and Politics	PLSC 2003	3	
U.S. Government and Politics	PLSC 2003H	5	
U.S. History	HIST 2003 or HIST 2013	3	
U.S. History	HIST 2003 and HIST 2013	5	
Social Science			
European History	HIST 1123	3	
Government and Politics: Comparative	PLSC 2013	3	
Human Geography	GEOS 1123	3	
Macroeconomics	ECON 2013	3	
Microeconomics	ECON 2023	3	
Psychology	PSYC 2003	3	
World History	HIST 1113 or HIST 1123	3	
World History	HIST 1113 and HIST 1123	5	
Other Engineering Course			
Computer Science A	CSCE 2004	3	

THE HIT

#### 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 1203 College Algebra and MATH 2554 Calculus I. No CLEP credit is awarded for MATH 1284 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/undergraduatecatalog/academicregulations/* 

## 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 2554C Calculus I	Required for All Majors.
MATH 2564C Calculus II	Required for All Majors.
MATH 2574C Calculus III	Required for All Majors EXCEPT Biomedical, Industrial, and Computer Science.
MATH 2584C Differential Equations	Required for All Majors EXCEPT Industrial and Computer Science.
MATH 2603 Discrete Mathematics	Required for Computer Science and Computer Engineering.
MATH 3083 Linear Algebra	Required for Biomedical Engineering and Computer Science.
MATH 3103 Combinatorics & Discrete Mathematics	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 1103 University Chemistry I (Lab is not required for engineering students.)	Required for All Majors.
PHYS 2054 University Physics I	Required for All Majors.
CHEM 1123/1121L University Chemistry II with lab	Required for Biological, Biomedical and Chemical Engineering. Science elective for all majors.
PHYS 2074 University Physics II	Required for all majors EXCEPT Civil, Industrial and Computer Science. Science elective for Civil, Industrial and Computer Science.
BIOL 1543/1541L Principles of Biology with lab	Required for Biological and Biomedical Engineering. Science elective for all majors EXCEPT Chemical Engineering.
GEOS 1113/1111L General Geology	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 2074 and CHEM 1123/1121L 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*.

THE HIT

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 1203 & MATH 0002L	College Algebra with 2 hour lab		<30	<19	<510	
MATH 1203 & MATH 0001L	College Algebra with 1 hour lab		30	19	510	
MATH 1203	College Algebra		46	22	540	
MATH 1284C	Precalculus Mathematics	MATH 1203	60	26	620	
MATH 2445	Calculus I with Review	MATH 1284C or MATH 1213 Or 2 on the Calculus AB or BC Exam	70	28	660	
MATH 2554C	Calculus I	MATH 1284C or MATH 1213 Or 2 on the Calculus AB or BC Exam	76	28	660	
MATH 2564C	Calculus II	MATH 2445 or MATH 2554C				
MATH 2574C	Calculus III	MATH 2564C				
MATH 2584C	Differential Equations	MATH 2564C				
MATH 2603	Discrete Math	MATH 2554C				
MATH 3083	Linear Algebra	MATH 2554C				

## **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.

 Pending transcripts from another institution with conege credit for a prerequisite.
 Pending and verified higher ACT or SAT math scores that have not been sent to UofA See page 19 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 1111 Introduction to Engineering I	GNEG 1111 Introduction to Engineering l
MATH 2554C Calculus I	MATH 2554C Calculus I
CHEM 1103 University Chemistry I	CHEM 1103 University Chemistry I
State Minimum Core	Science Elective with Lab
ENGL 1013 Composition I	ENGL 1013 Composition I
14 hours	15 hours

#### MATH 2554C CALCULUS I

Students enrolled in MATH 2554C 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 2445 CALCULUS I WITH REVIEW

Students may alternatively choose MATH 2445 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 2554C, 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.

THE HIT

One Science	Two Sciences
GNEG 1111 Introduction to Engineering l	GNEG 1111 Introduction to Engineering I
MATH 1284C Precalculus	MATH 1284C Precalculus
CHEM 1103 University Chemistry I	CHEM 1103 University Chemistry I
State Minimum Core	Science Elective with Lab
ENGL 1013 Composition I	ENGL 1013 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**

# **Summer Temporary Math Override Process**

THE HIT

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 1201 Success in Engineering Study	GNEG 1201 Success in Engineering Study
MATH 1203 College Algebra <sup>1</sup>	MATH 1203 College Algebra <sup>1</sup>
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 1013 Composition I	ENGL 1013 Composition I
14 – 16 hours <sup>1</sup>	13-15 hours <sup>1</sup>

<sup>1</sup>Some students may be required to also take MATH 0001L or MATH 0002L which adds 1-2 more hours

All students will enroll in MATH 1203 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 0001L required Attend lecture 4 days a week
- MATH 0002L 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. 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 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 Tuesday, August 1.

- Students will be administratively dropped from classes associated with the override if pre-requisites are not on file by the Tuesday, 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 being 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 Tuesday, 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 21 and the final day to add a full semester classes is Friday, August 25.

#### 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 Guide**

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

- 1. Log on to UAConnect *uaconnect.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 2023 (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 2023
  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 2023 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 1103 and PHYS 2054 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 2023** 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 2023** 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.

# **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 6). 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 2554C is worth 4 credit hours.
- Credit hours do not always equal hours spent in class or time required to study for the class.

#### CHEM 1103 University Chemistry I

CHEM 1103 is worth 3 credit hours and is required for all engineering majors. Engineering students are NOT required to take the lab (CHEM 1101L).

- Student will have CHEM 1103 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 2054 University Physics I

PHYS 2054 is worth 4 credit hours. The credit hours include the lecture, lab and test time found on the schedule.

- PHYS 2054 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.

# 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	256GB solid-state storage
<b>Operating System</b>	Windows
Battery Life	10 hours or more
Resolution	1920 $ imes$ 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.

THE HIT

#### **TUESDAY, AUGUST 1**

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

#### MONDAY, AUGUST 14

Attend Engineering Open House to meet faculty, staff, and peers to help prepare you for your first week and semester. Welcome carnival and mandatory first in-person meeting with peer mentor

#### 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 21 First day of classes

FRIDAY, AUGUST 25 Last day to add a full semester class

SUNDAY, AUGUST 27 Last day to drop a full semester class or all classes with 100% fee adjustment (\$45 fee for withdrawing)

FRIDAY, SEPTEMBER 1 Last day to drop a full semester class without a "W" on transcript

**MONDAY, SEPTEMBER 4** 

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 5** 11th day of classes (important date for scholarships with semester hour requirements)

#### **MONDAY, SEPTEMBER 11**

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 the Tech Store website for all technology purchasing, repairs and support needs. <u>techstore.uark.edu</u>

# **Important Dates**

**Tuesday, August 1** Deadline for Math Overrides

Monday, August 14 1:00 - 3:00 pm College of Engineering Open House

> Monday, August 21 First Day of Classes

**Friday, August 25** Last Day to add a full semester course



**College of Engineering**