AEROSPACE STUDIES MINOR

Description

**Air Force ROTC**
The preparation of future Air Force officers is provided through the Air Force ROTC (AFROTC) program. Enrollment is open to any student attending the University on a full-time basis. The curriculum provides the individual with a firm understanding of the concepts of aerospace power and the Air Force mission, organization and operations.

Enrollment in AFROTC is voluntary and accomplished through the fall and spring registration periods. Scholarships are available on a competitive basis. Approximately fifty percent of the students hold scholarships.

The minor not only prepares cadets for active duty service but provides any student the opportunity to study one of our country’s major instruments of power, the United States Military. In addition to studying Air Force organizations, missions and operations, the student will gain a broad perspective of the military in general by studying the history of all Department of Defense Services, thus emphasizing our country’s focus on Joint Military Operations.

**Active Duty Obligation**
There is no active duty obligation for enrolling in any AFROTC courses, unless a student wishes to become an Active Duty Air Force Officer or accepts an Air Force scholarship. Students who complete the Air Force ROTC program and receive a commission, incur a four-year active duty commitment. Flying officers serve additional commitments from the time they complete their training.

**General Program**
The Air Force ROTC program consists of the General Military Course (GMC) during the freshman and sophomore years and the Professional Officer Course (POC) for the remaining years. All GMC cadets must complete a four-week field training session during the summer between their sophomore and junior years to enter the POC. Field training is a competitively selected process, and all students wishing to pursue a commission through AFROTC must attend field training.

**Admission**

**College Admission**
The entrance requirements for the College of Arts and Sciences are the same as the UNL General Admission Requirements. Students who are admitted through the Admission by Review process may have certain conditions attached to their enrollment at UNL. These conditions are explained under “Removal of Deficiencies.”

In addition to these requirements, the College of Arts and Sciences strongly recommends a third and fourth year of one foreign language in high school. Four years of high school coursework in the same language will fulfill the College of Arts and Sciences’ language requirement. It will also allow students to continue language study at a more advanced level at UNL, and provide more opportunity to study abroad.

**Advising**

**Academic and Career Advising**

Students in the College who have declared a major will be assigned an academic advisor who is their first point of contact for a variety of questions. Academic advisors help students be successful in adjusting to UNL overall as well as making progress toward degree completion. The assigned advisor may be located within the department of their primary major, or in the Advising Center. Students can identify their assigned advisor in MyRED on the academics tab. In addition, faculty advisors are experts in their discipline, including advanced coursework and requirements, opportunities for research, student organizations, and considering graduate school in the discipline. Students who have declared a pre-health or pre-law area of interest will also work with advisors in the Exploratory and Pre-Professional Advising Center (Explore Center) in 127 Love Library South, who are specially trained to guide students preparing to enter a professional school.

For complete and current information on advisors for majors, minors, or pre-professional areas, contact the Arts and Sciences Academic and Career Advising Center, 107 Oldfather Hall, 402-472-4190, http://cas.unl.edu/advising.

**College Degree Requirements**

**College Distribution Requirements**

**Bachelor of Arts or Bachelor of Science (16 hours + Language)**
The College of Arts and Sciences distribution requirements are designed to ensure a breadth of courses within the liberal arts degree. By engaging in study in several different areas within the College, students develop the ability to learn in a variety of ways and apply their knowledge from a variety of perspectives. All requirements are in addition to University ACE requirements.

- A student may not use a single course to satisfy both an ACE outcome and a College distribution requirement.
- A student may not use a single course to satisfy more than one College Distribution Requirement.
- A student may not use a course from their primary major to satisfy the Breadth Requirement (F), but may apply an ancillary requirement of the primary major or a course from their second major toward this requirement.
- Independent study, directed readings, or internship courses cannot be used to satisfy a College Distribution Requirement.
- Cross-listed courses from interdisciplinary programs will be applied in the same area as courses from the home/cross-listed department.

**College Distribution Requirements**

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDR A - Written Communication</strong></td>
<td>3</td>
</tr>
<tr>
<td>Select from courses approved for ACE outcome 1.</td>
<td></td>
</tr>
<tr>
<td><strong>CDR B and BL - Natural, Physical, and Mathematical Sciences with Lab</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

The assigned advisor may be located within the department of their primary major, or in the Advising Center. Students can identify their assigned advisor in MyRED on the academics tab. In addition, faculty advisors are experts in their discipline, including advanced coursework and requirements, opportunities for research, student organizations, and considering graduate school in the discipline. Students who have declared a pre-health or pre-law area of interest will also work with advisors in the Exploratory and Pre-Professional Advising Center (Explore Center) in 127 Love Library South, who are specially trained to guide students preparing to enter a professional school.

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Select from biochemistry, biological sciences, chemistry, computer science, geology, meteorology, mathematics, physics and statistics. Must include one lab in the natural or physical sciences. Lab courses may be selected from biochemistry, biological sciences, chemistry, geology, meteorology and physics.

Some courses from geography and anthropology may also be used to satisfy the lab requirement above.  

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<thead>
<tr>
<th>CDR C - Humanities</th>
<th>3</th>
<th></th>
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</table>

Select from classics, English, history, modern languages and literatures, philosophy, and religious studies.

<table>
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<tr>
<th>CDR D - Social Science</th>
<th>3</th>
<th></th>
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</thead>
</table>

Select from anthropology, communication studies, geography, political science, psychology, or sociology.

<table>
<thead>
<tr>
<th>CDR E - Language</th>
<th>0-16</th>
<th></th>
</tr>
</thead>
</table>

Fulfilled by the completion of the 6-credit-hour second-year sequence in a single foreign language in one of the following departments: Classics and religious studies, or modern languages and literatures. Instruction is currently available in Arabic, Chinese, Czech, French, German, Greek, Japanese, Latin, Russian, and Spanish.

A student who has completed the fourth-year level of one foreign language in high school is exempt from the language requirement, but encouraged to continue on in their language study.

<table>
<thead>
<tr>
<th>CDR F - Additional Breadth</th>
<th>3</th>
<th></th>
</tr>
</thead>
</table>

Select from natural, physical and mathematical sciences (Area B), humanities (Area C), or social sciences (Area D). Cannot be a course from the primary major.

Credit Hours Subtotal: 16-32

1. See Degree Audit or a College of Arts and Sciences advisor for approved geography and anthropology courses that apply as natural science.

2. Language courses numbered 210 and below do not fulfill the CDR C.

3. See Degree Audit or College of Arts and Sciences advisor for list of natural/physical science courses in anthropology, geography, and psychology that do not apply as social science.

**Scientific Base**

**Bachelor of Science Only (60 hours)**

The bachelor of science degree requires students to complete 60 hours in mathematical, physical and natural sciences. Approved courses for scientific base credit come from the following College of Arts and Sciences disciplines: actuarial science, anthropology (selected courses), astronomy, biochemistry (excluding BIOC 101), biological sciences (excluding BIOS 100 or BIOS 203), chemistry (excluding CHEM 101), computer science (excluding CSCE 10), geography (selected courses), geology, life sciences, mathematics (excluding courses below MATH 104), meteorology, microbiology, physics and statistics.

See your degree audit or a College of Arts and Sciences advisor for a complete list including individual classes that fall outside of the disciplines listed above. Up to 12 hours of scientific and technical courses offered by other colleges may be accepted toward this requirement with approval of a college advisor.

**Language Requirement**

UNL and the College of Arts and Sciences place great value on academic exposure and proficiency in a second language. The UNL entrance requirement of two years of the same foreign language or the College's language distribution requirement (CDR E) will rarely be waived and only with relevant documentation. See the main College of Arts and Sciences page for more details.

**Minimum Hours Required for Graduation**

A minimum of 120 semester hours of credit is required for graduation from the College of Arts and Sciences. A total grade point average of at least 2.0 is required.

**Grade Rules**

**Restrictions on C- and D Grades**

The College will accept no more than 15 semester hours of C- and D grades from other domestic institutions except for UNO and UNK. All courses taken at UNO and UNK impact the UNL transcript. No transfer of C- and D grades can be applied toward requirements in a major or a minor. No UNL C- and D grades can be applied toward requirements in a major or a minor. International coursework (including education abroad) with a final grade equivalent to a C- or lower will not be validated by College of Arts and Sciences departments to be degree applicable.

**Pass/No Pass Privilege**

The College of Arts and Sciences adheres to the University regulations for the Pass/No Pass (P/N) privilege with the following additional regulations:

- Pass/No Pass hours can count toward fulfillment of University ACE requirements and college distribution requirements up to the 24-hour maximum.
- Most arts and sciences departments and programs do not allow courses graded Pass/No Pass to apply to the major or minor. Students should refer to the department’s or program’s section of the catalog for clarification. By college rule, departments can allow up to 6 hours of Pass/No Pass in the major or minor.
- Departments may specify that certain courses of theirs can be taken only on a P/N basis.
- The college will permit no more than a total of 24 semester hours of P/N grades to be applied toward degree requirements. This total includes all Pass grades earned at UNL and other U.S. schools. **NOTE:** This 24-hour limit is more restrictive than the University regulation.

**Grading Appeals**

A student who feels that he/she has been unfairly graded must ordinarily take the following sequential steps in a timely manner, usually by initiating the appeal in the semester following the awarding of the grade:

1. Talk with the instructor concerned. Most problems are resolved at this point.
2. Talk to the instructor's department chairperson.
3. Take the case to the Grading Appeal Committee of the department concerned. The Committee should be contacted through the department chairperson.
4. Take the case to the College Grading Appeals Committee by contacting the Dean's Office, 1223 Oldfather Hall.

**Course Level Requirements**

**Courses Numbered at the 300 or 400 Level**

Thirty (30) of the 120 semester hours of credit must be in courses numbered at the 300 or 400 level. Of those 30 hours, 15 hours (1/2) must be completed in residence at UNL.
Residency Requirement
Students must complete at least 30 of the 120 total hours for their degree at UNL. Students must complete at least 1/2 of their major coursework including 6 hours at the 300 or 400 level in their major, and 15 of the 30 hours required at the 300 or 400 level in residence. Credit earned during education abroad may be used toward the residency requirement only if students register through UNL.

ACE Requirements
Consistent with the mission and values of the University, ACE is based on a shared set of four institutional objectives and ten student learning outcomes. The ACE program was approved by faculty in all eight undergraduate colleges and endorsed by the Faculty Senate, the student government, and the Academic Planning Committee in January 2008 for implementation in the fall 2009. ACE aligns with current national initiatives in general education.

To meet the ACE Program requirement, a student will complete a minimum of 3 credit hours for each of the ten ACE Student Learning Outcomes (a total of 30 ACE credit hours). See the ACE website at: http://ace.unl.edu for the most current information and the most recently certified courses.

Catalog to Use
Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted to and enrolled as a degree-seeking student at UNL. In consultation with advisors, a student may choose to follow a subsequent catalog for any academic year in which they are admitted to and enrolled as a degree-seeking student at UNL in the College of Arts and Sciences. Students must complete all degree requirements from a single catalog year. Beginning in 1990-1991 the catalog which a student follows for degree requirements may not be more than 10 years old at the time of graduation.

Requirements for Minor Offered by Department
Course Requirements (18 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 331</td>
<td>Air Force Leadership Studies I</td>
<td>3</td>
</tr>
<tr>
<td>AERO 332</td>
<td>Air Force Leadership Studies II</td>
<td>3</td>
</tr>
<tr>
<td>AERO 441</td>
<td>National Security Affairs and Preparation for Active Duty I</td>
<td>3</td>
</tr>
<tr>
<td>AERO 442</td>
<td>National Security Affairs and Preparation for Active Duty II</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 12

Additional Courses
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNGT 360</td>
<td>Managing Behavior in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 361</td>
<td>Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>MNGT 411</td>
<td>Leading People and Projects</td>
<td></td>
</tr>
<tr>
<td>MNGT 414</td>
<td>Leadership in a Global Context</td>
<td></td>
</tr>
<tr>
<td>MNGT 464</td>
<td>Talent Acquisition and Staffing</td>
<td></td>
</tr>
<tr>
<td>MNGT 466</td>
<td>The Regulatory Environment for Employment and Labor</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 303</td>
<td>United States Military History, 1607-1917</td>
<td>3</td>
</tr>
</tbody>
</table>

Grade Rules
C- and D Grades
A grade of C or above is required for all courses in the minor.

Pass/No Pass
No course taken Pass/No Pass will be counted toward the minor.

AERO 185 Foundation of the United States Air Force I
Prerequisites: Must enroll in both AERO 185 (lecture) and AERO 185L (lab)
Description: Officership, communication skills, opportunities, and benefits in today's US Air Force. A weekly one and one-half hour Leadership Lab consists of Air Force customs and courtesies, Air Force environment, drill and ceremonies.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LEC
Groups: General Military Course

AERO 185L Leadership Laboratory
Prerequisites: Must enroll in both AERO 185 (lecture) and AERO 185L (lab)
Notes: Successful completion of this course is required for commissioning.
Description: Increasing students' knowledge of Air Force uniform wear, customs, and active duty opportunities.
Credit Hours: 0
Max credits per semester: 1
Max credits per degree: 1
Format: LAB
Groups: General Military Course

AERO 186 Foundation of the United States Air Force II
Prerequisites: Must enroll in both AERO 186 (lecture) and AERO 186L (lab)
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LEC
Prerequisite for: AERO 295
Groups: General Military Course
AER 186L Leadership Laboratory
Prerequisites: Must also enroll in both AER 186 (lecture) and AER 186L (lab)
Description: Increasing students' knowledge of Air Force uniform wear, customs, and active duty opportunities.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: General Military Course

AERO 295 The Evolution of US Air and Space Power I
Prerequisites: AER 186
Description: History of the development and deployment of airpower from the Wright Brothers' first flight to the Persian Gulf War and how the events were affected by technology, politics, doctrine, and geography. Emphasizes US airpower.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC
Prerequisite for: AERO 296
Groups: General Military Course

AERO 295L Leadership Laboratory
Prerequisites: Must enroll in both AERO 295 (lecture) and AERO 295L (lab)
Description: Introduction to cadet leadership training. Practical experience in leadership roles.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: General Military Course

AERO 296 The Evolution of US Air and Space Power II
Prerequisites: AER 295 or permission
Description: History of the development and deployment of airpower from the Wright Brothers' first flight to the Persian Gulf War and how the events were affected by technology, politics, doctrine, and geography. Emphasizes US airpower.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC
Groups: General Military Course

AERO 296L Leadership Laboratory
Prerequisites: Must enroll in both AERO 296 (lecture) and AERO 296L (lab)
Description: Introduction to cadet leadership training. Practical experience in leadership roles.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: General Military Course

AERO 331 Air Force Leadership Studies I
Prerequisites: Permission of professor of aerospace studies.
Description: Communications skills, leadership, quality initiatives, and human relations. Requires cadet research and participation in the instructional process.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: AERO 441; AERO 442
Groups: Professional Officer Course

AERO 331L Leadership Laboratory
Prerequisites: Must enroll in both AERO 331 (lecture) and AERO 331L (lab)
Description: Practical application of the principles of leadership in the operation and administration of the cadet wing.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: Professional Officer Course

AERO 332 Air Force Leadership Studies II
Prerequisites: AER 331, or permission of professor of aerospace studies.
Description: Principles of leadership, professionalism, ethics, communications skills, and problem solving, including quality leadership applications.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: AERO 441; AERO 442
Groups: Professional Officer Course

AERO 332L Leadership Laboratory
Prerequisites: Must enroll in both AERO 332 (lecture) and AERO 332L (lab)
Description: Practical application of the principles of leadership in the operation and administration of the cadet wing.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: Professional Officer Course

AERO 441 National Security Affairs and Preparation for Active Duty I
Prerequisites: AER 331, 332, or permission of professor of aerospace studies.
Description: Environment in which defense policy is formulated. Requisites for maintaining adequate national security forces; political, economic, and social constraints of the national defense structure; and the overall defense policymaking process.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: AERO 442
Groups: Professional Officer Course

AERO 442
AER 441L Leadership Laboratory
Description: Practical application of the principles of leadership and experience in the operation and administration of the cadet wing.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: Professional Officer Course

AER 442 National Security Affairs and Preparation for Active Duty II
Prerequisites: AER 331, AER 332, and AER 441 or permission of professor of aerospace studies.
Description: The armed forces as an integral element of society; the broad range of civil-military relations. The role of the professional officer in a democratic society, the socialization process within the armed services, and the military justice system.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Groups: Professional Officer Course

AER 442L Leadership Laboratory
Prerequisites: Must enroll in both AER 442 (lecture) and AER 442L (lab)
Description: Practical application of the principles of leadership and experience in the operation and administration of the cadet wing.
Credit Hours: 0
Max credits per semester: 0
Max credits per degree: 0
Format: LAB
Groups: Professional Officer Course