**ACCELERATED LAW CURRICULUM (58 HOURS)**

1. Students interested in the Accelerated Law Curriculum must complete the requirements for a major in Anthropology, Criminal Justice, History, Political Science, Social Science, or Sociology by the end of the third year of study at Troy University (or semester prior to attending partnered institution).
2. Students interested in the Accelerated Law Curriculum must meet the admission requirements and be accepted to a partnered institution. Students must take the LSAT exam as part of the admissions requirement.
3. Students must successfully complete 30 semester hours of law courses outlined by the partnered institution in order to receive Troy University credit.
4. In addition to completing the major requirements, students must minor in Legal Studies.
5. Students will receive both a faculty adviser for their declared major as well as an adviser for the Accelerated Law program.
6. For the Legal Studies Minor (18 hours)- Students must complete the following classes at Troy University:
   - LGL 2200 (3) Introduction to Legal Studies
   - LGL 3300 (3) Legal Research and Writing
   - LGL 4400 (3) Seminar in Legal Studies

The following 9 hours will be completed at the partnered law school and transferred to Troy University to complete the minor:

**Mississippi College of Law**
- LAW 502 (3) Torts
- LAW 582 (3) Legal Analysis and Communication I
- LAW 580 (1) Legal Research I
- LAW 583 (2) Legal Analysis and Communication II
- LAW 581 (1) Legal Research II

**Cumberland School of Law, Stanford University**
- Lawyering and Legal Reasoning I — 3 credit hours
- Lawyering and Legal Reasoning II — 3 credit hours
- Evidence — 3 credit hours

**Jones School of Law, Faulkner University**
- Legal Reasoning, Writing, & Research — 3 credit hours
- Foundations of Law — 3 credit hours
- Foundations of Legal Prof. — 1 credit hour
- Legal Analysis and Persuasion — 2 credit hours

7. Upon successful completion of the designated 30 semester hours of courses at the partnered institution, students may be awarded a Bachelor’s Degree in one of the designated majors with a minor in Legal Studies.

**AIR FORCE ROTC/AEROSPACE STUDIES MINOR (18 HOURS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 3312</td>
<td>3</td>
</tr>
<tr>
<td>AS 3313</td>
<td>3</td>
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<tr>
<td>AS 4412</td>
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<tr>
<td>AS 4413</td>
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<tr>
<td>AS L312</td>
<td>1</td>
</tr>
<tr>
<td>AS L313</td>
<td>1</td>
</tr>
<tr>
<td>AS L412</td>
<td>1</td>
</tr>
<tr>
<td>AS L413</td>
<td>1</td>
</tr>
</tbody>
</table>

Select two three-hour courses from upper-level political science (POL) courses, or substitute upper-level courses from history (HIS), geography (GEO), or social science (SOC) courses with the approval of the Department of Aerospace Studies chair.

*Students pursuing an Air Force ROTC Commission must also take the following Labs:
- AS L312 (1) Leadership Laboratory I
- AS L313 (1) Leadership Laboratory II
- AS L412 (1) Leadership Laboratory I
- AS L413 (1) Leadership Laboratory II

**ANTHROPOLOGY MAJOR (36 HOURS)**

**Area IV**
Anthropology majors should take Area IV electives appropriate for their major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 2200</td>
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<tr>
<td>STAT 2210</td>
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</table>

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 3305</td>
<td>3</td>
</tr>
<tr>
<td>ANT 3310</td>
<td>3</td>
</tr>
<tr>
<td>ANT 3311</td>
<td>3</td>
</tr>
<tr>
<td>ANT 3315</td>
<td>3</td>
</tr>
<tr>
<td>ANT 3340</td>
<td>3</td>
</tr>
<tr>
<td>ANT 4499</td>
<td>3</td>
</tr>
<tr>
<td>SS 3376</td>
<td>3</td>
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</tbody>
</table>

Select at least 15 hours of additional 3000/4000 level anthropology courses as approved by your faculty adviser.

**Accelerated Law Curriculum Option:**
Students majoring in Anthropology and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the
Specialized technical courses. (not to exceed 18 semester hours.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS 3305</td>
<td>3</td>
</tr>
<tr>
<td>GIS 3307</td>
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<td>GIS 3310</td>
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</tr>
<tr>
<td>HS 3310</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3300</td>
<td>3</td>
</tr>
<tr>
<td>POL 3300</td>
<td>3</td>
</tr>
<tr>
<td>POL 3343</td>
<td>3</td>
</tr>
<tr>
<td>POL 3364</td>
<td>3</td>
</tr>
<tr>
<td>PSY 4410</td>
<td>3</td>
</tr>
<tr>
<td>SCI 4450</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4406</td>
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<tr>
<td>SOC 4413</td>
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<tr>
<td>SOC 4421</td>
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<tr>
<td>SOC 4445</td>
<td>3</td>
</tr>
<tr>
<td>SWK 3320</td>
<td>3</td>
</tr>
</tbody>
</table>

OR

Transfer of *Specialized technical courses. (not to exceed 18 semester hours.)

*Specialized technical courses.

Credit will be awarded for specialized technical knowledge based upon American Council of Education (A.C.E.) credit recommendations or transfer work from regionally accredited (Southern Association of Colleges and Schools, Middle States Association of Colleges and Schools, etc.) post-secondary community college, or technical schools as approved by the Academic Council. Specializations are not available in fields of study that are offered through Troy University; e.g., majors, programs, or minors, e.g., nursing, computer science, information systems, or education. Exceptions to the use of a Troy University minor are the programs in Aviation Operations and Advanced Professional Flight. Program requirements for either minor may be used to satisfy the 18 hours of specialized technical courses.

Eligibility

Eligibility for enrollment in one of the applied science degree programs is dependent upon prior education and/or experience. Before enrollment in one of the programs, official documentation of prior learning must be submitted to determine eligibility. All post-secondary technical school transfer students must complete all courses required in the institution’s curriculum and earn (if appropriate) a diploma or certificate before being granted admission into the resources management degree program. No additional credit will be awarded for the possession of a license (i.e., all credit awarded is based on documentation of training and evaluation leading to the issue of a license, not the mere possession of a license). All credit from the Community College of the Air Force (CCAF), accredited post-secondary technical schools, and/or American Council on Education (ACE) recommendations will be considered junior college credit except where specifically recommended by ACE for upper-division credit. No credit will be awarded until six semester hours of academic credit has been earned at Troy University. At least 50 percent of the degree program must be traditional academic credit earned at the 3300/4400 level. Curriculum: The academic curricula taught are approved by the Academic Council. Specializations are not available in fields of study that are offered through Troy University; e.g., majors, programs, or minors, e.g., nursing, computer science, information systems, or education. Exceptions to the use of a Troy University minor are the programs in Aviation Operations and Advanced Professional Flight.

BACHELOR OF APPLIED SCIENCE IN RESOURCE AND TECHNOLOGY MANAGEMENT (36 HOURS)

<table>
<thead>
<tr>
<th>Area IV Requirements</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANT 2200</td>
<td>(3)</td>
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<tr>
<td>CJ 1101</td>
<td>(3)</td>
</tr>
<tr>
<td>ECO 2251</td>
<td>(3)</td>
</tr>
<tr>
<td>ECO 2252</td>
<td>(3)</td>
</tr>
<tr>
<td>GEO 2210</td>
<td>(3)</td>
</tr>
<tr>
<td>LDR 1110</td>
<td>(3)</td>
</tr>
<tr>
<td>PHI 2205</td>
<td>(3)</td>
</tr>
<tr>
<td>PHI 2210</td>
<td>(3)</td>
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<tr>
<td>SOC 2215</td>
<td>(3)</td>
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<tr>
<td>TROY 1101</td>
<td>(1)</td>
</tr>
<tr>
<td>IS 2241</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Required Core Courses (18 Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3300</td>
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<tr>
<td>PHI 3310</td>
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<tr>
<td>SCI 3365</td>
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</tr>
<tr>
<td>SS 3375</td>
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<tr>
<td>SS 3376</td>
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</tr>
<tr>
<td>GIS 3390</td>
<td>3</td>
</tr>
</tbody>
</table>

Select a minimum of 18 semester hours from the courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANT 4420</td>
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<tr>
<td>BIO 3340</td>
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<tr>
<td>CJ 3335</td>
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</tbody>
</table>

BIOLOGY EDUCATION

Students seeking Alabama teacher certification should select biology as a first major and education as a second major. Students should consult with their advisers concerning all certification requirements.

BIOLOGY MAJOR (44 HOURS)

*Specialized General Studies Requirements

General studies requirements for the biology, environmental science, biomedical sciences, and marine biology programs and
the biology major total 64 semester hours. See the General Studies section of this catalog for complete general studies information.

**Area III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1100</td>
<td>3</td>
</tr>
<tr>
<td>BIO L100</td>
<td>1</td>
</tr>
<tr>
<td>CHM 1142</td>
<td>3</td>
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<tr>
<td>CHM L142</td>
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</tr>
<tr>
<td>MTH 1125</td>
<td>4</td>
</tr>
</tbody>
</table>

**Area V Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1101</td>
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<td>BIO L101</td>
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<tr>
<td>CHM 1143</td>
<td>3</td>
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<td>IS 2241</td>
<td>3</td>
</tr>
<tr>
<td>TROY 1101</td>
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</table>

**Select one sequence:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHY 2252</td>
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<tr>
<td>PHY L252</td>
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<tr>
<td>PHY 2253</td>
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</tr>
<tr>
<td>PHY L253</td>
<td>1</td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2262</td>
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<td>PHY L262</td>
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<td>PHY 2263</td>
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**Major Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 2220</td>
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<tr>
<td>BIO L220</td>
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<td>BIO 2229</td>
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<tr>
<td>BIO L229</td>
<td>1</td>
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<tr>
<td>BIO 3320</td>
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<td>BIO L320</td>
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<td>BIO 4484</td>
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<td>1</td>
</tr>
<tr>
<td>STAT 2210</td>
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</tbody>
</table>

**Complete one botany course with its corresponding lab:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 3325</td>
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<td>BIO L325</td>
<td>1</td>
</tr>
<tr>
<td>BIO 4425</td>
<td>4</td>
</tr>
</tbody>
</table>

**Complete one zoology course with its corresponding lab:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 3307</td>
<td>3</td>
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<tr>
<td>BIO L307</td>
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<tr>
<td>BIO 4405</td>
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<td>BIO L440</td>
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<tr>
<td>BIO 4447</td>
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<tr>
<td>BIO L447</td>
<td>1</td>
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<tr>
<td>BIO 4471</td>
<td>3</td>
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<tr>
<td>BIO L471</td>
<td>1</td>
</tr>
</tbody>
</table>

**Complete one ecology/environmental course with its corresponding lab:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 4413</td>
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<td>BIO 4416</td>
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<td>BIO L416</td>
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<td>BIO 4421</td>
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<td>BIO 4479</td>
<td>3</td>
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<tr>
<td>BIO L479</td>
<td>1</td>
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</tbody>
</table>

**Complete one physiology/cell/molecular course with its corresponding lab:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 3347</td>
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<tr>
<td>BIO L347</td>
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<td>BIO 3348</td>
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<td>BIO L348</td>
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<td>BIO 3372</td>
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<td>BIO L414</td>
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<td>BIO L480</td>
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<td>BIO 4482</td>
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<tr>
<td>BIO L482</td>
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</tbody>
</table>

**BIOLOGY MINOR (18-20 HOURS)**

Lectures and the corresponding labs must be taken together:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1101</td>
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</tr>
<tr>
<td>BIO L101</td>
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</tr>
<tr>
<td>BIO 2220</td>
<td>3</td>
</tr>
<tr>
<td>BIO L220</td>
<td>1</td>
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</tbody>
</table>

Complete 10 to 12 additional semester hours of approved upper-level (3300 or above) biology courses with corresponding labs.

**BIOLOGY/BIOMEDICAL SCIENCES (56 HOURS)**

*Special Topics in Biology (BIO 4476), Guided Independent Studies (BIO 4491/4492) and Guided Independent Research (BIO 4493, 4494) may only be taken for a maximum of 6 semester hours.

**Specialized General Studies Requirements**

**Area III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1100</td>
<td>3</td>
</tr>
<tr>
<td>BIO L100</td>
<td>1</td>
</tr>
<tr>
<td>CHM 1142</td>
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<td>CHM L142</td>
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<tr>
<td>MTH 1125</td>
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</table>

**Area V Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 2241</td>
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<tr>
<td>TROY 1101</td>
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<tr>
<td>BIO 1101</td>
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<tr>
<td>BIO L101</td>
<td>1</td>
</tr>
<tr>
<td>CHM 1143</td>
<td>3</td>
</tr>
<tr>
<td>CHM L143</td>
<td>1</td>
</tr>
</tbody>
</table>

**Complete one sequence (physics sequence not required for medical technology concentration):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2252</td>
<td>3</td>
</tr>
<tr>
<td>PHY L252</td>
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</tr>
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<td>PHY 2253</td>
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<td>PHY L253</td>
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</table>

**OR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>PHY 2262</td>
<td>3</td>
</tr>
<tr>
<td>PHY L262</td>
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<td>PHY 2263</td>
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**Requirements**

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 2220</td>
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<td>BIO 3320</td>
<td>3</td>
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</table>
CHEMISTRY MAJOR (37 HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIO 1100 (3) Principles of Biology</td>
<td></td>
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<tr>
<td>CHM L142 (1) General Chemistry I Lab</td>
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</tr>
<tr>
<td>CHM 1142 (3) General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHM L142 (1) General Chemistry I Lab</td>
<td></td>
</tr>
<tr>
<td>MTH 1125 (4) Calculus I</td>
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**Area V Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 2241 (3) Computer Concepts and Applications</td>
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</tr>
<tr>
<td>MTH 1126 (4) Calculus II</td>
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</tr>
<tr>
<td>*PHY 2262 (3) Physics I with Calculus</td>
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</tr>
<tr>
<td>*PHY L262 (1) Physics I with Calculus Lab</td>
<td></td>
</tr>
<tr>
<td>*PHY 2263 (3) Physics II with Calculus</td>
<td></td>
</tr>
<tr>
<td>*PHY L263 (1) Physics II with Calculus Lab</td>
<td></td>
</tr>
<tr>
<td>TROY 1101 (1) University Orientation</td>
<td></td>
</tr>
</tbody>
</table>

*Chemistry majors minoring in Physics may replace these with free electives.

* Chemistry majors minoring in Mathematics may replace MTH 1126 with free electives.

**Required Courses (31 Hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1143 (3) General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHM L143 (1) General Chemistry II Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 2242 (3) Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHM L242 (1) Analytical Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 3342 (3) Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHM L342 (1) Organic Chemistry I Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 3343 (3) Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHM L343 (1) Organic Chemistry II Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 3381 (3) Physical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHM L381 (1) Physical Chemistry I Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 3382 (3) Physical Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHM 4444 (3) Advanced Inorganic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHM L444 (1) Advanced Inorganic Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 4445 (3) Instrumental Analysis</td>
<td></td>
</tr>
<tr>
<td>CHM L445 (1) Instrumental Analysis Lab</td>
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</table>

**Complete 6 hours of the following electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHM 3352 (3) Biochemistry</td>
<td></td>
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<tr>
<td>CHM L352 (1) Biochemistry Lab</td>
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</tr>
<tr>
<td>CHM L382 (1) Physical Chemistry II Lab</td>
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</tr>
<tr>
<td>CHM 4400 (3) Special Topics in Chemistry</td>
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<tr>
<td>CHM 4403 (3) Advanced Organic Chemistry</td>
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<tr>
<td>CHM 4420 (3) Principles of Polymer Chemistry</td>
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<tr>
<td>CHM L420 (1) Principles of Polymer Chemistry Lab</td>
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<tr>
<td>CHM 4452 (3) Advanced Biochemistry</td>
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<tr>
<td>CHM 4491/2 (1-3) Guided Independent Research</td>
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<tr>
<td>CHM 4493/4 (1-3) Guided Independent Study</td>
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<tr>
<td>CHM 4499 (1) Senior Research Seminar</td>
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</tr>
<tr>
<td>STAT 2210 (3) Introductory Statistics</td>
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**CHEMISTRY MINOR (20 HOURS)**

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<tbody>
<tr>
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</tr>
<tr>
<td>CHM 1143 (3) General Chemistry II</td>
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<tr>
<td>CHM L143 (1) General Chemistry II Lab</td>
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<td>CHM 3342 (3) Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHM L342 (1) Organic Chemistry I Lab</td>
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</tr>
<tr>
<td>CHM 3343 (3) Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHM L343 (1) Organic Chemistry II Lab</td>
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**Select four additional hours of advanced chemistry courses, such as:**

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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CHM 2242 (3) Analytical Chemistry</td>
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<tr>
<td>CHM L242 (1) Analytical Chemistry Lab</td>
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</tr>
<tr>
<td>CHM 3352 (3) Biochemistry</td>
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<td>CHM L352 (1) Biochemistry Lab</td>
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**COMPREHENSIVE GENERAL SCIENCE PROGRAM (54 HOURS)**

<table>
<thead>
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<tbody>
<tr>
<td>BIO 1100 (3) Principles of Biology</td>
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<tr>
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<tr>
<td>CHM 1142 (3) General Chemistry I</td>
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</tr>
<tr>
<td>CHM L142 (1) General Chemistry I Lab</td>
<td></td>
</tr>
<tr>
<td>MTH 1125 (4) Calculus I</td>
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**Area V**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>IS 2241 (3) Computer Concepts/Applications</td>
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<tr>
<td>PHY 2262 (3) Physics I w/Calculus</td>
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<tr>
<td>PHY L262 (1) Physics I w/Calculus Lab</td>
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<tr>
<td>SCI 2234 (3) Earth &amp; Space Science</td>
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<tr>
<td>SCI L234 (1) Earth &amp; Space Science Lab</td>
<td></td>
</tr>
<tr>
<td>TROY 1101 (1) University Orientation</td>
<td></td>
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**Required Courses:**

<table>
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<th>Hours</th>
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<tr>
<td>BIO 1101 (3) Organismal Biology</td>
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<tr>
<td>BIO L101 (1) Organismal Biology Lab</td>
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<tr>
<td>BIO 2220 (3) Principles of Cell Biology</td>
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<td>BIO L220 (1) Principles of Cell Biology Lab</td>
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</tr>
<tr>
<td>BIO 3320 (3) Genetics</td>
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<td>BIO L320 (1) Genetics Lab</td>
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</tr>
<tr>
<td>BIO 3347 (3) Human Anatomy &amp; Physiology I</td>
<td></td>
</tr>
<tr>
<td>BIO L347 (1) Human Anatomy &amp; Physiology I Lab</td>
<td></td>
</tr>
<tr>
<td>CHM 1143 (3) General Chemistry II</td>
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</tr>
<tr>
<td>CHM L143 (1) General Chemistry II Lab</td>
<td></td>
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<tr>
<td>CHM 3342 (3) Organic Chemistry I</td>
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<td>CHM 3343 (3) Organic Chemistry II</td>
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<tr>
<td>CHM L343 (1) Organic Chemistry II Lab</td>
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<tr>
<td>CHM 3381 (3) Physical Chemistry I</td>
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<td>CHM 3382 (3) Physical Chemistry II</td>
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<tr>
<td>CHM 4444 (3) Advanced Inorganic Chemistry</td>
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</tr>
<tr>
<td>MTH 1126 (4) Calculus I</td>
<td></td>
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</tbody>
</table>

**Select 12 semester hours of computer science courses with at least one course being at the 4000 level.**
COMPUTER SCIENCE PROGRAM (48 HOURS)

Specialized General Studies Requirements

Area III
MTH 1125 (4) Calculus I, in lieu of MTH 1110

Select a four hour course/lab combination from the following:
(Students must complete an eight hour sequence in chemistry or physics. Also see Area V Requirements.)
CHM 1142 (3) General Chemistry I
CHM L142 (1) General Chemistry I Lab
SCI 2233 (3) Physical Science
SCI L233 (1) Physical Science Lab
PHY 2252 (3) General Physics I
PHY L252 (1) General Physics I Lab
PHY 2262 (3) Physics I with Calculus
PHY L262 (1) Physics I with Calculus Lab

Select remaining Area III courses as shown in the General Studies section of this catalog.

Area V Requirements
CS 2250 (3) Computer Science I
MTH 1126 (4) Calculus II
TROY 1101 (1) University Orientation

Select a four hour course/lab combination from the following:
(Students must complete an eight hour sequence in chemistry or physics. Students completing Physical Science in Area III must take Earth and Space Science lecture/lab combination or Principles of Astronomy: Stars, Galaxies, and Cosmology lecture/lab combination.)
CHM 1143 (3) General Chemistry II
CHM L143 (1) General Chemistry II Lab
PHY 2253 (3) General Physics II
PHY L253 (1) General Physics II Lab
PHY 2263 (3) Physics II with Calculus
PHY L263 (1) Physics II with Calculus Lab
SCI 2234 (3) Earth and Space Science
SCI L234 (1) Earth and Space Science Lab

OR
SCI 2240 (3) Principles of Astronomy; Stars, Galaxies, and Cosmology

SCI L240 (1) Principles of Astronomy; Stars, Galaxies, and Cosmology Lab

Required Courses:
CS 2255 (3) Computer Science II
CS 3310 (3) Foundations of Computer Science
CS 3323 (3) Data Structures
CS 3329 (3) Analysis of Algorithms
CS 3332 (3) Software Engineering I
CS 3360 (3) Concepts of Object-Oriented Programming I
CS 3365 (3) Introduction to Computer Organization and Architectures
CS 3370 (3) Nature of Programming Languages
CS 3372 (3) Formal Languages and the Theory of Computation
CS 4420 (3) Introduction to Database Systems
CS 4445 (3) Data Communication and Networking
CS 4448 (3) Operating Systems
STAT 2210 (3) Introductory Statistics
MTH 2215 (3) Applied Discrete Mathematics

Select two of the following:
CS 3320 (3) Business Systems Programming
CS 3325 (3) Operations Research
CS 3331 (3) Fundamentals of Artificial Intelligence
CS 3361 (3) Concepts of Objected Oriented Programming II
CS 4401 (3) Advanced Artificial Intelligence
CS 4443 (3) Web Based Software Development
CS 4447 (3) Systems Analysis and Design

CS 4451 (3) Computer Security and Reliability
CS 4461 (3) Software Engineering II
CS 4462 (3) Special Topics in Object-Oriented Technology
CS 4495 (3) Special Topics in Computer Science

BS/MS Computer Science Accelerated Requirements:
CS 6640 (3) Advanced Database Concepts
CS 6668 (3) Network Security
CS 6672 (3) Distributed Algorithms
CS 6676 (3) Advanced Computer Network
CS 6634 (3) Cloud Computing
CS 6649 (3) Special Topics in Computer Science

Note:
1. Three (3) of the above courses fulfill nine (9) hours of the upper-level electives courses in the BS in Computer Science.
2. These courses are restricted to students who have been admitted to the BS/MS in Computer Science, have completed at least 90 credit hours, and have a GPA 3.0 or above. Students must also meet requirements for the graduate program.
3. GRE requirement for admission into Accelerated BS/MS in Computer Science program is waived for Honors Students who have a GPA of 3.4 or above.

COMPUTER SCIENCE, APPLIED MAJOR
(36 HOURS)

Specialized General Studies Requirements

Area III
MTH 2201 (3) Calculus and its Applications

Select additional Area III requirements as shown in the General Studies section of this catalog.

Area V Requirements
IS 2241 (3) Computer Concepts and Applications
MTH 2215 (3) Applied Discrete Mathematics
TROY 1101 (1) University Orientation

Major Requirements:
CS 2250 (3) Computer Science I
CS 2255 (3) Computer Science II
CS 2265 (3) Advanced Programming I
CS 3330 (3) Data Structures and Algorithms
CS 4420 (3) Introduction to Database Systems
CS 4443 (3) Web-Based Software Development
CS 4445 (3) Data Communications and Networking
CS 4447 (3) Systems Analysis and Design
CS 4448 (3) Operating Systems

Select three of the following:
CS 3320 (3) Business Systems Programming
CS 3332 (3) Software Engineering I
CS 3347 (3) Advanced Programming II
CS 4449 (3) Applied Networking
CS 4451 (3) Computer Security
CS 4495 (3) Special Topics in Computer Science
CS 4499 (1-3) Internship in Computer Science
CS 4480 (3) Study Abroad in Computer Science
CS 4410 (3) Introduction to Machine Learning

COMPUTER SCIENCE ASSOCIATE OF SCIENCE DEGREE (60 HOURS)

See the academic regulations section of this catalog for additional information regarding associate degrees.

General Studies Requirements

Area I
ENG 1101 (3) Composition and Modern English I
ENG 1102 (3) Composition and Modern English II

Area II
Select one of the following:
**Select one of the following:**
- ART 1133 (3) Visual Arts
- THE 1130 (3) Introduction to Theatre
- MUS 1131 (3) Music Appreciation

### Area III
- MTH 1125 (4) Calculus I

**Select one science course and corresponding lab:**
- BIO 1100 (3) Principles of Biology
- BIO L100 (1) Principles of Biology Lab
- SCI 2233 (3) Physical Science
- SCI L233 (1) Physical Science Lab
- SCI 2234 (3) Earth and Space Science
- SCI L234 (1) Earth and Space Science Lab

### Area IV
**Select one of the following:**
- HIS 1101 (3) Western Civilization I
- HIS 1102 (3) Western Civilization II
- HIS 1111 (3) U.S. to 1877
- HIS 1112 (3) U.S. since 1877
- HIS 1122 (3) World History to 1500
- HIS 1123 (3) World History from 1500

### Area V
- IS 2241 (3) Computer Concepts and Applications
- TROY 1101 (1) University Orientation

**Additional requirements:**
- CS 2250 (3) Computer Science I
- CS 2255 (3) Computer Science II
- CS 3310 (3) Foundations of Computer Science
- CS 3323 (3) Data Structures
- CS 3329 (3) Analysis of Algorithms
- CS 3332 (3) Software Engineering I
- CS 3365 (3) Introduction to Computer Organization and Architectures
- MTH 2215 (3) Applied Discrete Mathematics

**Select 9 hours of free electives.**

---

**CRIMINAL JUSTICE MAJOR (36 HOURS)**

Criminal justice majors are encouraged to take two semesters of Spanish or another foreign language as part of their general studies requirements.

### Area IV
- CJ 2221 (3) Survey of Law Enforcement
- CJ 2231 (3) Survey of Corrections

### Area V
- CJ 2241 (3) Survey of Law and Criminal Procedure

**Required Courses:**
- CJ 1101 (3) Introduction to Criminal Justice
- CJ 1110 (3) Careers in Criminal Justice
- CJ 3345 (3) Criminology
- CJ 3352 (3) Constitutional Law
- CJ 3375 (3) Research Methods

**Select 21 additional hours of upper-level (3000-4000) Criminal Justice courses, as approved by the advisor for the major.**

**BS/MSCJ Accelerated Honors Requirements:**
- *CJ 6610 (3) Principles of Administration in Criminal Justice*
- *CJ 6620 (3) Current Trends in Criminal Law*
- *CJ 6622 (3) Seminar in the Administration of Criminal Justice*

**Select an additional 3 hours of upper level (3000-4000) criminal justice courses, as approved by your academic advisor.**

*Registration for courses marked with an asterisk is restricted to students who have been admitted to BS/MS in Criminal Justice Accelerated Honors Option, have completed at least 90 credit hours, and 18 hours of criminal justice courses, and have a GPA of 3.4 or above. Students must also meet requirements for the graduate program.*

**Accelerated Law Curriculum Option:**

Students majoring in Criminal Justice and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the Accelerated Law Curriculum section the catalog for more information.

**15 hours of Law courses will be transferred from the partnered law institution**

**The following six (6) hours from the partnered institution will be transferred into the Criminal Justice Major electives:**
- Civil Procedure I — 3 credit hours
- Civil Procedure II — 3 credit hours

---

**CRIMINAL JUSTICE MINOR (18 HOURS)**

- CJ 1101 (3) Introduction to Criminal Justice

**Select 15 additional hours of upper-level criminal justice courses as approved by the advisor.**

---

**CYBER SECURITY PROGRAM**

**Specialized General Studies Requirements**

### Area III
- MTH 1125 (4) Calculus I

**Select a four hour course/lab combination from the following:**
- CHM 1142 (3) General Chemistry I
- CHM L142 (1) General Chemistry I Lab
- SCI 2233 (3) Physical Science
- SCI L233 (1) Physical Science Lab
- PHY 2252 (3) General Physics I
- PHY L252 (1) General Physics I Lab
- PHY 2262 (3) Physics I with Calculus
- PHY L262 (1) Physics I with Calculus Lab

**Select remaining Area III courses as shown in the General Studies section of this catalog**

### Area V
- TROY 1101 (1) Orientation
- STAT 2210 (3) Introduction to Statistics
- CS 2250 (3) Computer Science I

**Select a four hours course/lab combination from the following:**
- (Students must complete an eight hour sequence in chemistry of physics. Students completing Physical Science in Area III must take Earth and Space Science lecture/lab combination or Principles of Astronomy; Stars, Galaxies, and Cosmology lecture/lab combination.)
- CHM 1143 (3) General Chemistry II
- CHM L143 (1) General Chemistry II Lab
- PHY 2253 (3) General Physics II
- PHY L253 (1) General Physics II Lab
- PHY 2263 (3) Physics II with Calculus
Required Courses (54 hours)

<table>
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<tr>
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<th>Credits</th>
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<tbody>
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<td>CS 3323</td>
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<tr>
<td>MTH 2215</td>
<td>(3)</td>
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</tbody>
</table>

Select one upper level (3000-4000 level) Computer Science elective.

- CYBER SECURITY MINOR (18 HOURS)
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<th>Credits</th>
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- DIGITAL FORENSICS MINOR/CERTIFICATE (18 HOURS)
  Select 18 hours from the following:
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Electronics Engineering Technology Program (54 hours)

**Area III**

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<tbody>
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**Area V**

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<td>GEM 1100</td>
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**Requirements:**

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**Environmental Science Minor (18-20 Hours)**

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Complete 12 hours from the following:

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<td>CHM 3350</td>
<td>(3)</td>
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<tr>
<td>CHM L350</td>
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<tr>
<td>CHM 3352</td>
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<td>CHM L352</td>
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<tr>
<td>CHM 4445</td>
<td>(3)</td>
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<tr>
<td>CHM L445</td>
<td>(1)</td>
</tr>
</tbody>
</table>

**Environmental Science Program (54-56 Hours)**

*Special Topics in Biology (BIO 4476), Guided Independent Studies (BIO 4491/4492) and Guided Independent Research (BIO 4493, 4494) may only be taken for a maximum of 6 semester hours.

**Specialized General Studies Requirements**

**Area III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1100</td>
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<tr>
<td>BIO L100</td>
<td>(1)</td>
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<tr>
<td>CHM 1142</td>
<td>(3)</td>
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<tr>
<td>CHM L142</td>
<td>(1)</td>
</tr>
</tbody>
</table>

**Area V Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 2241</td>
<td>(3)</td>
</tr>
<tr>
<td>TROY 1101</td>
<td>(1)</td>
</tr>
<tr>
<td>BIO 1101</td>
<td>(3)</td>
</tr>
<tr>
<td>BIO L101</td>
<td>(1)</td>
</tr>
<tr>
<td>CHM 1143</td>
<td>(3)</td>
</tr>
<tr>
<td>CHM L143</td>
<td>(1)</td>
</tr>
</tbody>
</table>
Select one of the following GEO or GIS courses:
GEO 2299  (3) Basic GIS
OR
GIS 3390  (3) Fundamentals of Geographical Information and Analysis

Select one PHY lecture and lab combination:
PHY 2252  (3) General Physics I
PHY L252  (1) General Physics I Lab
OR
PHY 2262  (3) Physics I with Calculus
PHY L262  (1) Physics I with Calculus Lab

Program Requirements:
BIO 1120  (3) Survey of Environmental Science
BIO L120  (1) Survey of Environmental Science Lab
BIO 2220  (3) Principles of Cell Biology
BIO L220  (1) Principles of Cell Biology Lab
BIO 2229  (3) General Ecology
BIO L229  (1) General Ecology Lab
BIO 3320  (3) Genetics
BIO L320  (1) Genetics Lab
BIO 3328  (3) Environmental Pollution and Control
BIO L328  (1) Environmental Pollution and Control Lab
BIO 4413  (3) Limnology
BIO L413  (1) Limnology Lab
BIO 4479  (3) Environmental Assessment
BIO L479  (1) Environmental Assessment Lab
BIO 4484  (1) Senior Seminar in Biological & Environmental Sciences
CHM 3342  (3) Organic Chemistry I
CHM L342  (1) Organic Chemistry I Lab
STAT 2210  (3) Introductory Statistics

Complete 18-20 hours of adviser-approved upper-level courses in biology, marine biology, chemistry, geography, or mathematics.

BS/MSEBS Accelerated Honors Requirements:
*EBS 6601  (3) Environmental and Biological Ethics
*EBS 6624  (3) Public Health
*EBS 6691  (3) Research Methodology and Experimental Design

Note: These three courses fulfill 9 hours of the upper-level electives courses in the BS in Environmental Science Program.
*Registration for courses marked with an asterisk is restricted to students who have been admitted to the Environmental and Biological Sciences Accelerated Honors Option, have completed at least 90 credit hours and 18 hours of biology courses, and have a GPA of 3.4 or above. Students must also meet the requirements for the graduate program.

GAME DEVELOPMENT AND DESIGN MINOR (18 HOURS)

Select one of the following:
GDD 2210/HIS 2210  (3) History Through Games
GDD 3310/HIS 3310  (3) History of Game Design

Required Courses
GDD 3320  (3) Game Development
GDD 4499  (3) Game Design Capstone

Select three courses from the following:
GDD 4425  (3) Special Topics in Game Design and Development
GDD 4490  (3) Internship in Game Design and Development
ART 2208  (3) Digital Tools
ART 2210  (3) e-Drawing
ART 3315  (3) Principles of Digital Design
MKT 3300  (3) Principles of Marketing
MKT 3364  (3) Product and Service Innovation
CS 3360  (3) Concepts of Object Oriented Programming I
CS 3361  (3) Concepts of Object Oriented Programming II
ENG 3326  (3) Science Fiction
ENG 3351  (3) Introduction to Creative Writing
ENG 3352  (3) Advanced Creative Writing I
ENG 3353  (3) Advanced Creative Writing II
ENG 4407  (3) Fantasy Literature

GENERAL EDUCATION A.A. DEGREE (60 HOURS)

Associate of Arts Degree
See the academic regulations section of this catalog for additional information regarding associate degree.

Note: Students who pursue a baccalaureate degree with Troy University following the completion of the Associate of Arts in General Education must meet the minimum grade requirements in mathematics.

General Studies Requirements

Area I
ENG 1101  (3) Composition & Modern English I
ENG 1102  (3) Composition & Modern English II

Area II
Select one of the following:
ART 1133  (3) Visual Arts
THE 1130  (3) Introduction to Theatre
MUS 1131  (3) Music Appreciation

Select one of the following:
ENG 2205  (3) World Literature before 1660
ENG 2206  (3) World Literature after 1660
ENG 2211  (3) American Literature before 1875
ENG 2212  (3) American Literature after 1875
ENG 2244  (3) British Literature before 1785
ENG 2245  (3) British Literature after 1785

Select six hours of one foreign language.

Area III
Select one of the following:
MTH 1110  (3) Finite Mathematics
MTH 1112  (3) Pre-calculus Algebra

Select one science course and corresponding lab:
Select one science course and corresponding lab:

- BIO 1100 (3) Principles of Biology
- BIO L100 (1) Principles of Biology Lab
- SCI 2233 (3) Physical Science
- SCI L233 (1) Physical Science Lab
- SCI 2234 (3) Earth and Space Science
- SCI L234 (1) Earth and Space Science Lab

**Area IV**

Select one of the following:

- HIS 1101 (3) Western Civilization I
- HIS 1102 (3) Western Civilization II
HIS 1111 (3) U.S. to 1877
- HIS 1112 (3) U.S. since 1877
- HIS 1122 (3) World History to 1500
- HIS 1123 (3) World History from 1500

**Area V**

IS 2241 (3) Computer Concepts and Applications
TROY 1101 (1) University Orientation

Additional requirements
Select additional free electives to complete a total of 60 hours.

The completion of 12 or more elective hours within the same discipline area (English, Math, History, etc) will constitute an emphasis area with the Associate’s degree. Emphasis areas are not required for the completion of the Associate’s degree.

**GENERAL EDUCATION A.S. DEGREE (60 HOURS)**

**Associate of Science Degree**

See the academic regulations section of this catalog for additional information regarding associate degrees.

Note: Students who pursue a baccalaureate degree with Troy University following the completion of the Associate of Science in General Education must meet the minimum grade requirements in mathematics.

**General Studies Requirements**

**Area I**

ENG 1101 (3) Composition & Modern English I
ENG 1102 (3) Composition & Modern English II

**Area II**

Select one of the following:

- ART 1133 (3) Visual Arts
- THE 1130 (3) Introduction to Theatre
- MUS 1131 (3) Music Appreciation

Select one of the following:

- ENG 2205 (3) World Literature before 1660
- ENG 2206 (3) World Literature after 1660
- ENG 2211 (3) American Literature before 1875
- ENG 2212 (3) American Literature after 1875
- ENG 2244 (3) British Literature before 1785
- ENG 2245 (3) British Literature after 1785

**Area III**

Select one of the following:

MTH 1110 (3) Finite Mathematics
MTH 1112 (3) Pre-calculus Algebra

Select one science course and corresponding lab:

- BIO 1100 (3) Principles of Biology
- BIO L100 (1) Principles of Biology Lab
- SCI 2233 (3) Physical Science
- SCI L233 (1) Physical Science Lab
- SCI 2234 (3) Earth and Space Science
- SCI L234 (1) Earth and Space Science Lab

**Area IV**

Select one of the following:

- HIS 1101 (3) Western Civilization I
- HIS 1102 (3) Western Civilization II
- HIS 1111 (3) U.S. to 1877
- HIS 1112 (3) U.S. since 1877
- HIS 1122 (3) World History to 1500
- HIS 1123 (3) World History from 1500

**Area V**

IS 2241 (3) Computer Concepts and Applications
TROY 1101 (1) University Orientation

Additional requirements
Select additional free electives to complete a total of 60 hours.

The completion of 12 or more elective hours within the same discipline area (English, Math, History, etc) will constitute an emphasis area with the Associate’s degree. Emphasis areas are not required for the completion of the Associate’s degree.

**GEOGRAPHIC INFORMATION SCIENCES (GIS)**

**MAJOR (36 HOURS)**

Specialized General Studies Requirements

**Area II**

COM 2241 (3) Fundamentals of Speech

**Area III**

MTH 1141 (3) Pre-Calculus Trigonometry
SCI 2233 (3) Physical Science
SCI L233 (1) Physical Science Lab

**Area V**

IS 2241 (3) Computer Concepts and Applications
TROY 1101 (1) University Orientation
STAT 2210 (3) Introductory Statistics
BIO 1120 (3) Survey of Environmental Sciences
BIO L120 (1) Survey of Environmental Sciences Lab
CS 3310 (3) Foundations of Computer Sciences
SS 3375 (3) Research Methods in the Social Sciences

**Major Requirements**

- GEO 3300 (3) Principles of Physical Geography
- GEO 3301 (3) Principles of Cultural Geography
- GIS 3301 (3) Cartography and Geo-Visualization
- GIS 3305 (3) Spatial Information and Analysis
- GIS 3310 (3) Introduction to Remote Sensing
- GIS 3390 (3) Fundamentals of Geographical Information and Analysis
- GIS 3391 (3) Application of Geospatial Information Sciences
- GIS 4401 (3) Spatial Database Design and Management
- GIS 4405 (3) Geospatial Modeling and Programming
- GIS 4415 (3) Advanced Geospatial Technologies
- GIS 4420 (3) Web-Based GIS/Spatial Data Applications

Select one of the following:

- GIS 4490 (3) GIS Senior Project
- GIS 4499 (3) GIS Internship

**GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

**MINOR (18 HOURS)**

**Required Courses: (9 Hours)**

- GIS 3301 (3) Cartography and Geo-Visualization
- GIS 3390 (3) Fundamentals of Geographical Information and Analysis
- GIS 3305 (3) Spatial Information and Analysis

**Electives: (9 hours)**

Select one course from the following: (3 Hours)

- GEO 3300 (3) Principles of Physical Geography
### HISTORY MAJOR (36 HOURS)

History Majors/Minors will receive credit for no more than six hours of 3000-level and 4000-level history courses taken before or concurrently with HIS 3375.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
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<tbody>
<tr>
<td>GIS 3310</td>
<td>3</td>
<td>Introduction to Remote Sensing</td>
</tr>
<tr>
<td>GIS 3391</td>
<td>3</td>
<td>Application of Geospatial Information Sciences</td>
</tr>
<tr>
<td>GIS 4401</td>
<td>3</td>
<td>Spatial Database Design and Management</td>
</tr>
<tr>
<td>GIS 4405</td>
<td>3</td>
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<td>3</td>
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</tr>
<tr>
<td>GIS 4420</td>
<td>3</td>
<td>Web based GIS/ Spatial Data Applications</td>
</tr>
<tr>
<td>GEM 4410</td>
<td>3</td>
<td>Introduction to Global Positions</td>
</tr>
<tr>
<td>CS 3310</td>
<td>3</td>
<td>Foundations of Computer Sciences</td>
</tr>
<tr>
<td>GEO 3300</td>
<td>3</td>
<td>Principles of Physical Geography</td>
</tr>
<tr>
<td>GEO 3301</td>
<td>3</td>
<td>Principles of Cultural Geography</td>
</tr>
</tbody>
</table>

Select an additional 12 hours of approved, upper-level geography courses. GEO 2210 may not be counted toward both general studies and the geography minor.

### HISTORY EDUCATION (36 HOURS)

Students seeking Alabama teacher certification should select history as a first major and education as a second major. Students should consult with their advisers concerning all certification requirements.

**Specialized General Studies Requirements**

**Area IV**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 2241</td>
<td>3</td>
<td>American National Government</td>
</tr>
<tr>
<td>SOC 2275</td>
<td>3</td>
<td>Introduction to Sociology</td>
</tr>
</tbody>
</table>

Select one six-hour sequence:

- HIS 1101  (3) Western Civilization I, or placement
- HIS 1102  (3) Western Civilization II, or placement

**Area V Requirements**

- GEO 2210 (3) World Regional Geography
- HIS 1111 (3) U.S. to 1877, or placement
- HIS 1112 (3) U.S. since 1877, or placement
- IS 2241 (3) Computer Concepts and Applications
- TROY 1101 (1) University Orientation

**Major Requirements**

- HIS 3375 (3) Research and Methodology
- HIS 4490 (3) Senior Seminar

Select one emphasis:

**American/Latin American History Emphasis:**

Select 15 hours of upper-level American/Latin American courses in addition to either HIS 3316 or 4406.

Select an additional nine hours of upper-level European/Asian/African courses in addition to HIS 4451.

**European/Asian/African History Emphasis:**

Select 15 hours of upper-level European/Asian/African courses in addition to HIS 4451.

Select an additional 9 hours of upper-level American/Latin American courses in addition to either HIS 3316 or 4406.

### GEOGRAPHY MINOR (18 HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
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<tbody>
<tr>
<td>GEO 3300</td>
<td>3</td>
<td>Principles of Physical Geography</td>
</tr>
<tr>
<td>GEO 3301</td>
<td>3</td>
<td>Principles of Cultural Geography</td>
</tr>
</tbody>
</table>

Select an additional 12 hours of approved, upper-level geography courses. GEO 2210 may not be counted toward both general studies and the geography minor.

**SELECTED COURSES**

**Core Courses**

- HIS 1112 (3) World History to 1500
- HIS 1123 (3) World History from 1500

**Area IV Requirements**

- GEO 2210 (3) World Regional Geography
- HIS 1111 (3) U.S. to 1877, or placement
- HIS 1112 (3) U.S. since 1877, or placement
- IS 2241 (3) Computer Concepts and Applications
- TROY 1101 (1) University Orientation

**Requirements for the Major**

- HIS 3375 (3) Research and Methodology
- HIS 4490 (3) Senior Seminar

Select 18 hours of approved upper-level American/Latin American courses.

Select 12 hours of approved upper-level European/Asian/African courses.

**Accelerated Law Curriculum Option:**

Students majoring in History and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the Accelerated Law Curriculum section the catalog for more information.

9 hours of Law courses will be transferred from the partnered law institution.

The following twelve (12) hours from the partnered institution will be transferred into the History Major electives:

- Civil Procedure I — 3 credit hours
- Civil Procedure II — 3 credit hours
- Criminal Law — 3 credit hours
- Contracts I — 3-4 credit hours

### HISTORY MINOR (18 HOURS)

History Majors/Minors will receive credit for no more than six hours of 3000-level and 4000-level history courses taken before or concurrently with HIS 3375.

- HIS 3375 (3) Research and Methodology

Select 15 hours of upper-level history courses.
Required Courses (9 hours)

POL 4476
POL 4474
POL 4468
POL 4467
POL 4464
POL 4450
GEO 3307
GEO 3301
GEO 2210
ANT 4411

Select 9 hours from the following:

POL 4460
POL 2260
ANT 3310

CJ 4470 (3)

Select 15 hours from the following courses:

CJ 3308 (3) Foundations of Intelligence
CJ 3345 (3) Criminology
CJ 3350 (3) Gangs
CJ 3382 (3) Social Media Investigation
CJ 4406 (3) Transnational Organized Crime
CJ 4425 (3) Violence in America
CJ 4430 (3) Selected Topics in Criminal Justice
CJ 4440 (3) Terrorism
CJ 4470 (3) Criminal Justice Issues in Homeland Security

Select 9 hours from the following:

ANT 3340 (3) Language in Culture and Society
ANT 4411 (3) High Civilizations of the New World
GEO 2210 (3) World Regional Geography
GEO 3301 (3) Principles of Cultural Geography
GEO 3307 (3) Geography of Europe
POL 4450 (3) Latin American Politics
POL 4464 (3) Arab-Israeli Conflict
POL 4465 (3) Politics of the Developing World
POL 4466 (3) Middle Eastern Politics
POL 4467 (3) Asian Politics
POL 4468 (3) Russian Politics
POL 4470 (3) European Politics
POL 4474 (3) Terrorism and Political Violence
POL 4476 (3) Politics of Southeast Asia

HOMELAND SECURITY MINOR (18 HOURS)

Select 18 hours from the following as approved by the adviser:

CJ 3305 (3) Foundations of Emergency Management
CJ 3345 (3) Security Operations
CJ 4420 (3) Comparative Criminal Justice
CJ 4405 (3) National Security and the Law
CJ 4440 (3) Terrorism
CJ 4470 (3) Criminal Justice Issues in Homeland Security
CJ 4488 (3) Internship (limit one)
POL 3364 (3) State and Local Politics
POL 4415 (3) International Conflict
POL 4422 (3) Public Policy Making

HUMANITIES MINOR (18 HOURS)

Please see the College of Communication and Fine Arts for details on the Humanities Minor.

INTELLIGENCE MINOR (18 HOURS)

Required for the minor:

CJ 3308 (3) Foundations of Intelligence

Select 15 hours from the following courses:

CJ 3305 (3) Foundations of Emergency Management
CJ 3345 (3) Criminology
CJ 3350 (3) Gangs
CJ 3382 (3) Social Media Investigation
CJ 4406 (3) Transnational Organized Crime
CJ 4425 (3) Violence in America
CJ 4430 (3) Selected Topics in Criminal Justice
CJ 4440 (3) Terrorism
CJ 4470 (3) Criminal Justice Issues in Homeland Security

INTER-CULTURAL COMPETENCY MINOR (18 HOURS)

Required Core Courses: (9 hours)

ANT 3310 (3) Cultural Anthropology
POL 2260 (3) World Politics
POL 4460 (3) Intercultural Relations

Select 9 hours from the following:

ANT 3340 (3) Language in Culture and Society
ANT 4411 (3) High Civilizations of the New World
GEO 2210 (3) World Regional Geography
GEO 3301 (3) Principles of Cultural Geography
GEO 3307 (3) Geography of Europe
POL 4450 (3) Latin American Politics
POL 4464 (3) Arab-Israeli Conflict
POL 4465 (3) Politics of the Developing World
POL 4466 (3) Middle Eastern Politics
POL 4467 (3) Asian Politics
POL 4468 (3) Russian Politics
POL 4470 (3) European Politics
POL 4474 (3) Terrorism and Political Violence
POL 4476 (3) Politics of Southeast Asia

LEGAL STUDIES MINOR (18 HOURS)

Required Courses (9 hours)

LGL 2200 (3) Introduction to Legal Studies
LGL 3300 (3) Legal Research and Writing
LGL 4400 (3) Seminar in Legal Studies

Select 9 hours of electives from the following courses:

CJ 2241 (3) Survey of Law and Criminal Procedure
CJ 3352 (3) Constitutional Law in Criminal Justice
CJ 4447 (3) Current Issues in Legal Systems Operation and Administration
CJ 4411 (3) Evidence
LAW 2221 (3) Legal Environment of Business
LAW 4420 (3) Administrative Law
POL 3342 (3) Judicial Branch
POL 4420 (3) Constitutional Law
POL 4472 (3) Administrative Law

MARINE BIOLOGY PROGRAM (56 HOURS)

*Special Topics in Biology (BIO 4476), Guided Independent Studies (BIO 4491/4492) and Guided Independent Research (BIO 4493, 4494) may only be taken for a maximum of 6 semester hours.

Students must take courses at both Troy University and Dauphin Island Sea Lab.

Specialized General Studies Requirements

Area III

BIO 1100 (3) Principles of Biology
BIO L100 (1) Principles of Biology Lab
CHM 1142 (3) General Chemistry I
CHM L142 (1) General Chemistry I Lab
MTH 1125 (4) Calculus I

Area V Requirements

IS 2241 (3) Computer Concepts and Applications
TROY 1101 (1) University Orientation
BIO 1101 (3) Organismal Biology
BIO L101 (1) Organismal Biology Lab
CHM 1143 (3) General Chemistry II
CHM L143 (1) General Chemistry II Lab

Complete one sequence (physics sequence not required for medical technology concentration):

PHY 2252 (3) General Physics I
PHY L252 (1) General Physics I Lab
PHY 2253 (3) General Physics II
PHY L253 (1) General Physics II Lab

OR

PHY 2262 (3) Physics I with Calculus
PHY L262 (1) Physics I with Calculus Lab
PHY 2263 (3) Physics II with Calculus
PHY L263 (1) Physics II with Calculus Lab

Requirements for the Program

Lectures and corresponding labs must be taken together.

BIO 2220 (3) Principles of Cell Biology
BIO L220 (1) Principles of Cell Biology Lab
BIO 2229 (3) General Ecology
BIO L229 (1) General Ecology Lab
BIO 3320 (3) Genetics
BIO L320 (1) Genetics Lab
BIO 4484 (1) Senior Seminar in Biological & Environment Sciences
CHM 3342 (3) Organic Chemistry I
CHM L342 (1) Organic Chemistry I Lab
CHM 3343 (3) Organic Chemistry II
CHM L343 (1) Organic Chemistry II Lab
STAT 2210 (3) Introductory Statistics

Troy University Courses:

BIO 3307 (3) Invertebrate Zoology
BIO L307 (1) Invertebrate Zoology Lab

Complete 12 additional semester hours of adviser-approved biology or marine biology (MB) courses.

Dauphin Island Sea Lab (DISL) Courses (16 semester hours).
DISL courses are offered during the summer term. Students are required to take the following prerequisites before attending DISL: CHEM 1143, L143, BIO 110F, L101, BIO 2229, L229. Students must also comply with all DISL catalog prerequisites for individual courses.

Complete 16 semester hours of MB courses approved by the DISL liaison and Department Chair.

**MATHEMATICS EDUCATION**

Students seeking Alabama teacher certification should select mathematics as a first major and education as a second major. Students should consult with their advisers concerning all certification requirements.

**STATISTICS MINOR (18 HOURS)**

Select 9 hours from the following:
- STAT 3355 (3) Survey Sampling
- STAT 4452 (3) Mathematical Statistics II
- STAT 4459 (3) Applied Regression Analysis
- STAT 4465 (3) Categorical Data Analysis
- STAT 4466 (3) Data Mining
- STAT 4467 (3) Experimental Design
- STAT 4456 (3) Mathematics of Finance
- STAT 4464 (3) Multivariate Analysis

**MILITARY OPERATIONS MINOR (18 HOURS)**

Military electives may be taken from credit recommended by the American Council on Education (ACE) or military credit from regionally accredited institutions. Students transferring in less than 18 credit hours in non-duplicated ACE recommended military credits may take additional advisor approved, upper-level courses as needed. Any excess military credit may go towards a second minor in Military Studies under the Bachelor of Interdisciplinary Studies Program, towards Option II of the BAS-Resource Technology Management Program, or towards the student’s free electives requirement if needed.

**MILITARY STUDIES MINOR (18 HOURS)**

Military electives may be taken from credit recommended by the American Council on Education (ACE) or military credit from regionally accredited institutions. Military Studies minors may only be declared as a second minor within the Bachelor of Interdisciplinary Studies degree program and follow the same guidelines as the Military Operations minor. Any excess military credit may go towards the student’s free electives requirement if needed.

**MILITARY SCIENCE LEADERSHIP MINOR (19-22 HOURS)**

**Area II Requirements:**
- COM 2241 (3) Fundamentals of Speech

**Area IV Requirements:**
Select one 2000 level 3-hour course from one of the following areas: Psychology, Sociology, or Political Science.

- MSL 3301 (3) Leadership and Problem Solving
- MSL 3302 (3) Leadership and Ethics
- MSL 3304 (1) Military Advanced Leadership Lab 111-A
- MSL 3305 (1) Military Advanced Leadership Lab 111-B
- MSL 4401 (3) Leadership and Management
- MSL 4402 (3) Officership
- MSL 4404 (1) Military Advanced Leadership Lab IV-A
- MSL 4405 (1) Military Advanced Leadership Lab IV-B
- MSL 4497 (1-3) Senior Seminar in Military Science

Select a three-hour military history course approved by the professor of military science.

**PHILOSOPHY AND RELIGION MINOR (18 HOURS)**

Select 9 hours from the following:
- PHI 2201 (3) Introduction to Political Philosophy
- PHI 2203 (3) Introduction to Philosophy
- PHI 2204 (3) Ethics and the Modern World
- PHI 2205 (3) Introduction to Logic
- PHI 2210 (3) Critical Thinking
- PHI 2280 (1-3) Travel Study in Philosophy
- REL 2210 (3) Introduction to Biblical Studies
- PHI 2215 (3) General Topics in Philosophy
- REL 2280 (3) World Religions
- REL 2285 (1-3) Travel Study in Religion

Select 9 hours from the following upper division courses. At least 6 hours must be philosophy (PHI) courses.
- PHI 3301 (3) Western Philosophy
- PHI 3310 (3) Applied Ethics
- PHI 3320 (3) Non-Western Philosophies
Students seeking a double major in Physics and Mathematics should consult with their advisers in both the Physics and Mathematics Departments.

### PHYSICS MAJOR (37 HOURS)

**Area III**
- MTH 1125 (4) Calculus I
- PHY 2262 (3) Physics I w/Calculus
- PHY L262 (1) Physics I w/Calculus Lab

**Area V**
- CS 2250 (3) Computer Science I
- MTH 1126 (4) Calculus II*

*Note: *Students selecting a minor in Mathematics or a second major in Mathematics will meet the Calculus II requirement in the Mathematics Major/Minor rather than in Area V.

**Required courses (20 hours)**
- PHY 2263 (3) Physics II w/Calculus
- PHY L263 (1) Physics II w/Calculus Lab
- PHY 3310 (3) Modern Physics
- PHY L310 (1) Modern Physics Lab
- PHY 3325 (3) Thermodynamics
- PHY 4420 (3) Mechanics
- PHY 4435 (3) Electricity & Magnetism
- PHY 4445 (3) Quantum Mechanics I

Select a minimum of 17 semester hours from the courses listed below:
- MTH 2227 (4) Calculus III
- MTH 3364 (3) Vector Calculus
- PHY 3320 (3) Mathematical Methods for Physicists
- PHY 3321 (3) Equations of Mathematical Physics
- PHY 3359 (3) Waves and Optics
- PHY L359 (1) Waves and Optics Lab
- PHY 4438 (3) Electromagnetic Fields
- PHY 4440 (3) Dynamics of Particles & Systems
- PHY 4446 (3) Quantum Mechanics II
- PHY 4460 (3) Relativity I
- PHY 4470 (3) Nuclear Physics
- PHY 4475 (3) Particle Physics
- PHY 4478 (3) Relativity II
- PHY 4482 (3) Introduction to String Theory
- PHY 4483-85 (1) Seminar in Relativity
- PHY 4495 (3) Topics in Physics
- PHY 4491-92 (3) Guided Independent Research
- PHY 4493-94 (3) Guided Independent Study

### PHYSICS AND MATHEMATICS DOUBLE MAJOR

**PHYSICS MINOR (18-19 HOURS)**

- PHY 2262 (3) Physics I Calculus
- PHY L262 (1) Physics I with Calculus Lab
- PHY 2263 (3) Physics II with Calculus
- PHY L263 (1) Physics II with Calculus Lab
- PHY 3310 (3) Modern Physics
- PHY L310 (1) Modern Physics Lab

Select an additional six to seven hours of adviser-approved, upper-level physics courses.

### POLITICAL SCIENCE MAJOR (36 HOURS)

**Area V Requirements**
- IS 2241 (3) Computer Concepts and Applications
- TROY 1101 (1) University Orientation
- POL 2241 (3) American National Government or placement in POL 2240
- POL 2260 (3) World Politics

**Major Requirements**
- POL 3300 (3) Foundations of Political Science
- POL 3330 (3) Political Theory
- POL 3390 (3) The Art of Political Science Research

Select one of the following concentrations:

#### American Politics and Public Administration Concentration

- POL 3340 (3) U.S. Government—Executive Branch
- POL 3341 (3) U.S. Government—Legislative Branch
- POL 3342 (3) U.S. Government—Judicial Branch

Select six hours from the following:

- POL 3343 (3) American Political Processes
- POL 3355 (3) Southern Politics
- POL 3364 (3) State and Local Politics
- POL 3383 (3) Women in Politics
- POL 3393 (3) African-American Politics
- POL 4405 (3) Political Behavior and Public Opinion
- POL 4420 (3) Constitutional Law
- POL 4421 (3) Introduction to Public Administration
- POL 4422 (3) Public Policy Making
- POL 4424 (3) Contemporary American Foreign Policy
- POL 4432 (3) Comparative Public Policy
- POL 4451 (3) Public Personnel Administration
- POL 4453 (3) Bureaucratic Politics
- POL 4469 (3) Religion in Politics
- POL 4472 (3) Administrative Law

Select an additional 12 hours of upper-level (3000-4000) political science courses, as approved by your academic adviser.

**International Politics Concentration**

- POL 3351 (3) International Relations
- POL 4410 (3) International Political Economy
- POL 4433 (3) Comparative Government

Select six hours from the following:

- POL 4405 (3) Political Behavior and Public Opinion
- POL 4415 (3) International Conflict
- POL 4424 (3) Contemporary American Foreign Policy
- POL 4432 (3) Comparative Public Policy
- POL 4445 (3) Inter-American Relations
- POL 4450 (3) Latin American Politics
- POL 4452 (3) International Law
- POL 4460 (3) Intercultural Relations
- POL 4464 (3) Arab-Israeli Conflict
- POL 4465 (3) Politics of the Developing World
- POL 4466 (3) Middle Eastern Politics
- POL 4467 (3) Asian Politics
- POL 4468 (3) Russian Politics
- POL 4470 (3) European Politics
- POL 4474 (3) Terrorism and Political Violence
- POL 4476 (3) Politics of Southeast Asia
Select an additional 12 hours of upper-level (3000-4000) political science courses, as approved by your academic adviser.

**Accelerated Honors Requirements:**

*IR 5551 (3) Survey of International Relations
*IR 6601 (3) Research Method in International Relations
*R6620 (3) International Political Economy

Select an additional 3 hours of upper-level (3000-4000) political science courses, as approved by your academic adviser.

*Registration for courses marked with an asterisk is restricted to students who have been admitted to International Relations Concentration Accelerated Honors Option, have completed at least 90 credit hours, and 18 hours of political science courses. Students must also meet requirements for the graduate program.

**Accelerated Law Curriculum Option:**

Students majoring in Political Science and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the Accelerated Law Curriculum section the catalog for more information.

**15 hours of Law courses will be transferred from the partnered law institution**

The following six (6) hours from the partnered institution will be transferred into the Political Science Major electives:

- Civil Procedure I — 3 credit hours
- Civil Procedure II — 3 credit hours

**POLITICAL SCIENCE MINOR (18 HOURS)**

- POL 3300 (3) Foundations of Political Science
- POL 3330 (3) Introduction to Political Theory

Select an additional 12 hours of upper level courses, as approved by your academic adviser.

**AMERICAN POLITICS MINOR (18 HOURS)**

**Required Courses (9 hours)**

- POL 3340 (3) U. S. Government—Executive Branch
- POL 3341 (3) U. S. Government—Legislative Branch
- POL 3342 (3) U. S. Government—Judicial Branch

**Select three of the following courses (9 hours)**

- POL 3343 (3) American Political Processes
- POL 3355 (3) Southern Politics
- POL 3364 (3) State and Local Politics
- POL 3338 (3) Women in Politics
- POL 3339 (3) African-American Politics
- POL 4405 (3) Political Behavior and Public Opinion
- POL 4420 (3) Constitutional Law
- POL 4421 (3) Introduction to Public Administration
- POL 4422 (3) Public Policy Making
- POL 4424 (3) Contemporary American Foreign Policy
- POL 4432 (3) Comparative Public Policy
- POL 4451 (3) Public Personnel Administration
- POL 4453 (3) Bureaucratic Politics
- POL 4469 (3) Religion in Politics
- POL 4472 (3) Administrative Law

**INTERNATIONAL RELATIONS MINOR (18 HOURS)**

**Required course (9 hours)**

- POL 3351 (3) International Relations
- POL 4410 (3) International Political Economy
- POL 4433 (3) Comparative Government

**Select three hours from the following courses (9 hours)**

- POL 3300 (3) Foundations of Political Science
- POL 4405 (3) Political Behavior and Public Opinion
- POL 4415 (3) International Conflict

- POL 4424 (3) Contemporary American Foreign Policy
- POL 4432 (3) Comparative Public Policy
- POL 4445 (3) Inter-American Relations
- POL 4450 (3) Latin American Politics
- POL 4452 (3) International Law
- POL 4460 (3) Intercultural Relations
- POL 4464 (3) Arab-Israeli Conflict
- POL 4465 (3) Politics of the Developing World
- POL 4466 (3) Middle Eastern Politics
- POL 4467 (3) Asian Politics
- POL 4468 (3) Russian Politics
- POL 4470 (3) European Politics
- POL 4474 (3) Terrorism and Political Violence
- POL 4476 (3) Politics of Southeast Asia

**SCIENCE EDUCATION**

Students seeking Alabama teacher certification should select the comprehensive science program as a first major and education as a second major. Students should consult with their advisers concerning all certification requirements.

**SOCIAL SCIENCE MAJOR (36 HOURS)**

**Specialized General Studies Requirements**

**Area IV**

NOTE: Social Science Education Majors must take HIS 1101 Western Civilization I and HIS 1102 Western Civilization II.

**Area V Requirements**

- STAT 2210 (3) Introductory Statistic

**Requirements for the Major**

- SS 2220 (3) Introduction to Social Science
- SS 3375 (3) Research Methods in the Social Sciences
- SS 3376 (3) Statistical Applications of Social Science Inquiry
- GIS 3305 (3) Spatial Information and Analysis
- SS 4498 (3) Social Science Theory
- SS 4499 (3) Senior Seminar

Select an additional 18 hours of approved upper-level courses in at least three disciplines from the following: anthropology, economics, geography, history, political science, psychology, sociology, criminal justice, or as approved by the department chair.

**Accelerated Law Curriculum Option:**

Students majoring in Social Science and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the Accelerated Law Curriculum section the catalog for more information.

**15 hours of Law courses will be transferred from the partnered law institution**

The following six (6) hours from the partnered institution will be transferred into the Social Science Major electives:

- Civil Procedure I — 3 credit hours
- Civil Procedure II — 3 credit hours

**SOCIAL SCIENCE MINOR: GENERAL SOCIAL SCIENCE (18 HOURS)**
SS 2220 (3) Introduction to Social Science
SS 4498 (3) Social Science Theory

Select an additional 12 hours from at least three of the following: anthropology, criminal justice, economics, geography, history, political science, psychology, social science, or sociology. At least 12 hours must be 3000/4000 level.

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**SOCIOLOGY MAJOR (36 HOURS)**

**Area IV Requirements**
SOC 2275 (3) Introduction to Sociology

**Area V Requirements**
IS 2241 (3) Computer Concepts and Applications
TROY 1101 (1) University Orientation
STAT 2210 (3) Introductory Statistics

**Requirements for the Major**
SOC 4420 (3) Sociological Theory
SS 3375 (3) Research Methods in the Social Sciences
SS 3376 (3) Statistical Applications of Social Science Inquiry
SS 4499 (3) Senior Seminar

Select an additional 24 hours of approved upper-level sociology courses.

**Accelerated Law Curriculum Option:**
Students majoring in History and Legal Studies as a minor may select the Accelerated Law Curriculum Option. See the Accelerated Law Curriculum section the catalog for more information.

15 hours of Law courses will be transferred from the partner law institution.

The following six (6) hours from the partnered institution will be transferred into the Sociology Major electives:
- Civil Procedure I — 3 credit hours
- Civil Procedure II — 3 credit hours

**SOCIOLOGY MINOR (18 HOURS)**

Select 18 hours of approved, upper-level Sociology courses. SOC 2280 may be applied toward the minor.

**SURVEYING AND GEOMATICS SCIENCES PROGRAM (53 HOURS)**

**Area II:**
ART 2201 (3) Introductory Drawing

Select remaining Area II courses as specified in the General Studies section of this catalog.

**Area III Requirements**
MTH 1125 (4) Calculus I

Select an 8 hour physics sequence with labs:
- PHY 2252 (3) General Physics I
- PHY L252 (1) General Physics I Laboratory
- PHY 2253 (3) General Physics II
- PHY L253 (1) General Physics II Laboratory
- OR
- PHY 2262 (3) Physics I with Calculus
- PHY L262 (1) Physics I with Calculus Laboratory
- PHY 2263 (3) Physics II with Calculus
- PHY L263 (1) Physics II with Calculus Laboratory

**Area V Requirements**
CS 2250 (3) Computer Science I
IS 2241 (3) Computer Concepts & Application
MTH 2230 (3) Applied Linear Algebra
STAT 2210 (3) Introductory Statistics
TROY 1101 (1) University Orientation

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**SURVEYING AND GEOMATICS SCIENCES MINOR (20 HOURS)**

**Required Courses:**
- GEM 1100 (2) Computer-Aided Drafting
- GEM 2220 (3) Basics of Surveying
- GEM 3309 (3) Land Surveying Principles
- GIS 3390 (3) Fundamentals of Geographic Information and Analysis
- GEM 4408 (3) Geodesy and Geodetics
- GEM 4409 (3) Hydrology
- GEM L409 (2) Geomatics/GIS Projects
- OR
- GEM 4496 (1) Cooperative Work Experience II
- GEM 4499 (2) Cooperative Work Experience I

**UNMANNED AERIAL SYSTEMS MINOR (18 HOURS)**

**Required Courses:**
- UAS 2200 (3) Unmanned Aerial Systems Overview
- UAS 2202 (3) Principles of UAS Design
- UAS 2204 (3) Principles of UAS Sensors & Sensing Systems
- UAS 2206 (3) Human Factors In UAS Operations & Accidents
- UAS 2208 (3) Legal & Ethical Considerations for UAS Operations

Select 3 semester hours from the following:
- UAS 2210 (3) UAS Real World Applications
- UAS 2212 (3) UAS Piloting Familiarization