

ASSOCIATE OF TECHNICAL STUDIES

The Associate of Technical Study (ATS) degree allows students to combine courses from two or more different technical programs to create a degree that focuses on a special career interest. Students who have successfully completed a course of technical studies at a non-credit-bearing postsecondary institution that has an articulation agreement with the College may be able to receive up to 30 transfer credits toward an Associate of Technical Study degree in the specific program identified in the agreements.

Associate of Technical Study Degree

Cuyahoga Community College will grant an Associate of Technical Study degree to students in good standing upon completion of the following requirements.

Comprehensive Graduation Requirements

The Associate of Technical Study degree prepares students with the skills necessary to enter and compete effectively in today's workforce. It is awarded for the successful completion of an individually planned technical education program that contains an area of concentration formed either by an intra-institutional combination of courses from two or more different technical programs or by credit (maximum of 30 semester credit hours) awarded by the College for courses completed or training received at other institutions with which the College has entered into an articulation agreement.

- Students must complete an ATS contract, which includes an outline of specific coursework to be taken to earn the ATS degree. Students must work with an academic counselor to develop the ATS contract.
- Students must satisfactorily complete at least 60 semester credit hours at the 1000-level or higher. No more than 3 of the 60 credits can be completed in physical education.
- Students must achieve a minimum overall grade point average of 2.00 for all courses attempted at Cuyahoga Community College (with exceptions as provided under College policies for repeating a course, Grade Forgiveness and Fresh Start).
- Students must complete a minimum of 20 of the 60 semester credit hours at Cuyahoga Community College after the ATS application has been approved.
- Special Topics, Independent Study/Research and Cooperative Education courses may be applied toward the general education and program requirements unless otherwise noted.

General Education Requirements

Each of the College's degree programs require that students complete a set amount of courses in the areas of general education that include: Communication, Mathematics and Data Analysis, Natural and Physical Sciences, Arts and Humanities, and Social and Behavioral Sciences. Students completing the general education requirements, along with the specific program and elective requirements for a degree will have achieved the College's general education outcomes.

Communication (6 semester credit hours)

The communication skills of reading analytically, writing fluently, listening critically and speaking articulately are essential. Students must complete the following to meet this requirement:

- ENG-1010 College Composition I or ENG-101H Honors College Composition I¹
- Three (3) semester credits selected from the following courses:

Communication Studies

| Code | Title | Credit Hours |
|-----------|--------------------------------------|--------------|
| COMM-1010 | Fundamentals of Speech Communication | 3 |
| COMM-101H | Honors Speech Communication | 3 |

English

| Code | Title | Credit Hours |
|----------|-------------------------------|--------------|
| ENG-1020 | College Composition II | 3 |
| ENG-102H | Honors College Composition II | 3 |
| ENG-2151 | Technical Writing | 3 |

¹ Students who transfer in credits for ENG-1020 College Composition II without having credit for ENG-1010 will have ENG-1010 waived, but the required 6 hours in Communication must be earned.

Mathematics and Data Analysis (3 semester credit hours)

The ability to integrate numerical methods for use in today's workforce is essential. Students must complete the following to complete this requirement:

- Three (3) semester credits of Mathematics at the 1000-level or higher, selected from the following courses:

| Code | Title | Credit Hours |
|-----------|--|--------------|
| MATH-1190 | Algebraic and Quantitative Reasoning | 3 |
| MATH-1370 | Mathematics for Elementary and Middle School Teachers I | 4 |
| MATH-1380 | Mathematics for Elementary and Middle School Teachers II | 4 |
| MATH-1410 | Elementary Probability and Statistics I | 3 |
| MATH-1420 | Elementary Probability and Statistics II | 3 |
| MATH-1470 | Modern Mathematics for Business and Social Science I | 4 |
| MATH-1480 | Modern Mathematics for Business and Social Sciences II | 4 |
| MATH-1490 | Business Probability and Statistics I | 3 |
| MATH-1500 | Business Probability and Statistics II | 3 |
| MATH-1530 | College Algebra | 4 |
| MATH-153H | Honors College Algebra | 4 |
| MATH-1540 | Trigonometry | 3 |
| MATH-154H | Honors Trigonometry | 3 |
| MATH-1580 | Precalculus | 5 |
| MATH-1610 | Calculus I | 5 |
| MATH-161H | Honors Calculus I | 5 |
| MATH-1620 | Calculus II | 5 |

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|-----------|--------------------------------------|---|
| MATH-162H | Honors Calculus II | 5 |
| MATH-2010 | Introduction to Discrete Mathematics | 4 |
| MATH-2310 | Calculus III | 4 |
| MATH-231H | Honors Calculus III | 4 |
| MATH-2410 | Introduction to Linear Algebra | 3 |
| MATH-2520 | Differential Equations | 3 |

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| ENG-2520 | African-American Literature II | 3 |
| ENG-2601 | Literature for Children and Adolescents | 3 |
| ENG-2700 | World Literature | 3 |
| ENG-2710 | Shakespeare | 3 |
| ENG-2730 | Exploration of World Mythology | 3 |
| ENG-2770 | Rhetorics of Gaming: Introduction to Video Game Analysis | 3 |

Arts and Humanities/Social and Behavioral Sciences/ Natural and Physical Sciences (6 semester credit hours)

The appreciation of the achievements of the Arts and Humanities, Social and Behavioral Sciences, Natural and Physical Sciences provides the ability to integrate learning within a complex global perspective; to gain an awareness of and respect for different cultures; to integrate ethical decision making in dealing responsibly with personal, family, and community issues; and to understand, analyze, and describe aspects of human behavior from diverse political, social, historical, and cultural perspectives. To meet this requirement, students must complete the following:

- Select six (6) semester credits from at least 2 of the following areas, with a minimum of 3 credits in each area:
- Courses that have been used to complete the Communication requirement cannot count toward fulfilling Arts and Humanities requirement.

Arts and Humanities

Art

| Code | Title | Credit Hours |
|----------|--|--------------|
| ART-1010 | Art Appreciation | 3 |
| ART-1040 | Survey of Non-Western Art | 3 |
| ART-2020 | Art History Survey: Prehistoric to Renaissance | 3 |
| ART-202H | Honors Art History Survey: Prehistoric to Renaissance | 3 |
| ART-2030 | Art History Survey: Late Renaissance to Present | 3 |
| ART-203H | Honors Art History Survey: Late Renaissance to Present | 3 |

Dance

| Code | Title | Credit Hours |
|-----------|--------------------|--------------|
| DANC-1100 | Dance Appreciation | 3 |

English 2000-level Literature courses

| Code | Title | Credit Hours |
|----------|---|--------------|
| ENG-2020 | Women Writers on the Experiences of Women | 3 |
| ENG-2310 | American Literature I | 3 |
| ENG-2320 | American Literature II | 3 |
| ENG-2350 | British Literature I | 3 |
| ENG-2360 | British Literature II | 3 |
| ENG-2410 | Introduction to Literature: Poetry | 3 |
| ENG-2420 | Introduction to Literature: Fiction | 3 |
| ENG-2430 | Introduction to Literature: Drama | 3 |
| ENG-2510 | African-American Literature I | 3 |

History

| Code | Title | Credit Hours |
|-----------|---------------------------------------|--------------|
| HIST-2031 | Islam to the Modern Middle East | 3 |
| HIST-2150 | African American History to 1877 | 3 |
| HIST-2160 | African American History 1877-present | 3 |
| HIST-2520 | Hitler and the Holocaust | 3 |
| HIST-2660 | Women in American History | 3 |

Humanities

| Code | Title | Credit Hours |
|----------|---|--------------|
| HUM-1010 | Introduction to Humanities | 3 |
| HUM-1020 | The Individual in Society | 3 |
| HUM-102H | Honors Individual in Society | 3 |
| HUM-2020 | Community Engagement Through the Humanities | 3 |
| HUM-2030 | Culture and Belief | 3 |

Media and Journalism Studies

| Code | Title | Credit Hours |
|----------|-------------------|--------------|
| MJS-1310 | Film Appreciation | 3 |

Music

| Code | Title | Credit Hours |
|----------|------------------------------------|--------------|
| MUS-1010 | Survey of European Classical Music | 3 |
| MUS-1020 | Survey of Jazz | 3 |
| MUS-1030 | Survey of Rock and Roll | 3 |
| MUS-1040 | Survey of African-American Music | 3 |
| MUS-1050 | Survey of World Music | 3 |
| MUS-2541 | Jazz History | 3 |

Philosophy

| Code | Title | Credit Hours |
|-----------|-----------------------------------|--------------|
| PHIL-1000 | Critical Thinking | 3 |
| PHIL-1010 | Introduction to Philosophy | 3 |
| PHIL-101H | Honors Introduction to Philosophy | 3 |
| PHIL-1020 | Introduction to Logic | 3 |
| PHIL-2020 | Ethics | 3 |
| PHIL-202H | Honors Ethics | 3 |
| PHIL-2050 | Bioethics | 3 |
| PHIL-205H | Honors Bioethics | 3 |
| PHIL-2060 | Business Ethics | 3 |
| PHIL-208H | Honors Social Justice | 3 |

Religious Studies

| Code | Title | Credit Hours |
|----------|--|--------------|
| REL-1010 | Introduction to Religious Studies | 3 |
| REL-2000 | Comparative World Religions | 3 |
| REL-2010 | Religious Traditions of Western Christianity | 3 |
| REL-2060 | African-American Religious Experience | 3 |

Theatre

| Code | Title | Credit Hours |
|-----------|--------------------------------|--------------|
| THEA-1010 | Theatre Appreciation | 3 |
| THEA-2210 | History of Theatre and Drama I | 3 |
| THEA-2220 | History of Theatre & Drama II | 3 |

Social and Behavioral Sciences**Anthropology**

| Code | Title | Credit Hours |
|-----------|-----------------------------------|--------------|
| ANTH-1010 | Cultural Anthropology | 3 |
| ANTH-2010 | Peoples and Cultures of the World | 3 |
| ANTH-2110 | Archaeology | 3 |

Economics

| Code | Title | Credit Hours |
|-----------|------------------------------|--------------|
| ECON-1210 | Survey of Economics | 3 |
| ECON-2000 | Principles of Microeconomics | 3 |
| ECON-2010 | Principles of Macroeconomics | 3 |

Geography

| Code | Title | Credit Hours |
|-----------|--|--------------|
| GEOG-1000 | Introduction to Geography | 3 |
| GEOG-1010 | World Regional Geography | 3 |
| GEOG-1050 | Africans in the Americas | 3 |
| GEOG-1510 | Regional Geography of the United States and Canada | 3 |
| GEOG-2030 | Environmental Geography | 3 |

History

| Code | Title | Credit Hours |
|-----------|---|--------------|
| HIST-1010 | History of Civilization I | 3 |
| HIST-101H | Honors History of Civilization I | 3 |
| HIST-1020 | History of Civilization II | 3 |
| HIST-102H | Honors History of Civilization II | 3 |
| HIST-1510 | United States History to 1877 | 3 |
| HIST-151H | Honors United States History to 1877 | 3 |
| HIST-1520 | United States History Since 1877 | 3 |
| HIST-152H | Honors United States History since 1877 | 3 |
| HIST-1700 | History of Africa | 3 |
| HIST-2700 | History of Modern Africa | 3 |

Political Science

| Code | Title | Credit Hours |
|----------|--|--------------|
| POL-1010 | American National Government | 3 |
| POL-101H | Honors American National Government | 3 |
| POL-1020 | State & Local Government | 3 |
| POL-2020 | Introduction to Conflict and Peace Studies | 3 |
| POL-2030 | Comparative Politics | 3 |
| POL-2060 | Political Systems of Africa | 3 |
| POL-2070 | International Relations | 3 |
| POL-2100 | Constitutional Law | 3 |
| POL-2120 | Women and Politics | 3 |

Psychology

| Code | Title | Credit Hours |
|----------|---|--------------|
| PSY-1010 | General Psychology | 3 |
| PSY-101H | Honors General Psychology | 3 |
| PSY-1050 | Introduction to Industrial/Organizational Psychology | 3 |
| PSY-2010 | Child Growth and Development | 3 |
| PSY-201H | Honors Child Growth and Development | 3 |
| PSY-2020 | Life Span Development | 4 |
| PSY-202H | Honors Life Span Development | 4 |
| PSY-2040 | Social Psychology | 3 |
| PSY-2050 | Psychology of Personality | 3 |
| PSY-2060 | Adolescent Psychology | 3 |
| PSY-2081 | Psychopathology (formerly PSY-2080 Abnormal Psychology) | 3 |
| PSY-2100 | Introduction to Aging | 3 |
| PSY-2110 | Educational Psychology | 3 |

Sociology

| Code | Title | Credit Hours |
|----------|-------------------------------|--------------|
| SOC-1010 | Introductory Sociology | 3 |
| SOC-101H | Honors Introductory Sociology | 3 |
| SOC-1020 | Social Institutions | 3 |
| SOC-2010 | Social Problems | 3 |
| SOC-201H | Honors Social Problems | 3 |
| SOC-2020 | Sociology of the Family | 3 |
| SOC-2100 | Aging and Society | 3 |
| SOC-2110 | Death and Dying | 3 |
| SOC-2160 | Introduction to Criminology | 3 |
| SOC-2410 | Sociology of Gender | 3 |
| SOC-2550 | Race and Ethnic Relations | 3 |

Urban Studies

| Code | Title | Credit Hours |
|----------|-------------------------------|--------------|
| UST-1010 | Introduction to Urban Studies | 3 |
| UST-2020 | Urban Cultures | 3 |

Women and Gender Studies

| Code | Title | Credit Hours |
|----------|---|--------------|
| WGS-1510 | Introduction to Women's and Gender Studies | 3 |
| WGS-151H | Honors Introduction to Women's and Gender Studies | 3 |
| WGS-2010 | Women in the World | 3 |
| WGS-201H | Honors Women in the World | 3 |
| WGS-2120 | Women and Politics | 3 |

Natural and Physical Sciences**Anthropology**

| Code | Title | Credit Hours |
|-----------|-----------------|--------------|
| ANTH-1210 | Human Evolution | 4 |

Biology

| Code | Title | Credit Hours |
|----------|---|--------------|
| BIO-1040 | The Cell and DNA | 3 |
| BIO-104L | The Cell and DNA Laboratory | 1 |
| BIO-1050 | Human Biology | 3 |
| BIO-106L | Environment, Ecology, & Evolution Laboratory | 1 |
| BIO-1100 | Introduction to Biological Chemistry | 3 |
| BIO-1221 | Anatomy and Physiology for Diagnostic Medical Imaging | 4 |
| BIO-1230 | Anatomy and Physiology of the Eye | 4 |
| BIO-1410 | Anatomy & Physiology of Domestic Animals I | 4 |
| BIO-1420 | Anatomy & Physiology of Domestic Animals II | 3 |
| BIO-1500 | Principles of Biology I | 4 |
| BIO-150H | Honors Principles of Biology I | 4 |
| BIO-1510 | Principles of Biology II | 4 |
| BIO-151H | Honors Principles of Biology II | 4 |
| BIO-2060 | Principles of Genetics | 3 |
| BIO-2100 | Biology of Aging | 3 |
| BIO-2150 | Environmental Science | 3 |
| BIO-2200 | Radiobiology | 2 |
| BIO-2331 | Anatomy and Physiology I | 4 |
| BIO-2341 | Anatomy and Physiology II | 4 |
| BIO-2500 | Microbiology | 4 |
| BIO-2600 | Pathophysiology | 3 |

Chemistry

| Code | Title | Credit Hours |
|-----------|--|--------------|
| CHEM-1000 | Everyday Chemistry | 3 |
| CHEM-100L | Everyday Chemistry Laboratory | 1 |
| CHEM-1010 | Introduction to Inorganic Chemistry | 4 |
| CHEM-101H | Honors Introduction to Inorganic Chemistry | 4 |
| CHEM-1020 | Introduction to Organic Chemistry and Biochemistry | 4 |

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| CHEM-102H | Honors Introduction to Organic Chemistry and Biochemistry | 4 |
| CHEM-1081 | Medicinal Plants Chemistry | 3 |
| CHEM-1300 | General Chemistry I | 4 |
| CHEM-130H | Honors General Chemistry I | 5 |
| CHEM-130L | General Chemistry Laboratory I | 1 |
| CHEM-1310 | General Chemistry II | 4 |
| CHEM-131H | Honors General Chemistry II | 5 |
| CHEM-131L | General Chemistry Laboratory II | 1 |
| CHEM-2300 | Organic Chemistry I | 5 |

Earth Science

| Code | Title | Credit Hours |
|-----------|--------------------------------------|--------------|
| ESCI-1030 | Earth | 3 |
| ESCI-103L | Earth Laboratory | 1 |
| ESCI-1040 | Weather Studies | 3 |
| ESCI-1050 | Introduction to Ocean Studies | 3 |
| ESCI-1310 | Physical Geography | 3 |
| ESCI-131L | Lab in Physical Geography | 1 |
| ESCI-1410 | Physical Geology | 3 |
| ESCI-141L | Lab in Physical Geology | 1 |
| ESCI-1610 | Geology of the National Parks | 3 |
| ESCI-161L | Lab in Geology of the National Parks | 1 |

Physics

| Code | Title | Credit Hours |
|-----------|--|--------------|
| PHYS-1010 | Astronomy | 3 |
| PHYS-101L | Astronomy Laboratory | 1 |
| PHYS-1050 | Everyday Physics | 2 |
| PHYS-1210 | College Physics I | 4 |
| PHYS-1220 | College Physics II | 4 |
| PHYS-1300 | Physics of Optical Materials | 4 |
| PHYS-2250 | Radiographic Physics and Quality Control | 4 |
| PHYS-2310 | General Physics I | 5 |
| PHYS-2320 | General Physics II | 5 |

The following courses from non-science subject areas can be counted toward this requirement for the Associate of Technical Studies degree:

| Code | Title | Credit Hours |
|-----------|-------------------------------------|--------------|
| DIET-1200 | Basic Nutrition | 3 |
| EMT-1401 | Anatomy & Physiology for Paramedics | 4 |
| MT-1242 | Somatic Studies I | 3 |
| MT-1272 | Somatic Studies II | 3 |
| MT-1280 | Somatic Studies III | 2 |

Diversity, Equity, and Inclusion

| Code | Title | Credit Hours |
|-----------|--------------------------------|--------------|
| COMM-2160 | Intercultural Communication | 3 |
| ENG-2510 | African-American Literature I | 3 |
| ENG-2520 | African-American Literature II | 3 |
| MJS-1611 | Black Media | 3 |

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|----------|---|---|
| SOC-2550 | Race and Ethnic Relations | 3 |
| WGS-1510 | Introduction to Women's and Gender Studies | 3 |
| WGS-151H | Honors Introduction to Women's and Gender Studies | 3 |
| WGS-2010 | Women in the World | 3 |
| WGS-201H | Honors Women in the World | 3 |

Elective Graduation Requirements (15 semester credit hours)

The remaining 15 semester credits to complete the required minimum total of 60 semester credits may be chosen from 1000-level courses and above, exclusive of developmental coursework. Courses taken to meet general education requirements in Communication, Mathematics and Data Analysis, Arts and Humanities, Social and Behavioral Sciences, or Natural and Physical Sciences cannot count towards fulfilling elective graduation requirements. Selection of elective semester credit hours of coursework shall be related to the occupational objective of the student of the basic components to further develop technical competencies.

Program Requirements

The program leading to an Associate of Technical Study degree must have an area of concentration that is equivalent to 30 semester credits in technical studies and clearly identifiable with a career objective. Approximately one half of each Associate of Technical Study program is devoted to non-technical studies.

Cross-listed Courses

Cross-listed courses are identical courses offered in two or more subject areas. They differ only in subject area code and course number. Credit may be earned once for cross-listed courses.