

# TRANSFER PROGRAMS

- APPLIED PSYCHOLOGY
- BUSINESS ADMINISTRATION
- BUSINESS ADMINISTRATION: SPORT MANAGEMENT
- CRIMINAL JUSTICE
- ENGLISH
- ENVIRONMENTAL SCIENCE
- INDIVIDUAL STUDIES
- LIBERAL ARTS: HUMANITIES & SOCIAL SCIENCE
- LIBERAL ARTS: MATH & SCIENCE



# Applied Psychology

## ■ ASSOCIATE OF SCIENCE

Earning an A.S. in Applied Psychology provides a considerable advantage to those who are looking to secure employment in personal and home health care. Students who complete the program will have extensive knowledge in the liberal arts as well as areas that focus on the application of learning and behavior to enhance the lives of children and adults who are struggling with behavioral and/or developmental disabilities. Graduates will also have met the seamless transfer requirements to transfer into a SUNY four-year college or university as a rising junior in a psychology major.

### Program Goals:

- Evaluate arguments with regard to psychological questions.
- Write using APA style to effectively communicate psychological information.
- Describe the psychological perspective on the human condition in a cultural context.
- Discuss psychological questions demonstrating diversity awareness and a global world view.
- Demonstrate the ability to apply psychological principles to other disciplines.
- Compare and contrast the major areas and theories in psychology.

## MINIMUM DEGREE REQUIREMENTS (63 CREDITS):

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### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

### Mathematics & Science 14 Credits:

MAT 161 Elementary Statistics  
One Mathematics course above 100 is required.  
BIO 100 Human Biology  
One four-credit science elective in a natural science is required.

### Psychology 15 Credits:

PSY 101 Introduction to Psychology  
PSY 230 Human Development  
PSY 240 Social Psychology  
PSY 250 Applied Psychology  
PSY 280 Abnormal Psychology

### Social Science 6 Credits:

SOC 101 Introduction to Sociology  
One three-credit social science elective is required.

### Human Services 3 Credits:

HUS101/SWK101 Introduction to Human Services /  
Introduction to Social Work is required.

### History 3 Credits:

One three-credit history elective is required.

### Humanities 9 Credits:

COM 101 Public Speaking  
One three-credit foreign language elective is required.  
One three-credit humanities elective in art, music, or theatre is required.

### History 3 Credits:

One three-credit history elective is required.

### Health/Physical Education 1 Credit:

One HPE elective is required.

### Free Electives 6 Credits:

Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest or to sample different academic disciplines.

# Business Administration

## ■ ASSOCIATE OF SCIENCE

The A.S. Degree Program in Business Administration is designed for students intending to transfer to four-year institutions. The program prepares students for a smooth transition, frequently with junior-level status, to many four-year colleges. Many students transfer to colleges that offer degrees in financial information and analysis; entrepreneurial studies; hotel, resort, and tourism; management; e-business; management information systems, international business, and accounting. Clinton has a 2+2 agreement with SUNY Plattsburgh in several areas including accounting, management, marketing, and international business.

### Program Goals:

- Prepare students to apply the legal basis of business enterprises and the quantitative basis for measuring business functions.
- Prepare students to demonstrate a basic understanding of scientific methods, math, humanities, social sciences, and natural science.
- Prepare students to communicate effectively, both orally and in writing.
- Prepare students to demonstrate proficiency in using computer software.
- Prepare students for employment and/or transfer to a four-year program.

## MINIMUM DEGREE REQUIREMENTS (61 CREDITS):

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### Accounting 8 Credits:

ACC120 Financial Accounting  
ACC 125 Managerial Accounting

### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

### Mathematics 7 Credits:

MAT 161 Elementary Statistics  
MAT 215 Calculus for Business or MAT 224 Calculus I

### Science 4 Credits:

One four-credit natural science course with lab components is required.

### Computer Science 3 Credits:

CSC 102 Introduction to Microcomputer Applications

### Business 18 Credits:

BUS 101 Introduction to Business  
BUS 210 Principles of Marketing  
BUS 250 Principles of Management  
BUS 260 Business Law I  
BUS 261 Business Law II  
One business elective in any three-credit accounting, business or computer science is required.

### Social Science 6 Credits:

ECO 101 Principles of Microeconomics  
ECO 102 Principles of Macroeconomics

### History 3 Credits:

American History or Western Civilization Gen. Ed. course.

### Humanities 3 Credits:

The Arts, Foreign Language, or Other World Civilizations Gen. Ed. course.

### Free Elective 3 Credits:

Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest or to sample different academic disciplines.

# Business Administration: Sport Management

## ■ ASSOCIATE OF SCIENCE

The A.S. Business Administration: Sport Management Degree Program is designed to prepare students for entry and mid-level positions of employment in the Sport Management field or for smooth transition into a four year Bachelor of Sport Management Degree Program of their choice. This program will provide students opportunity to build a solid base of general education courses and business courses and provide exposure to introductory sport management specific courses required for employment and for continuing their education at the Baccalaureate level. Further, the program aims to assist in preparing qualified employees/managers to the many sport, athletic, fitness, recreation and tourism related businesses locally, statewide, nationally. The program provides students the foundation they need to seamlessly transfer to parallel bachelor's degree programs and assists in development of the skills and expertise necessary to secure mid to upper level employment in the vast array of career paths that encompass the sport management field upon completion.

### Program Goals:

- Demonstrate proficiency in written and oral communication skills.
- Apply the legal basis of business enterprises and the quantitative basis for measuring business functions.
- Demonstrate proficiency in using computer software.
- Demonstrate an understanding of and appreciation for the various disciplines within the sport management profession.
- Analyze and demonstrate an understanding of sport's impact on society throughout history.
- Analyze, understand and apply leadership concepts, skills and strategies related to sport management.

### MINIMUM DEGREE REQUIREMENTS (63 CREDITS):

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#### Accounting 4 Credits:

ACC 120 Financial Accounting

#### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

#### Mathematics 3 Credits:

Any MAT course above 100.

#### Science 4 Credits:

One four-credit natural science course with lab components is required.

#### Information Management 3 Credits:

CSC 102 Introduction to Microcomputer Applications

#### Business 15 Credits:

BUS 101 Introduction to Business  
BUS 210 Principles of Marketing  
BUS 215 Human Resource Management  
BUS 250 Principles of Management  
BUS 260 Business Law I

#### History or Social Science 9 Credits:

ECO 101 Principles of Microeconomics  
SOC 101 Introduction to Sociology  
One three-credit elective from the following list: MSM 118,  
PSY 101, HIS 101, HIS 102, HIS 121, HIS 122

#### Health and Physical Education 9 Credits:

HPE 201 Foundations of Sport Management  
HPE 202 Sport in Society  
HPE 203 Leadership for Sport Professionals

#### Humanities 9 Credits:

COM 101 Public Speaking  
ART 111 *or* ART 113  
One Foreign Language Gen. Ed. course.

#### Elective 1 Credit:

LIB 101 or HPE Activity course.

# Criminal Justice

## ■ ASSOCIATE OF ARTS

The A.A. Degree Program in Criminal Justice is designed for students intending to transfer to four-year colleges and universities throughout the State University of New York (SUNY) system, as well as private institutions, where they can often enter with junior status and take additional courses to complete a bachelor's degree in Criminal Justice.

Students will complete a course of study that gives them a strong foundation of knowledge about crime, crime causation and criminal justice institutions. Students will also take courses in the various disciplines that make up the overall category of liberal arts: humanities, social sciences, mathematics, and science.

### Program Goals

The program will prepare students to:

- Have a thorough knowledge of the components of the criminal justice system and how they interact with each other.
- Apply analytical skills and substantive knowledge to specific justice problems.
- Communicate effectively, both orally and in writing.
- Transfer into a baccalaureate degree program.

### MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

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A minimum of 60 credit hours is required for the Criminal Justice Associate of Arts degree. If basic skills courses are required, degree completion will take more than four semesters.

#### Basic Skills Courses:

If indicated by placement testing, basic skills courses in mathematics and English are required as prerequisite courses. These courses count as credit toward load and financial aid, but not toward graduation.

#### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

#### Humanities 6 Credits:

COM 101 Public Speaking is required  
Courses in art, music, philosophy, communication, English, theater, and foreign language may be taken.

#### Social Science 6 Credits:

PSY 101 Introduction to Psychology  
SOC 101 Introduction to Sociology

#### Foundations for College Success 3 Credits:

FCS 101 Foundations for College Success

#### History 6 Credits:

One American History course  
One course in Western Civilization **or** Other World Civilization

#### Mathematics 3 Credits:

MAT 103 Finite Math or higher

#### Natural Science 4 Credits:

One four-credit natural science course with laboratory is required.

#### Criminal Justice 15 Credits:

CRI 101 Introduction to Criminal Justice  
CRI 201 Criminal Law  
CRI 207 Criminal Investigation **or**  
CRI 210 Police Operations  
CRI 208 Corrections Theory and Practice  
CRI 214 Ethics in Criminal Justice

#### Health/Physical Education 2 Credits:

One activity course is required.

#### Liberal Arts/Criminal Justice Electives 9 Credits:

Six (6) of the credits must be in the liberal arts.

# English

## ■ ASSOCIATE OF ARTS

The English A. A. is an interdisciplinary program designed for students who wish to major or minor in English at the baccalaureate level to seek career opportunities in diverse fields — such as creative, professional and/or institutional writing, education, and others—or use the acquired skills to pursue a variety of other degrees, like law, education, public relations, and many others that require strong verbal and writing skills. The program will focus on reading literary texts from various periods, developing critical skills required to analyze and write about these texts, as well as studying and practicing a variety of writing techniques.

Students who enroll in the English A. A. program can choose to follow a literature track, writing track, or the general English program (a combination of literature and writing courses).

### Program Goals

Students who graduate from the English A.A. Program will be able to:

- engage in critical reading of a variety of literary genres across multiple historical periods,
- recognize, understand, and explain various literary elements of texts,
- use literary terminology, critical methods, and various lenses of interpretation in their writing,
- write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources,
- conduct research, evaluate sources, and cite evidence using accurate MLA conventions,
- demonstrate the ability to use complex language in a variety of contexts, both written and spoken,
- make clear decisions of genre, audience, and rhetorical technique in their writing, and
- use current technologies to assist in the research and presentation of critical and creative writing.

### English Electives:

*\*Literature Track electives include:  
ENG 201, 210, 211, 220, 225, 233,  
240, 242, and 245.*

*\*\*Writing Track electives include: ENG  
201, 206, 210, 211, 225, 233, 234,  
240, 242, 245, or 250.*

*\*\*\*General English Track electives  
include: ENG 150, 201, 206, 210,  
211, 225, 231, 233, 234, 235, 240,  
242, 245, or 250.*

## MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

A minimum of 60 credit hours is required for the English Associate of Arts degree. If basic skills courses are required, degree completion will take more than four semesters.

### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition  
Fifteen (15) ENG credits in a track (see below)

### Humanities 9 Credits:

COM 101 Public Speaking  
One foreign language course (second level)  
One course in art, music, theatre, HUM 110, or MSM 239

### Social Science 6 Credits:

One American History course: HIS 101, 102, or 203  
One Western Civilization course: HIS 121, 122, or FRE 250

### Psychology 3 Credits:

PSY 101 Introduction to Psychology

### Mathematics 6 Credits:

Above MAT 100

### Natural Science 4 Credits:

One four-credit science course with laboratory is required.

### Health/Physical Education 1 Credit:

Any course with HPE prefix fills this requirement.

### Information Literacy 1 Credit:

LIB 101 Library Research Skills

### Free Electives 9 Credits:

Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest or to sample different academic disciplines.

## Literature, Writing, or General English Tracks 15 Credits (choose one track):

Track	Credits
<b>Literature Track</b>	
ENG 210 or ENG 211	3
ENG 220 or ENG 225	3
ENG 250	3
Literature Electives* (2)	6
<b>Writing Track</b>	
ENG 235	3
ENG 150 or ENG 206	3
ENG 231	3
Writing Elective** (1)	3
General English Elective*** (1)	3
<b>General English Track</b>	
General English Electives*** (5)	15

# Environmental Science

## ■ ASSOCIATE OF SCIENCE

The Environmental Science A.S. degree program is to prepare students for transfer into a 4-year Environmental Science B.S. program with an appropriate mix of general education and specialized coursework in the natural sciences.

Students will develop a strong foundation in the sciences with courses in environmental science, ecology, geology, biology and chemistry. Courses in environmental science technology and environmental issues emphasize scientific project management skills and career pathways for environmental scientists. In addition to meeting other basic General Education requirements typical of the first two years of a B.S. degree, specialized environmental coursework will provide students with a skill set useful in the pursuit of their future employment in environmental engineering and remediation, natural resource management, or wastewater/drinking water treatment industries.

### Program Goals

The program will prepare students to:

- Problem-solve.
- Accurately collect and record data in field and laboratory settings.
- Demonstrate computer literacy.
- Apply various sampling and data collection techniques to environmental media, including soils and water.
- Use publicly-available resources necessary for environmental site investigation and management.

### MINIMUM DEGREE REQUIREMENTS (63 CREDITS):

A minimum of 63 credit hours is required for the Environmental Science Associate of Science degree. If basic skills courses are required, degree completion will take more than four semesters.

#### Basic Skills Courses:

If indicated by placement testing, basic skills courses in mathematics and English are required as prerequisite courses. These courses count as credit toward load and financial aid, but not toward graduation.

#### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

#### Arts or Foreign Language 3 Credits:

One Arts or Foreign Language course

#### Social Science 3 Credits:

One Social Science course

#### History 6 Credits:

Credits in two of the following areas must be taken: American History, Western Civilization or Other World Civilizations.

#### Mathematics 7 Credits:

MAT 161 Elementary Statistics  
MAT 204 College Algebra with Trigonometry II **or**  
MAT 224 Calculus and Analytic Geometry I

#### Environmental Science 9 Credits:

ENV 101 Introduction to Environmental Science  
ENV 210 Environmental Technology  
ENV 220 Seminar in Environmental Issues

#### Biological Sciences 12 Credits:

BIO 101 General Biology I  
BIO 102 General Biology II  
BIO 206 Ecology

#### Chemistry 8 Credits:

CHE 111 General Chemistry I  
CHE 112 General Chemistry II

#### Geology 4 Credits:

GEL 101 Physical Geology

#### Scientific Literacy 1 Credit:

SCI 110 Foundational Skills in Science

#### Information Literacy 3 Credits:

CSC 102 Introduction to Microcomputer Applications

#### Health/Physical Education 1 Credit:

One activity course is required.

# Individual Studies

## ■ ASSOCIATE OF ARTS ■ ASSOCIATE OF SCIENCE

### Associate of Arts

The Individual Studies degree option provides students with a great deal of flexibility to develop their own course of study. Course concentration is divided mainly among the Humanities, Social Sciences, and Math/Science disciplines with a large number of electives and free electives completing the curriculum. Sixty credits are needed to receive the Associate in Arts in the Individual Studies Program. This program can be used either by students who are unsure of their plans and need flexibility to explore educational options, or by those who wish to develop their own personally planned course of study (approved by the College) because of special educational needs and career goals. A.A. Degree students usually emphasize the Social Sciences and Humanities. The A.A. Degree in Individual Studies is also intended to prepare students for transfer to similar four year baccalaureate programs. Students who would like to pursue this degree must complete the Individual Studies Degree Application.

#### MINIMUM DEGREE REQUIREMENTS:

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1. A minimum of 60 credit hours.
2. ENG 101S, RDG 095, MAT 098, if indicated by Placement Test.
3. English: ENG 101 and 102.
4. 18-20 credits distributed among Humanities (6 credits), Social Sciences (6 credits) and Math/Science (6-8 credits) disciplines.
5. 20-22 elective credits in one or more of the following areas: Humanities, Social Sciences, Math/Science.
6. 14 Free Electives in any credit courses approved by the college.
7. Students intending to pursue baccalaureate degree should make sure all courses are transferable.
8. A maximum of 15 credits may be granted for prior work/life experiences if such experiences equal college-level learning. Students must complete 12 credits of college level work before having work/life experiences considered for credit towards degree.

### Associate of Science

The Individual Studies degree option provides students with a great deal of flexibility to develop their own course of study. Course concentration is divided mainly among the Humanities, Social Sciences, and Math/Science disciplines with a large number of electives and free electives completing the curriculum. Sixty credits are needed to receive the Associate in Science in the Individual Studies Program. This program can be used either by students who are unsure of their plans and need flexibility to explore educational options, or by those who wish to develop their own personally planned course of study (approved by the College) because of special educational needs and career goals. A.S. Degree students usually have a strong concentration in Math/Science. The A.S. Degree in Individual Studies is also intended to prepare students for transfer to similar four year baccalaureate programs. Students who would like to pursue this degree must complete the Individual Studies Degree Application.

#### MINIMUM DEGREE REQUIREMENTS:

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1. A minimum of 60 credit hours.
2. ENG 101S, RDG 095, MAT 098, if indicated by Placement Test.
3. English: ENG 101 and 102.
4. 20-21 credits distributed among Humanities (3 credits), Social Sciences (6 credits), and Math/Science disciplines (11-12 credits).
5. 3-4 elective credits in one of the following areas: Humanities, Social Sciences, Math/Science.
6. 30 Free Electives in any credit courses approved by the college.
7. Students intending to pursue baccalaureate degree should make sure all courses are transferable.
8. A maximum of 15 credits may be granted for prior work/life experiences if such experiences equal college-level learning. Students must complete 12 credits of college level work before having work/life experiences considered for credit towards degree.



# Liberal Arts: Humanities & Social Science

## ■ ASSOCIATE OF ARTS

The liberal arts degrees require a student to take a sampling of courses in the various disciplines that make up the overall category of liberal arts: humanities, social sciences, mathematics, and science. Students will select courses in all the categories listed above, but those earning the Liberal Arts: Humanities/Social Science degree will take more courses in the humanities (art, music, literature, foreign language) and social sciences (history, psychology, political science, sociology).

The Humanities/Social Science degree is specifically designed to prepare students to transfer into a baccalaureate program in one of the humanities or social science disciplines. Graduates transfer to numerous four-year colleges and universities throughout the State University of New York (SUNY) system, as well as private institutions, where they can often enter with junior status and take additional courses to complete a bachelor's degree in a specific major.

Clinton also has specific articulation agreements with several institutions for a number of bachelor's degree programs. By carefully following the sequence of courses listed in the respective articulation agreement (available on Clinton's website by following the links: Current Students; Academics; Degrees/Certificates Offered; 2 + 2 Programs), students may be in a position to transfer into their junior year at the four-year college or university. Some of these agreements require students to cross register and take courses at the transfer institution while they are at Clinton, but this incurs no additional cost as long as the student is enrolled in at least twelve credit hours at Clinton.

### Program Goals

The program will assist students to:

- Develop a range of skills including critical thinking and problem solving.
- Increase information literacy.
- Develop knowledge and understanding of the human condition in a cultural context.
- Promote diversity awareness and a global view.
- Expand skills in written and oral proficiency.
- Promote proficiency in additional disciplines in order to gain breadth of experience in a variety of disciplines.
- Transfer to a four-year program.

### MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

A minimum of 60 credit hours is required for the Liberal Arts Humanities/Social Science Associate of Arts degree. If basic skills courses are required, degree completion will take more than four semesters.

#### Basic Skills Courses:

If indicated by placement testing, basic skills courses in mathematics and English are required as prerequisite courses. These courses count as credit toward load and financial aid, but not toward graduation.

#### English 9 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition  
One English elective

#### American History, Other World History, Western Civilization, or Foreign Language 3 credits:

One three-credit course is required.

#### Humanities 9 Credits:

Courses in art, music, philosophy, communication, English, theater, Western Civilization, and foreign language may be taken. At least one Arts course is required for a Humanities/Social Science degree.

#### Social Science 12 Credits in Three Different Disciplines:

Courses in anthropology, economics, geography, history, political science, psychology, sociology, and mass media may be taken.

#### Mathematics 6 Credits:

Two mathematics courses: MAT 101 or higher.

#### Science 4 Credits:

One four-credit science course with laboratory is required.

#### Health and Physical Education 1 Credit:

Any course with an HPE prefix fills this requirement.

#### Information Literacy 1 Credit:

LIB 101 Library Research Skills

#### Electives 15 Credits:

Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest or to sample different academic disciplines.

#### NOTES:

- It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.

# Liberal Arts: Math & Science

## ■ ASSOCIATE OF SCIENCE

The liberal arts degrees require a student to take a sampling of courses in the various disciplines that make up the overall category of liberal arts: humanities, social sciences, mathematics, and science. Besides sampling courses in all the categories listed above, students earning the Liberal Arts Math/Science degree will take more courses in mathematics (e.g. algebra, calculus, statistics) and natural sciences (e.g. biology, chemistry, physics, environmental science).

The Math/Science degree is specifically designed to prepare students to transfer into a baccalaureate program in mathematics, natural sciences, or a related discipline. Graduates transfer to numerous four-year colleges and universities throughout the State University of New York (SUNY) system, as well as private institutions, where they enter with junior status and take additional courses in one of these specialized areas to gain a strong base of knowledge.

Clinton also has specific articulation agreements with several institutions for a number of bachelor's degree programs. By carefully following the sequence of courses listed in the respective articulation agreement (available on Clinton's website by following the links: Current Students; Academics; Degrees/Certificates; Transfer Agreements), students will be in position to transfer into their junior year at the four-year college or university.

### Program Goals:

- Prepare Math/Science majors to problem-solve.
- Prepare Math/Science majors to use appropriate technology.
- Prepare Math/Science majors to communicate effectively.
- Prepare Math/Science majors to transfer to a four-year institution in mathematics, science, or a related field.

## MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

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A minimum of 60 credit hours is required for the Liberal Arts Math/Science Associate of Science degree. If basic skills courses are required, degree completion will take more than four semesters.

### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition

### Humanities 3 Credits:

The Arts or Foreign Language Gen. Ed. course.

### History 3 Credits:

American History or Other World Civilizations or Western Civilization Gen. Ed. course.

### Social Science 3 Credits:

Social Science Gen. Ed. course.

### Health and Physical Education 1 Credit:

HPE Activity course elective.

### College Success 3 Credits:

FCS 101 Foundations for College Success

### Information Management 1 Credit:

SCI 110 Foundational Skills in Science

### Mathematics 7 Credits:

MAT 161 Elementary Statistics  
MAT 224 Calculus I

### Tracks -33 Credits (*choose one track*):

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General Track	Credits
Science with Lab	4
Science with Lab	4
STEM Electives	12
Free Electives	13

Biology Track	Credits
BIO 101 General Biology I	4
BIO 102 General Biology II	4
CHE 111 General Chemistry I	4
CHE 112 General Chemistry II	4
CHE 241 Organic Chemistry I	4
Bio Track Elective 1*	4
Bio Track Elective 2*	4
Free Electives	5

\*Biology Track Elective Options: BIO 204, BIO 206, BIO 228, BIO 229, CHE 242, MAT 225, PHY 111, PHY 112, PHY 121, PHY 122

### NOTE:

- The Math & Science degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program

The Math & Science A.S. degree is a two-year transfer program designed to provide students with course preparation for a baccalaureate program in mathematics, natural sciences or a related field. Graduates may transfer to numerous four-year colleges and universities with junior status and benefit from general education coursework that transfers throughout the State University of New York (SUNY) system and to most private institutions. To best serve students, Clinton offers a number of articulation agreements, as well as transfer scholarships, such as the following:

### **Articulation Agreements and Advisement Options in Biology, Chemistry, Biochemistry, and Environmental Science**

Students in these programs complete 60-67 credit hours at Clinton, working to complete the SUNY general education requirements and to build a strong foundation in the physical sciences.

Graduates from four-year programs in biology, chemistry, biochemistry, and environmental science typically advance toward graduate degrees and/or seek careers in medicine, health, agriculture, pharmaceuticals, environmental science, or industrial, private or public research laboratories.

### **Articulation Agreements with Upstate Medical University**

Articulation Agreements in Cardiovascular Perfusion, Medical Imaging Sciences, Medical Technology, Radiation Therapy Technology, and Respiratory Care.

Graduates of this program seek careers in healthcare settings such as operating room specialists, working with physicians, or within anatomical pathology, radiology or clinical laboratories. Students in this program typically complete 60-64 credit hours at Clinton, working to complete the SUNY general education requirements and to establish a strong foundation in science coursework.

### **Articulation Agreements and Advisement Options with Paul Smith's College, SUNY ESF and SUNY ESF – Wanakena Ranger School**

After completing approximately 60 credits at Clinton, students interested in forestry or natural sciences may transfer to Paul Smith's College or SUNY ESF to pursue a bachelor's degree. After completing approximately 30 credits at Clinton, students may transfer to Wanakena Ranger School to pursue an associate's degree in Forest Technology, Land Surveying Technology or Environmental and Natural Resources Conservation.

#### **NOTE:**

*These credit hours of coursework earn the student an Associate of Science degree in Liberal Arts & Science - Math & Science at Clinton Community College and are equivalent to what most majors would take during the freshman and sophomore years at SUNY Plattsburgh, SUNY ESF, Upstate Medical University, or Paul Smith's College. By carefully following the sequence of courses listed in the respective articulation agreement (available on the Clinton website), students will be in position to transfer to their junior year at the four-year college or university.*

# CAREER PROGRAMS

- ACCOUNTING
- BUSINESS ADMINISTRATION
- COMPUTER ELECTRONICS TECHNOLOGY
- COMPUTER INFORMATION SYSTEMS
- CRIMINAL JUSTICE
- ENVIRONMENTAL TECHNOLOGY
- HEALTH SERVICES MANAGEMENT
- HUMAN SERVICES
- INDIVIDUAL STUDIES
- INDUSTRIAL / COMMERCIAL ELECTRICIAN
- MECHANICAL TECHNOLOGY
- NURSING
- RENEWABLE ENERGY TECHNOLOGIES
- WIND ENERGY & TURBINE TECHNOLOGY



# Accounting

## ■ ASSOCIATE OF APPLIED SCIENCE

The A.A.S. Accounting Degree provides a general education and specialized training in accounting and management to prepare graduates for entry-level positions in industry, service organizations, retail establishments, and various government agencies. The A.A.S. Degree is not designed to prepare graduates to transfer to a four-year institution. However, almost all courses do transfer to most four-year universities, and many A.A.S. Accounting Degree graduates do continue their studies at transfer institutions.

Graduates are eligible for city, county, state and federal jobs, or may open their own business in areas such as taxes, bookkeeping/accounting, and general business.

Graduates can join the workforce in areas such as:

- Customs Broker
- Accounting
- Retail Sales
- Management
- Human Resources
- Marketing
- Inside/Outside Sales
- Non-profit Organizations
- Advertising
- Payroll
- Tax Management
- Insurance
- Banking

### **Program Goals:**

- Prepare students to demonstrate basic quantitative skills required in business.
- Prepare students to communicate effectively, both orally and in writing.
- Prepare students to demonstrate proficiency in using computer software.
- Prepare students to demonstrate skills required in designing and maintaining a moderately complex, double entry accounting records.
- Prepare students to demonstrate proficiency in personal income tax preparation.
- Prepare students for employment and/or transfer to a four-year program.

## **MINIMUM DEGREE REQUIREMENTS (63 CREDITS):**

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### **English 6 Credits:**

ENG 101 English Composition  
ENG 102 Literature & Composition **or**  
ENG 235 Technical Writing

### **Mathematics 3 Credits:**

MAT 101 or higher

### **Information Management 3 Credits:**

CSC 102 Introduction to Microcomputer Applications

### **Communication 3 Credits:**

COM 101 Public Speaking

### **Accounting 20 Credits:**

ACC 110 Fundamentals of Accounting  
ACC 120 Financial Accounting  
ACC 125 Managerial Accounting  
ACC 159 Payroll Accounting  
ACC 251 Federal Income Tax  
ACC 252 Computer Applications in Accounting

### **Business 18 Credits:**

BUS 101 Introduction to Business  
BUS 110 Personal Finance  
BUS 213 Business Communications  
BUS 260 Business Law I  
BUS 261 Business Law II  
BUS 275 Integrated Business Experience **or**  
Business Elective (Any ACC, BUS, CSC three-credit course)

### **History or Social Science 6 Credits:**

ECO 101 **or** ECO 102

### **Science 4 Credits:**

One four-credit natural science course with laboratory components is required.

# Business Administration

## ■ ASSOCIATE OF APPLIED SCIENCE

The A.A.S. Degree Program in Business Administration has been developed for students contemplating careers in the expanding fields of marketing, sales, retailing, advertising, personnel, office management, and other business fields. The curriculum provides specialized training in management, as well as a comprehensive general education. Many graduates enter the workforce by successfully completing governmental examinations. Others gain promotions, new job opportunities, and increased compensation as a result of obtaining their degrees at Clinton.

### Program Goals:

- Prepare students to apply the legal basis of business enterprises and the quantitative basis for measuring business functions.
- Prepare students to communicate effectively, both orally and in writing.
- Prepare students to demonstrate proficiency in using computer software.
- Prepare students for employment and/or transfer to a four-year program.

## MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

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### Accounting 8 Credits:

ACC120 Financial Accounting  
ACC125 Managerial Accounting

### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition **or**  
ENG 235 Technical Writing

### Mathematics 3 Credits:

MAT 101 or higher

### Information Management 3 Credits:

CSC 102 Introduction to Microcomputer Applications

### Communication 3 Credits:

COM 101 Public Speaking

### Business 24 Credits:

BUS 101 Introduction to Business  
BUS 110 Personal Finance  
BUS 210 Principles of Marketing  
BUS 213 Business Communications  
BUS 260 Business Law I  
BUS 261 Business Law II  
BUS 285 Business Internship **or**  
Business Elective (Any ACC, BUS, CSC three-credit course)

### History or Social Science 6 Credits:

ECO 101 Microeconomics **or**  
ECO 102 Macroeconomics  
One three-credit social science elective in anthropology, economics, geography, history, mass media, political science, psychology, and sociology, may be taken.

### Science 4 Credits:

One four-credit science course with laboratory components is required.

### Free Elective 3 Credits:

Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest or to sample different academic disciplines.

# Computer and Electronics Technology

## ■ ASSOCIATE OF APPLIED SCIENCE

The Computer and Electronics Technology (CET) A.A.S. degree program provides graduates with skills in two areas: information technology and electronics. Students have the option to concentrate their studies by following either the information technology track or electronics track. Skilled Computer and Electronics Technicians are in high demand, and nearly all students who have successfully completed the CET program have gone to work in the technology field, making some of the highest starting salaries of Clinton alumni. Graduates also have the option to pursue a bachelor's degree in Computer or Electrical Engineering Technology.

### Program Goals:

- Prepare students to gain knowledge and practical competence in the major areas of the Computer Electronics Technology field allowing for a wide variety of career opportunities.
- Prepare students to conduct the research required to successfully complete computer and electronics-related projects consistent with current business/industry practice at the apprentice level.
- Prepare students to demonstrate knowledge of the fundamentals of electrical circuits.
- Prepare students to demonstrate knowledge of the fundamentals of analog and digital electronic circuits.
- Prepare students to demonstrate knowledge of computer programming languages.
- Prepare students to demonstrate knowledge and proper use of electrical test equipment.
- Prepare students for work as entry-level computer and electronics technicians or further study within the field at requisite institutions of higher learning.
- Prepare students to communicate effectively, both orally and in writing, as well as interact effectively within the work environment.
- Prepare students to solve mathematical problems typically encountered in the computer and electronics industries.

### MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

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#### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition **or**  
ENG 235 Technical Writing

#### Mathematics 8 Credits:

MAT 105 Technical Math I  
MAT 205 Technical Math II

#### Science 8 Credits:

PHY 111 General Physics I  
PHY 112 General Physics II

#### Computer Science 3 Credits:

CSC 230 Introduction to Networking

#### Electrical Technology 21 Credits:

ETE 101 Electrical Circuits I  
ETE 103 Computer Programming for Electronics  
ETE 104 Electronics I  
ETE 105 Digital Electronics I  
ETE 205 Digital Electronics II  
ETE 207 Microcontroller Fundamentals

#### Electronics or Information Technology Tracks 14 Credits (*choose one track*):

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Electronics Track	Credits
ETE 102 Electrical Circuits II	4
ETE 202 Industrial Electricity	3
MEC 217 Instrumentation	3
Free Electives	4

Information Technology Track	Credits
CSC 121 Fundamental Concepts of Computing	3
CSC 217 Computer Programming	3
CSC 220 Operating Systems	3
CSC 225 Computer Hardware	3
Free Electives	2

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#### NOTES:

- *It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.*
- *The Computer Electronics Technology degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program.*

# Computer Information Systems

## ■ ASSOCIATE OF APPLIED SCIENCE

The Computer Information Systems (CIS) degree is a hands-on program that covers a wide variety of topics including computer programming, hardware, operating systems, web design, and database management. This degree will prepare students for entry level positions in the following areas:

- Computer Programming
- Computer Networking
- Computer Hardware Maintenance and Repair
- Web Design
- Database Management
- Help Desk/Computer Support

**Internship** – The CIS degree program has a required internship to insure that students get at least 120 hours of work experience in the computer field before they graduate.

**Articulation Agreements** – The CIS degree program has articulation agreements with Rochester Institute of Technology, SUNY IT, and SUNY Plattsburgh.

**Cost Effective** – Students that complete the CIS degree can go directly to work for a company or transfer to one of the institutions named above. Either way, students save substantially on the cost of an education.

### Program Goals:

- Prepare students to demonstrate knowledge and practical competence in the major areas of the IT field.
- Prepare students to conduct the research required to successfully complete computer-related projects consistent with current business/industry practice at the apprentice level.
- Prepare students for further study within the computer field at the junior level in requisite institutions of higher learning.
- Prepare students to communicate effectively, both orally and in writing, as well as interact effectively within the work environment.
- Prepare students to solve mathematical problems typically encountered in the computer industry.

## MINIMUM DEGREE REQUIREMENTS (61 CREDITS):

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### English 6 Credits:

ENG 101 English Composition  
ENG 102 Literature & Composition **or**  
ENG 235 Technical Writing

### Mathematics 3-4 Credits:

MAT 101 or above

### Humanities 3 Credits:

COM 101 Public Speaking

### Social Science 3 Credits:

One social science elective is required.

### Liberal Arts 3 Credits:

One liberal arts elective is required.

### Computer Information Systems 33 Credits:

CSC 102 Introduction to Microcomputer Applications  
CSC 121 Fundamental Concepts of Computing  
CSC 202 Database Systems  
CSC 215 Web Design & Programming  
CSC 217 Computer Programming  
CSC 220 Operating Systems  
CSC 225 Computer Hardware  
CSC 230 Introduction to Networking  
CSC 280 Technology Practicum/Seminar  
*Pick two courses from the following:*  
CSC 201 Advanced Software Applications  
CSC 219 Developing Mobile Applications  
CSC 222 Database Web Applications  
CSC 240 Networking II

### Science 4 Credits:

One science course with lab is required.

### Health and Physical Education Activity 1 Credit:

One activity course is required.

### Free Electives 3 Credits:

Students may use these credits to focus on an area of interest or prepare for a specific transfer opportunity.

### NOTES:

- It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.
- The Computer Information Systems degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program.



# Criminal Justice

## ■ ASSOCIATE OF APPLIED SCIENCE

The Criminal Justice curriculum is a two year program that leads to an Associate of Applied Science Degree. The program prepares students for exciting careers in law enforcement, corrections, and private/industrial security.

Our program meets the needs of students who plan to enter their chosen careers right after graduation. Courses also provide continuing education to professionals already employed in the criminal justice field.

Students are required to successfully complete a minimum of 60 credits with a minimum grade point average of 2.0. If enrolling with the required math and English skills, students may complete the program in four full-time semesters or two years. Without the required math and English, studies will extend beyond two years.

### Internships

Field experience is not only a wonderful way to learn information and acquire skills, it is the best way for students to "try out" careers. Internships are also a great opportunity to get job experience and make professional contacts that could prove invaluable for landing the first job after graduation. Clinton's Criminal Justice Program is unique for the wide array of diverse internship settings available to students.

An Associate Degree in Criminal Justice prepares graduates for a career in or as a:

- State Police
- Municipal Police Departments
- Federal Law Enforcement
- State- and County-level Corrections Officers
- Deputy Sheriff
- Court Officer
- Private Security Officers and Campus Security

### Program Goals:

- Prepare students to have a thorough knowledge of the components of the criminal justice system and how they interact with each other.
- Prepare students for successful employment in the field of criminal justice or related fields.
- Prepare students to apply analytical skills and substantive knowledge to specific justice problems.
- Prepare students to communicate effectively, both orally and in writing.

## MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

### Foundations for College Success 3 Credits:

FCS 101 Foundations for College Success

### English 6 Credits:

ENG 101 English Composition

ENG 102 Literature & Composition

### Mathematics or Science 3-4 Credits:

MAT 100 or higher; **or**

One science elective in biology, chemistry, environmental science, physics, geology or science may be taken.

Students who take a four-credit math or science class will be able to use 1 credit towards their free elective

### Communication 3 Credits:

COM 101 Public Speaking

### Criminal Justice 18 Credits:

CRI 101 Introduction to Criminal Justice

CRI 201 Criminal Law

CRI 207 Criminal Investigation

CRI 208 Corrections Theory and Practice

CRI 210 Police Operations

CRI 214 Ethics in Criminal Justice

### Criminal Justice Electives 9 Credits:

Three course electives in criminal justice are required.

### Social Science 9 Credits:

PSY 101 Introduction to Psychology

SOC 101 Introduction to Sociology

PSC 100 Government and Politics in America

### Computer 3 Credits:

CSC 102 Introduction to Microcomputer Applications

### Health and Physical Education 2 Credits:

Two activity courses are required.

### Free Elective 4 Credits:

Students who take a four-credit math or science class are only required to take 3 credits of free elective.

# Environmental Technology

## ■ ASSOCIATE OF APPLIED SCIENCE

The Environmental Technology A.A.S. Degree will give students the scientific background and hands-on instruction needed to pursue a technical career in fields related to environmental science. Graduates will possess basic skills applicable to careers in environmental site investigation, cleanup, and monitoring and wastewater/drinking water operations. As one of only four (4) NYSDEC-approved wastewater programs in the state, the A.A.S. degree offers a highly marketable skill set that includes a fast-track option for wastewater treatment plant operator certification. Students will train for a position in these high-growth career areas in state-of-the-art science laboratories situated on Clinton's beautiful campus overlooking Lake Champlain. In addition to lab and classroom instruction, students will also receive practical exposure to the latest field technologies in a variety of outdoor settings and prepare for certification exams relevant to employment in the environmental industry (Hazardous Materials/Water Treatment Operator). The U.S. Bureau of Labor Statistics projects that employment in these fields will grow much faster than the national average, adding nearly 33,000 new positions across the United States over the next 10 years. Regionally, an anticipated surge in retirements at wastewater treatment plants in NYS will require a workforce with the specialized skills to replace plant operators in towns and municipalities across the state. Opportunities are also available for transfer to a four-year Environmental Science program at another SUNY institution. The Environmental Technology program can be completed in only four semesters, or two years. Students who require developmental math and/or English may take more than four semesters. In order to graduate, students must complete 60 credits and graduate with a grade point average of 2.0.

### Program Goals:

- Prepare Environmental Technology majors to problem-solve.
- Prepare Environmental Technology majors to accurately collect and record data in field and laboratory settings.
- Prepare Environmental Technology majors to demonstrate knowledge of safety practices common to many environmental-related industries.
- Prepare Environmental Technology majors to communicate effectively, both orally and in writing, as well as interact effectively within the work environment.

## MINIMUM DEGREE REQUIREMENTS (64 CREDITS):

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### English 6 Credits:

ENG 101 English Composition

### Mathematics 7 Credits:

MAT 105 Technical Math I  
MAT 161 Elementary Statistics

### Science 16 Credits:

BIO 101 General Biology I  
BIO 102 General Biology II  
CHE 111 General Chemistry I  
CHE 112 General Chemistry II

### Environmental Technology 18 Credits:

BIO 204 Microbiology  
ENV 101 Environmental Science  
ENV 210 Environmental Technology  
ENV 211 Water Quality Operator  
ENV 214 Internship/Field Training  
GEL 101 Physical Geology

### Mechanical Technology 14 Credits:

MEC 100 Introduction to Engineering Technology  
MEC 206 Principles of Fluid Power Systems  
MEC 207 Industrial Maintenance  
MEC 209 Industrial Health and Safety  
MEC 217 Instrumentation

### Social Science 3 Credits:

PSC 240 State and Local Government

### Computer 3 Credits:

CSC 102 Introduction to Microcomputer Applications

### NOTES:

1. It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.
2. The Environmental Technology degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program.
3. These credit hours of coursework earn the student an Applied Associate of Science degree in Environmental Technology at Clinton Community College and are equivalent to what most majors would take during the freshman and sophomore years at SUNY ESF. By carefully following the sequence of courses listed in the respective articulation agreement (available on the Clinton website) students will be in position to transfer to their junior year at the four-year university.

# Health Services Management

## ■ ASSOCIATE OF APPLIED SCIENCE

The A.A.S. degree program in Health Services Management prepares students for positions such as service coordinators, personnel assistants, office managers, field staff supervisors, administrative assistants and other business office personnel.

An associate degree in Health Services Management prepares graduates to work in a variety of health care settings or as the following:

- Nursing Home Administrator
- Hospital Office Manager
- Doctor's / Physician's Office Manager
- Health Services Director
- Director of Adult Care Services

### **Program Goals:**

- Prepare students for a variety of entry level employment in the health care industry and for continuing their education in a number of fields.
- Permit students to build their academic credentials and acquire career-specific skills and expertise.
- Effectively communicate underlying principles as they apply to current issues in the health care industry.
- Perform the five levels of health care delivery and major components of each.

## **MINIMUM DEGREE REQUIREMENTS (63 CREDITS):**

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### **English 6 Credits:**

ENG 101 English Composition  
ENG 102 Literature & Composition

### **Mathematics 3 Credits:**

Any MAT course above 100.

### **Science 4 Credits:**

One four-credit science course with lab components is required.

### **Communications 3 Credits:**

COM 101 Public Speaking **or**  
COM 226 Introduction to Human Communication

### **Information Management 3 Credits:**

CSC 102 Introduction to Microcomputer Applications

### **Business 15 Credits:**

BUS 101 Introduction to Business  
BUS 210 Principles of Marketing  
BUS 213 Business Communications  
BUS 215 Human Resource Management  
BUS 250 Principles of Management

### **Accounting 3 Credits:**

ACC 120 Financial Accounting

### **Health Services Management 12 Credits:**

HSM 111 Community Medical & Public Health Care  
HSM 112 Issues in Long-Term Care  
HSM 211 Medical Problems & Programs  
HSM 212 Management of Health Facilities

### **Social Science 6 Credits:**

PSY 101 Introduction to Psychology  
SOC 101 Introduction to Sociology

### **Nursing 1 Credit:**

NUR 106 Medical Terminology

### **Health and Physical Education 3 Credits:**

HPE 101 Personal Health

# Human Services

## ■ ASSOCIATE OF APPLIED SCIENCE

### **Mission Statement**

*The mission of the Human Services Program is to prepare competent entry-level professionals for employment in the helping professions and/or transfer to baccalaureate programs in Human Services or related fields. The program provides students with theory and practice in the areas of general human services and selected specialty areas.*

The Human Services (HUS) curriculum is a two-year program that leads to an Associate of Applied Science (A.A.S.) Degree. The program's primary focus is work-preparedness and training for entry-level employment within a variety of helping professions. Students are introduced to foundational, interdisciplinary theories and coached in the use of generalist helping skills.

The program is grounded in the needs of students who plan to seek employment upon graduation. A student who wishes to transfer to a four-year college or university upon earning an A.A.S. in Human Services may do so; however, this goal is best communicated early in the student's course of study to maximize the opportunity for individualized goal-setting and advising.

Select coursework may provide extended learning for individuals who are already employed in the human services field. Students may choose to attend on a full-time or a part-time basis. For scheduling flexibility, many advanced courses are offered in a hybrid format. A class taught in a hybrid format is conducted partly in-class and partly online. To that end, students need basic technology skills and are encouraged to enroll in CSC 102: Microcomputer applications in the first semester.

The A.A.S. in the Human Services Degree Program prepares graduates for entry-level work in the following service areas\*: early childhood day care, chemical dependency treatment, family assistance, gerontology, housing, crisis intervention, advocacy, working with the developmentally challenged, and many other subfields in the social services. \*Note: Additional education, training, or certification may be required to secure a specific job title or role within a particular service area.

### **Program Goals:**

- Assist the HUS students to develop a range of individual skills that are required for the Human Services professions.
- Assist the HUS students to gain knowledge and an understanding of conceptual information used in the Human Services professions.
- Assist the HUS students to develop additional academic skills required for professional development in the Human Services field.
- Assist the HUS students in promoting awareness of a pluralistic society and an acceptance of a global view.
- Assist the HUS students in preparation for employment and/or transfer to a four-year program.

### **MINIMUM DEGREE REQUIREMENTS (64 CREDITS):**

#### **English 6 Credits:**

ENG 101 English Composition  
ENG 235 Technical Writing

#### **Mathematics 3 Credits:**

One Mathematics course, above 100

#### **Communication 3 Credits:**

COM 101 Public Speaking

#### **Human Services 30 Credits:**

HUS 101 Introduction to Human Services **or**  
HUS 105 Introduction to Basic Counseling Skills  
HUS 200 Case Management & Crisis Intervention  
HUS 201 Social Service Agencies  
HUS 206 Group Skills for Human Service Professionals  
HUS 283 Internship & Seminar **or**  
HUS 284 Internship & Seminar for CASAC  
Three approved Human Services Electives are required.

#### **Social Science 9 Credits:**

PSC 240 State and Local Government  
PSY 101 Introduction to Psychology  
SOC 101 Introduction to Sociology  
One 200 level psychology or sociology elective **or** HUS 210

#### **Science 4 Credits:**

BIO 100 Human Biology

#### **Health and Physical Education 3 Credits:**

HPE 102 Safety and First Aid

#### **Information Management 3 Credits:**

CSC 102 Microcomputer Applications

# Individual Studies

## ■ ASSOCIATE OF APPLIED SCIENCE

The Individual Studies degree option provides students with a great deal of flexibility to develop their own course of study. Course concentration is divided mainly among the Humanities, Social Sciences, and Math/Science disciplines with a large number of electives and free electives completing the curriculum. Sixty credits are needed to receive the Associate in Applied Science in the Individual Studies Program. This program can be used either by students who are unsure of their plans and need flexibility to explore educational options, or by those who wish to develop their own personally planned course of study (approved by the College) because of special educational needs and career goals. The A.A.S. Degree, like the A.A. and A.S. Degrees, can also be used for transfer to a four year program, but the A.A.S. Degree was designed mainly to lead individuals directly to employment in a specific career. Students who would like to pursue this degree must complete the Individual Studies Degree Application.

### MINIMUM DEGREE REQUIREMENTS:

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1. A minimum of 60 credit hours.
2. ENG 101S, RDG 095, MAT 098, if indicated by Placement Test.
3. English: ENG 101 and ENG 102 or ENG 235.
4. 12-14 credits distributed among Humanities/Social Sciences (6 credits) and Math/Science (6-8 credits) disciplines.
5. 3 elective credits in one or more of the following areas: Humanities, Social Sciences, Math/Science.
6. 37-39 Free Electives in any credit courses approved by the College.
7. Students intending to pursue baccalaureate degree should make sure all courses are transferable.
8. A maximum of 15 credits may be granted for prior work/life experiences if such experiences equal college-level learning. Students must complete 12 credits of college-level work before having work/life experiences considered for credit towards degree.

# Industrial / Commercial Electrician

## ■ ASSOCIATE IN OCCUPATIONAL STUDIES

The Industrial/Commercial Electrician (ICE) degree program will prepare students to become electricians. The ICE degree is an Associate in Occupational Studies (AOS) degree, which is a career degree in which all the courses relate directly to preparing students for specific careers. The ICE degree is a two-year program that prepares students for careers as electricians, for both residential and commercial applications. It provides a pathway for graduates of the local BOCES Electrical program to further their education as well as provide local high school graduates and career-changing adults another pathway to a rewarding occupation.

Students in the degree will develop knowledge and skills in four key areas: electrical construction, electrical motors and motor controls, programmable logic controllers, and industrial electronics. Topics include electrical theory, electrical circuits, and electrical construction along with supporting courses such as electrical blueprint reading and project estimating. All core courses are guided by the current version of the National Electric Code (NEC) Handbook.

The first year of the program establishes the core knowledge in electrical theories, electrical components, electrical construction, and safety, as well as electrical project estimating. The second year focuses on more advanced electrical skills such as structured wiring and systems, photovoltaics, logic controllers, and instrumentation. The program is a mixture of lecture and laboratory courses with a significant amount of lab time. The curriculum will emphasize both hands-on skills and academics in order to cultivate the necessary competence which allows students to pursue a career in the electrical industry. Graduates of the program may be employed as:

- Commercial Electricians
- Residential Electricians
- Construction Electricians
- Electrical Power-Line Installers and Repairers
- Electrical Testers
- Electrical Test Technicians
- Field Technicians
- Electrical Equipment Maintenance and Repair Technicians
- Solar Systems Installer, Maintainer, and Repairer
- Wind Energy System Installer, Maintainer, and Repairer

The Industrial/Commercial Electrician (ICE) degree program is designed to be completed in four semesters, or two years. In order to graduate, students must successfully complete a minimum of 61 credits with a grade point average of 2.0. The program may take longer than four semesters if the required entry-level math skills are not met upon admission into the program.

### Program Goals:

- Prepare students to be able to properly install, replace, or repair all common types of electrical devices.
- Prepare students to be able to correctly read and interpret electrical blueprints.
- Prepare students to be able to accurately determine the costs related to an anticipated electrical project.
- Prepare students to be able to prepare and install structured cabling.
- Prepare students to be able to perform tests and checks of commercial fire alarm systems.
- Prepare students to be prepared to work on PLCs, motors, and motor controls in manufacturing and other facilities.

## MINIMUM DEGREE REQUIREMENTS (61 CREDITS):

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### Computer Science 3 Credits:

CSC 230 Intro to Networking

### Computer Science and Electronics Technology 20 Credits:

ETE 101 Electrical Circuits I  
ETE 102 Electrical Circuits II  
ETE 105 Digital Electronics I  
ETE 106 Photovoltaic Systems Theory & Design  
ETE 107 Photovoltaic Installation and Maintenance  
ETE 202 Industrial Electricity

### Industrial/Commercial Electrician 19 Credits:

ICE 101 Residential Electrical and Wiring  
ICE 102 Electrical Blueprint Reading  
ICE 201 Commercial Electrical and Wiring  
ICE 202 Project Estimation  
ICE 203 Alarms and Special Systems

### Mathematics 8 Credits:

MAT 105 Technical Math I, equivalent or higher  
MAT 205 Technical Math II, equivalent or higher

### Mechanical Technology 8 Credits:

MEC 209 Industrial Health & Safety  
MEC 217 Instrumentation  
MEC 222 Programmable Logic Controllers

### Wind Energy & Turbine Technology 3 Credits:

WTT 201 Power Generation

# Mechanical Technology

## ■ ASSOCIATE OF APPLIED SCIENCE

The Mechanical Technology A.A.S. degree prepares students for a rewarding career in the constantly evolving technology field. Highly skilled mechanical technicians are in high demand in Upstate New York, Northern New England, and elsewhere in the country. Graduates of the Mechanical Technology program are equipped with the knowledge and skills to make an immediate impact in the technology workforce. Students will learn to become successful technicians by building on essential skills such as creativity, problem solving, team work, and leadership through hands-on projects and labs. The degree program also introduces students to key industrial concepts such as safety, quality control, industrial maintenance, manufacturing processes, computer aided design (CAD) and fluid power systems. After completion of the first year, students will choose from three tracks within the Mechanical Technology A.A.S. degree program. The tracks (Computer Aided Design (CAD), Manufacturing, and Maintenance) prepare students for more specific jobs in industry. An Associate degree in Mechanical Technology prepares graduates to work in a variety of settings in the following occupations:

- Mechanical, Maintenance, or Manufacturing Technician
- Quality Assurance/Quality Control Specialist
- Operator
- CAD Technician
- Supervisor
- Programmable Logic Controller (PLC) Technician
- Robotics Technician

The Mechanical Technology program is designed to be completed in four semesters, or two years. In order to graduate, students must successfully complete a minimum of 64 credits with a grade point average of 2.0. The program may take longer than four semesters if the required entry-level math and English skills are not met upon admission into the program.

### Program Goals:

- Prepare students to adapt and overcome challenges put forth in the mechanical technology field based on their practical education, analytical reasoning, creativity, and problem solving skills.
- Prepare students to apply their knowledge of mathematics, science, and technology to understand and solve analytical mechanical technology problems.
- Prepare students to conduct, analyze, interpret, and document standard tests, measurements, and experiments.
- Prepare students to work effectively and function as a member or leader of a team.
- Prepare students to be proficient in both oral and written communication skills for applications in both technical and non-technical environments.
- Provide students with an understanding of the importance of quality, timeliness, and continuous improvement.
- Prepare students to incorporate professional standards, ethics, and responsibilities into their work environment.
- Prepare students to apply program principles to mechanical systems through specification, installation, fabrication, test, operation, maintenance, documentation, or troubleshooting.

## MINIMUM DEGREE REQUIREMENTS (64 CREDITS):

### English 3 Credits:

ENG 101 English Composition

### Humanities/Social Science Elective 3 Credits:

One social science or humanities elective in anthropology, economics, geography, history, mass media, political science, psychology, or sociology may be taken.

### Mathematics 8 Credits:

MAT 105 Technical Math I, *equivalent or higher*

MAT 205 Technical Math II, *equivalent or higher*

### Science 8 Credits:

PHY 111 General Physics I

PHY 112 General Physics II **or**

CHE 111 General Chemistry I

### Computer Science 3 Credits:

CSC 102 Introduction to Microcomputer Applications

### Electrical Technology 7 Credits:

ETE 101 Electrical Circuits I

ETE 202 Introduction to Industrial Electricity

### Mechanical Technology 21 Credits:

MEC 100 Introduction to Engineering Technology

MEC 101 Technical Drawing/CAD

MEC 102 Blueprint Reading & Technical Schematics

MEC 203 Introduction to Quality Control/Assurance

MEC 204 Manufacturing Processes

MEC 206 Principles of Fluid Power Systems

MEC 207 Principles of Industrial Maintenance

MEC 209 Industrial Health & Safety

### Mechanical Technology Tracks 11 Credits:

Maintenance Track	Credits
MEC 208 Maintenance Troubleshooting	1
MEC 217 Instrumentation	3
CSC 230 Introduction to Networking <b>or</b>	3
MEC 222 Programmable Logic Controllers <b>or</b>	
ETE 105 Digital Electronics I	
ETE 102 Electrical Circuits II <b>or</b> ETE 104 Electronics I	4

  

Manufacturing Track	Credits
MEC 205 Geometric Dimensioning and Tolerancing	2
MEC 212 Computer Aided Manufacturing	3
MEC 215 Workforce Leadership	3
MEC 217 Instrumentation	3

  

CAD Track	Credits
MEC 201 Solid Modeling/Animation	3
MEC 202 Advanced Solid Modeling	3
MEC 205 Geometric Dimensioning and Tolerancing	2
MEC 212 Computer Aided Manufacturing	3

*NOTE:* The Mechanical Technology degree program features a course schedule with set classes in the Fall and Spring semesters. Not all classes are offered each semester. Students who start in the Spring and meet all other requirements may take five semesters to complete the program.

# Nursing

## ■ ASSOCIATE OF APPLIED SCIENCE

The Associate Degree Program in Professional Nursing prepares students for a career as a Registered Nurse, with the potential to work in a variety of health care settings. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. The program is more fully described in the Clinton Community College Department of Nursing Student Handbook. (Clinton.edu/nursing) This program is fully registered by the University of the State of New York and nationally accredited by the Accreditation Commission for Education in Nursing.

The program of study in professional nursing coursework is tightly organized and sequential. Students in the Nursing Program must follow the Nursing curriculum required course sequence. Students must successfully complete (with a "C" or better) all scheduled non-nursing courses in the same semester as the required nursing (NUR) course. A minimum of 63 credits with a grade point average of 2.5 is required for graduation. Students may earn course credit by enrollment or transfer, according to College and Nursing Program policy.

The Nursing Program is guided by the College's established values. Nursing faculty are attentive to providing for the diverse learning needs of students and are committed to providing relevant learning, leading to career paths and future educational objectives. Clinton student nurses are introduced to a holistic, caring philosophy which focuses on the humanness and uniqueness of each individual patient, within a highly technical and regulated healthcare environment. Emphasis is on the bio-psycho-social person who has a healthcare requirement. The program's tradition of excellence contributes to the fulfillment of the College's mission to be an integral and responsive contributor to the educational, economic and social vitality of the community.

Students must successfully meet the criteria for promotion and graduation as defined in the Clinton Department of Nursing Student Handbook.

The Associate Degree Nursing program at Clinton Community College located in Plattsburgh, NY is accredited by the: Accreditation Commission for Education in Nursing (ACEN)  
3390 Peachtree Road NE, Suite 1400  
Atlanta, GA 30326  
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Degree Nursing program is Continuing Accreditation.

### **Graduate Learning Outcomes:**

1. Analyze and apply standards of nursing practice in functioning with integrity as a safe entry level nurse.
2. Examine and utilize caring behaviors in providing holistic care for diverse populations.
3. Communicate effectively with patients, families, and other members of the health care team.
4. Utilize self awareness in the development of professional identity and demonstrate a commitment to lifelong learning.
5. Apply acquired critical reasoning skills to develop, implement, and evaluate a nursing plan of care.

## **MINIMUM DEGREE REQUIREMENTS (63 CREDITS):**

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### **English 3 Credits:**

ENG 101 English Composition

### **Nursing 38 Credits:**

NUR 103 Fundamentals of Nursing  
NUR 104 Medical Surgical Nursing I  
NUR 105 Maternal/Child Nursing  
NUR 201 Medical Surgical Nursing II  
NUR 202 Mental Health Nursing  
NUR 203 Medical Surgical Nursing III  
NUR 204 Pharmacology

### **Social Science 9 Credits:**

PSY 101 Introduction to Psychology  
PSY 230 Human Development  
SOC 101 Introduction to Sociology

### **Science 12 Credits:**

BIO 204 Microbiology  
BIO 228 Anatomy & Physiology I  
BIO 229 Anatomy & Physiology II

### **Electives 1 Credit:**

SPA 110 Spanish for Health Care **or**  
1 Credit HPE Activity Course

### **Prerequisites for Admission:**

See page 10 under Competitive Degree Programs.



# Renewable Energy Technologies

## ■ ASSOCIATE OF APPLIED SCIENCE

The Renewable Energy Technologies Program is a hands-on, technology-based program of study that will award an A.A.S. degree. The program includes the study of electricity, electronics, wind energy production, power distribution, photovoltaic systems installation, operation, and maintenance, along with general education study in humanities, science, and technical math. The core courses have a specific focus on the preparation of graduates for immediate employment in a renewable energy field as installers, troubleshooters, sales, system engineering or technical support. Students may also pursue self-employment opportunities, expand existing business services to include renewable energy installation, maintenance and repair, or pursue advanced study.

Graduates of the program will not only be desired to fill jobs locally but will be able to work anyplace in the country where renewable energy is being produced. As the trend to rely more on renewable energy production continues to grow, trained technicians will be needed to service them. These technicians will require a strong background in industrial electricity, renewable energy production and transmission as well as knowledge of electronics systems in order to safely and competently work in this environment.

### Why consider the Renewable Energy Technologies degree at Clinton?

According to the American Council on Renewable Energy "Renewable energy technologies are at the center of New York's concerted strategy to move to a clean energy economy. The state is ranked in the top 10 states for installed wind generation capacity and installed solar generation capacity..." ACORE ranks New York as 8th in the nation in installed wind capacity and 7th in installed solar capacity. Steady expansion is expected.

The Occupational Information Network (O\*NET) is the nation's primary source of occupational information. According to O\*NET, projected growth in the renewable energy field from 2008 to 2018 is expected to be faster than average. The American Solar Energy Society recently published the Green-Collar Jobs report showing that renewable energy and energy efficiency sectors generate more than 9 million jobs and \$1 trillion in annual revenue in the U.S., a trend that is likely to continue.

### Program Goals

Students will:

- Describe the role of renewable energy as alternative energy source.
- Demonstrate an understanding of the mechanical and electro-mechanical systems of Renewable Energy Technologies.
- Install, maintain, troubleshoot and repair photovoltaic renewable energy systems.
- Install, maintain, troubleshoot and repair wind power systems.
- Demonstrate an understanding of electrical power delivery systems.
- Demonstrate proficiency with multiple types of electrical test equipment.
- Prepare to solve mathematical problems typically encountered in the Renewable Energy industry.

### MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

#### English 3 Credits:

ENG 101 English Composition

#### Mathematics 8 Credits:

MAT 105 Technical Math I

MAT 205 Technical Math II

#### Science 8 Credits:

ENV 101 Environmental Science

PHY 111 General Physics I

#### Computer Science 3 Credits:

CSC 230 Introduction to Networking

#### Electrical Technology: Electronics 21 Credits:

ETE 101 Electrical Circuits I

ETE 102 Electrical Circuits II

ETE 104 Electronics I

ETE 106 Photovoltaic Systems Theory & Design

ETE 107 Photovoltaic Systems Installation & Maintenance

ETE 202 Industrial Electricity

#### Mechanical Technology 6 Credits:

MEC 102 Blueprint Reading & Technical Schematics

MEC 209 Environmental Health & Safety

MEC 217 Instrumentation

#### Wind Energy and Turbine Technology 7 Credits:

WTT 101 Introduction to Wind Energy and Wind Turbine Technology

WTT 103 Safety at Height and Rescue

WTT 201 Power Generation & Delivery

#### Free Electives 4 Credits:

Students must select one Clinton approved SUNY General Education Course.

#### NOTES:

- It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.
- The Renewable Energy Technologies degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program.

# Wind Energy & Turbine Technology

## ■ ASSOCIATE OF APPLIED SCIENCE

In the United States, wind power is at the top of the list of fast growing, new sources of electrical energy. In Clinton and Franklin Counties alone, 257 wind turbines have been constructed since 2007 with more slated to be installed over the next several years. As the number of wind turbines across the country continues to grow, trained technicians will be needed to service them. These technicians will require a strong background in industrial electricity and mechanical systems in order to safely and competently work in this exciting new energy sector.

Clinton classrooms and laboratories are well-equipped with modern equipment providing students with the type of hands-on training that's so important. Graduates of the Wind Energy & Turbine Technology program will be prepared to enter the workforce responsible for service work in current and future wind parks throughout the country. Graduates will not only be highly qualified to fill jobs locally but will be able to work anywhere wind turbines are located in the country. Due to the abundance of electrical and mechanical subject matter throughout the curriculum, students may also be positioned for work in other energy sectors such as hydro-power and traditional energy.

After receiving an Associate Degree in Wind Energy & Turbine Technology students will be able to:

1. Identify the role of wind energy and turbine technology in alternative energy.
2. Demonstrate an understanding of the mechanical systems in modern wind turbines.
3. Demonstrate an understanding of electrical power delivery systems in modern wind turbines.
4. Maintain the mechanical and electrical systems of wind turbines.

The Wind Energy & Turbine Technology program can be completed in four semesters or two years. In order to graduate, students must successfully complete 61 credits with a grade point average of 2.0 or above. In order to complete the program in four semesters, students must place into the required courses upon entering school.

### Program Goals:

- Provide students with background knowledge in electrical, mechanical, and fluid power at the entry level for wind turbine service technicians.
- Provide students with opportunities to demonstrate knowledge on the placement of wind turbines.
- Provide students with knowledge of safety practices used in utility scale wind turbines.
- Provide students with troubleshooting experiences at the entry-level for wind turbine service technicians.
- Prepare students to communicate effectively, both orally and in writing, as well as interact effectively within the work environment.
- Prepare students to solve mathematical problems typically encountered in the wind industry.

### MINIMUM DEGREE REQUIREMENTS (60 CREDITS):

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#### English 3 Credits:

ENG 101 English Composition

#### Mathematics 8 Credits:

MAT 105 Technical Math I

MAT 205 Technical Math II

#### Health and Physical Education 1 Credit:

HPE 105 Physical Fitness *or*

HPE 124 Career Fitness

#### Computer Science 3 Credits:

CSC 230 Introduction to Networking

#### Mechanical Technology 6 Credits:

MEC 102 Blueprint Reading & Tech. Schematics

MEC 206 Principles of Fluid Power Systems

MEC 209 Environmental Health & Safety

#### Electrical Technology 14 Credits:

ETE 101 Electrical Circuits I

ETE 102 Electrical Circuits II

ETE 105 Digital Electronics I

ETE 202 Introduction to Industrial Electricity

#### Wind Energy & Turbine Technology 13 Credits:

WTT 101 Introduction to Wind Energy & Turbines

WTT 102 Wind Turbine Mechanical Systems

WTT 103 Safety at Height and Rescue

WTT 201 Power Generation & Delivery

WTT 202 Turbine Troubleshooting & Repair

#### Science 12 Credits:

ENV 210 Environmental Technology

MET 101 Meteorology

PHY 111 General Physics I

#### NOTES:

- It may take a student more than two years to complete this degree, or may require summer coursework, if basic skills courses are required.
- The Wind Energy & Turbine Technology degree program features a course schedule with set classes in the fall and spring semesters. Not all classes are offered each semester. Students who start in the spring and meet all other requirements may take five semesters to complete the program.

# CERTIFICATE PROGRAMS

- ALCOHOL & SUBSTANCE ABUSE COUNSELING
- COMPUTER SUPPORT
- HEALTH STUDIES
- INDUSTRIAL/COMMERCIAL ELECTRICIAN
- PAYROLL
- RENEWABLE ENERGY TECHNOLOGIES
- WIND TURBINE SERVICE TECHNICIAN

## Alcohol & Substance Abuse Counseling

The Human Services Alcohol & Substance Abuse Counseling Certificate Program is a 30 credit program designed to prepare students for entry-level employment or to enhance current employment within the addictions field. This certificate provides an academic and experiential foundation for skill development and ethical practice in the field of addiction counseling. All of the credit hours earned in the Alcohol & Substance Abuse Counseling Certificate Program are transferrable to the Human Services A.A.S. Degree Program. Additionally, completion of the certificate will cover the total 350 education hours required for credentialing by the New York Office of Alcohol and Substance Abuse Services (OASAS).

### Human Services 27 Credits:

- HUS 101 Introduction to Human Services
- HUS 105 Introduction to Basic Counseling Skills
- HUS 108 Foundations for the Chemical Dependency Professional
- HUS 110 Critical Topics in Chemical Dependency
- HUS 175 Ethics for Chemical Dependency Counseling
- HUS 201 Social Service Agencies
- HUS 206 Group Skills for Human Services Professions
- HUS 210 Identification, Diagnosis, and Treatment Planning
- HUS 284 Internship & Seminar for CASAC

### Additional Certificate Requirements:

Students must place into college-level English.

## Computer Support

The Computer Support Certificate includes several Information Technology courses and covers a wide variety of computer skills. This certificate is designed to prepare students for entry-level positions in computer support. All credits from this certificate are transferable to the Computer Information Systems Associate in Applied Science Degree Program.

### Degree Requirements (24 Credits):

- ENG 101 English Composition
- CSC 102 Microcomputer Applications
- CSC 121 Fundamental Concepts of Computing
- CSC 201 Advanced Applications
- CSC 220 Operating Systems
- CSC 225 Computer Hardware
- CSC 230 Introduction to Networking
- CSC 215 Web Design and Programming **or**
- CSC 240 Networking II

### Additional Certificate Requirements:

Students must place into Math 101 or above.

## Health Studies

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The Health Studies Certificate is a 30-32 credit program that requires a foundation of coursework in math (not required, just placement), science, humanities and the social sciences, and health studies, complemented by a flexible elective component, allowing students to tailor the curriculum worksheet to their needs. Students, following the successful completion of the certificate, will be better prepared to succeed in related degree programs, such as nursing, or to seek employment in the healthcare arena. A seminar in Health Career Pathways will expose students to a variety of healthcare career options and fortify them with a working knowledge of organizational standards/regulations. A number of the courses offered in the certificate are applicable to the Nursing A.A.S. Degree program.

**Goal:** To provide students with the opportunity to begin to explore health career options while being introduced to foundation courses leading to further education or employment.

**Following successful completion of the certificate students will:**

- demonstrate a broad base of knowledge of personal health issues and careers;
- have a competitive edge for entry level employment in a variety of healthcare settings; and,
- possess college level science and math skills necessary for admission to a career degree program.

### MINIMUM CERTIFICATE REQUIREMENTS:

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1. A minimum of 30-32 credit hours.
2. FCS 101 Foundation of College Success
3. Humanities/Social Sciences: a minimum of 6 credits to include ENG 101 and PSY 101.
4. Science: a minimum of 8 credit hours, to include BIO 101 or CHE 101. Students wishing to pursue a degree in Nursing will benefit from inclusion of BIO 228 & 229, once the BIO 101 and CHE 101 requisites have been met.
5. Health Studies: a minimum of 7 credit hours to include HPE 100, HPE 101, HPE 102.
6. This certificate requires that students be prepared for college level mathematics upon completion. Students, who have not placed into MAT 103 or higher, will be required to take developmental math coursework up to and including MAT 100 or MAT100Q (pre-req for CHE 101).

### Information Literacy 3 Credits:

FCS 101 Foundations for College Success

### Humanities/Social Sciences 6 Credits:

ENG 101 English Composition

PSY 101 Introduction to Psychology

### Science 8 Credits:

BIO 101 General Biology

CHE 101 Applied Chemistry

### Health Studies 7 Credits:

HPE 101 Personal Health

HPE 102 Safety & First Aid

HPE 100 Seminar in Health Career Pathways

### Electives 6-8 Credits

**(Choose from the following):**

BIO 204 Microbiology (4 credits)

BIO 228 Anatomy & Physiology I (4 credits)

BIO 229 Anatomy & Physiology II (4 credits)

CSC 102 Introduction to Microcomputer (3 credits)

HPE 125 Nutrition for Health & Fitness (3 credits)

HPE 147 Care & Prevention of Athletic Injuries (4 credits)

HPE Activity Courses (1 credit)

HUS 101 Introduction to Human Services (3 credits)

LIB 101 Library Research Skills (1 credit)

MAT 100 or MAT 100Q (if required by placement)

NUR 101 Introduction to Nursing (1 credit)

NUR 106 Medical Terminology (1 credit)

NUR 207 Phlebotomy (2 credits)

SCI 110 Foundation Skills in Science (1 credit)

SOC 101 Introduction to Sociology (3 credits)

## Industrial/Commercial Electrician

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This Industrial/Commercial Electrician Certificate program will prepare students to become electrician helpers, electrician apprentices, maintenance technicians, or allow them to work in the electrical retail field. It will also assist those interested in gaining access to the International Brotherhood of Electrical Workers (IBEW) Local 910 Electrician Apprenticeship Program. The Certificate is a subset of courses offered in the proposed Industrial/Commercial Electrician A.O.S. Degree program. Students will develop knowledge in electrical construction and basic electrical theory while learning basic electrical construction skills. Topics include electrical theory, electrical circuits, and electrical construction along with supporting courses such as electrical blueprint reading and project estimating. All core courses are guided by the current version of the National Electric Code (NEC) Handbook.

### Industrial/Commercial Electrician 10 Credits:

ICE 101 Residential Electrical & Wiring

ICE 102 Electrical Blueprint Reading

ICE 202 Project Estimation

### Mathematics 8 Credits:

MAT 105 Technical Mathematics I

MAT 205 Technical Mathematics II

### Computer & Electronics Technology 8 Credits:

ETE 101 Electrical Circuits I

ETE 102 Electrical Circuits II

### Mechanical Technology 2 Credits:

MEC 209 Environmental Health & Safety

# Payroll

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This program prepares students for work in the area of Payroll Accounting in most business and educational institutions and in some governmental agencies. This program not only provides payroll basics and advanced procedures, but it provides students with a variety of other skills, such as human resource management, computers in accounting, management, and public speaking.

### English 3 Credits:

ENG 101 English Composition

### Communications 3 Credits:

COM 101 Public Speaking

### Business 19 Credits:

ACC120 Financial Accounting  
ACC 159 Payroll Accounting  
ACC 252 Computers in Accounting  
BUS 101 Introduction to Business  
BUS 213 Business Communications  
CSC 102 Introduction to Microcomputer Applications

# Renewable Energy Technologies

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The Renewable Energy Technologies certificate is a laboratory-oriented, technological program of study that will award a College Certificate. The program includes 14 credits of English, technical math, environmental science, and computer networking, plus 18 credits of technology courses in subjects directly related to renewable energy. The technology courses have a specific focus of preparing graduates for immediate employment in the renewable energy field.

This program is unique as it will be one of two in New York State that is strong in electrical technology while providing instruction in both photovoltaic systems and wind power systems. This program allows students the opportunity to pursue a career in renewable energy technology. Students will be prepared to work as installers and troubleshooters. Additionally, students may pursue self-employment opportunities, expand existing business services to include renewable energy installation and maintenance, or pursue completion of the Renewable Energy Technologies A.A.S. or Wind Energy and Turbine Technician A.A.S. Degree program.

### English 3 Credits:

ENG 101 English Composition

### Mathematics 4 Credits:

MAT 105 Technical Math I

### Science 4 Credits:

ENV 101 Environmental Science

### Computer Science 3 Credits:

CSC 230 Introduction to Networking

### Renewable Energy Technologies 18 Credits:

ETE 101 Electrical Circuits I  
ETE 106 Photovoltaic Systems Theory & Design  
ETE 107 Photovoltaic Systems Installation & Maintenance  
ETE 202 Industrial Electricity  
MEC 102 Blueprint Reading & Technical Schematics  
WTT 101 Introduction to Wind Energy and Wind Turbine Technology  
WTT 103 Safety at Height and Rescue

# Wind Turbine Service Technician

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The Wind Turbine Service Technician Certificate program is a 29 credit program designed to prepare students to begin their career in wind energy or enhance current employment in the renewable energy industry. Students will acquire a strong background in industrial electricity and mechanical systems in order to safely and competently work in the wind industry. All of the credit hours in this certificate are transferable to the Wind Energy and Turbine Technology A.A.S. Degree program.

### Mathematics 4 Credits:

MAT 105 Technical Mathematics I

### Health/Physical Education 1 Credit:

HPE 105 Physical Fitness *or*  
HPE 124 Career Fitness

### Computer Information Systems 3 Credits:

CSC 230 Introduction to Networking

### Technology 21 Credits:

ETE 101 Electrical Circuits I  
ETE 202 Industrial Electricity  
MEC 102 Blueprint Reading & Schematics  
MEC 206 Principles of Fluid Power Systems  
MEC 209 Environmental Health & Safety  
WTT 101 Introduction to Wind Energy & Turbines  
WTT 102 Wind Turbine Mechanical Systems  
WTT 103 Safety at Height and Rescue