TRANSFER PROGRAMS

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

BUSINESS ADMINISTRATION

■ ASSOCIATE OF SCIENCE

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):

Accounting 8 Credits:
ACC120   Financial Accounting
ACC 125   Managerial Accounting

English 6 Credits:
ENG 101   English Composition
ENG 102   Literature & Composition

Mathematics & Science 11 Credits:
MAT 161   Elementary Statistics
MAT 215   Calculus for Business
One four-credit science elective in biology, chemistry, environmental science, physics or science is required.

Computer Science 3 Credits:
CSC 102   Introduction to Microcomputer Applications

Business 18 Credits:
BUS 101   Business Organization & Management
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 9 Credits:
ECO 101   Principles of Microeconomics
ECO 102   Principles of Macroeconomics
One three-credit social science elective in anthropology, economics, geography, history, mass media, political science, psychology, or sociology, may be taken.

Humanities 3 Credits:
One three-credit humanities electives in the arts including music, and theatre, literature, public speaking, or foreign languages.

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

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 filed 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 Bachelaureate 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):

Accounting 4 Credits:
ACC 120 Financial Accounting

English 6 Credits:
ENG 101 English Composition
ENG 102 Literature & Composition

Mathematics & Science 7-8 Credits:
MAT 103 Finite Mathematics or Above
One four-credit natural science elective with lab is required.

Computer Science 3 Credits:
CSC 102 Introduction to Microcomputer Applications

Business 15 Credits:
BUS 101 Business Organization & Management
BUS 210 Principles of Marketing
BUS 216 Principles of Finance
BUS 250 Principles of Management
BUS 260 Business Law I

Social Science 9 Credits:
ECO 101 Principles of Microeconomics
SOC 101 Introduction to Sociology
One three-credit elective from the following lis: ENG 235, 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 204 Leadership for Sport Professionals

Humanities 9 Credits:
COM 101 Public Speaking
ART 111 *or* ART 113
One foreign language (101 or above)

Elective 1 Credit:
LIB 101 or HPE Activity course.

CRIMINAL JUSTICE

■ **ASSOCIATE OF ARTS**

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):

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.

ENVIRONMENTAL SCIENCE

■ ASSOCIATE OF SCIENCE

Environimental 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

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:

1. A minimum of 60 credit hours.
2. ENG 093, 094, 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:

1. A minimum of 60 credit hours.
2. ENG 093, 094, 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

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

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 8 Credits:
Two four-credit science courses with laboratories are 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 14 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.

LIBERAL ARTS: MATH & SCIENCE

■ **ASSOCIATE OF SCIENCE**

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):

A minimum of 60 credit hours is required for the Liberal Arts Math/Science Associate of Science degree.

Basic Skills Courses:
Basic skills courses in mathematics and English are required as prerequisite courses if indicated by placement testing. These courses count toward load and financial aid, but not toward graduation.

English 6 Credits:
ENG 101   English Composition
ENG 102   Literature & Composition

Humanities 6 Credits:
Courses in art, communication, English, foreign language, mass media, music, philosophy, and theater may be taken.

Social Science 9 Credits:
Credits must be taken from two of the following disciplines: anthropology, economics, geography, history, political science, psychology, or sociology.

Mathematics 11 Credits:
MAT 161   Elementary Statistics
Two of the following courses: MAT 204 College Algebra with Trigonometry II, MAT 224 Calculus with Analytic Geometry I or MAT 225 Calculus with Analytic Geometry II.

Science 8 Credits:
Two four-credit science courses with laboratory components are required. Students planning to major in a science should take a two-year sequence.

Scientific Literacy 1 Credit:
SCI 110   Foundational Skills in Science

Math/Science Electives 8 Credits:
Eight credits of mathematics and science credits will be taken under advisement of a math or science faculty member. A mix of college-level mathematics, science and related courses will be selected to best prepare students for a bachelor's program in mathematics, natural sciences, or a related field.

Health and Physical Education 1 Credit:
Any course with an HPE prefix fills this requirement. One activity course is required.

College Success 3 Credits:
FCS 101   Foundations for College Success

Electives 7 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.
- 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 with SUNY Plattsburgh

Childhood Education Articulation Agreements with a choice of concentrations in mathematics or science.

This is a pathway for those who are seeking a career as a teacher certified in childhood education (grades 1-6). Students in this program typically complete 63-65 credit hours at Clinton, working to complete the SUNY general education requirements and to establish a concentration in math or natural science.

Students will need to cross register at SUNY Plattsburgh for three courses during three of their semesters at Clinton. These courses meet on SUNY Plattsburgh's campus and the student does not incur extra cost as long as the student is enrolled in at least 12 additional credit hours at Clinton. Advisors will assist students in completing this cross registration. Students who are seeking a career as a teacher certified in education (grades 7-12) should follow a Math & Science A.S. degree with a focus in the relevant area of mathematics or science.

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

- BUSINESS ACCOUNTING
- BUSINESS ADMINISTRATION
- COMPUTER INFORMATION SYSTEMS
- COMPUTER TECHNOLOGY
- CRIMINAL JUSTICE
- ELECTRICAL TECHNOLOGY: ELECTRONICS
- ENVIRONMENTAL TECHNOLOGY
- HUMAN SERVICES
- INDIVIDUAL STUDIES
- MECHANICAL TECHNOLOGY
- NURSING
- RENEWABLE ENERGY TECHNOLOGIES
- WIND ENERGY & TURBINE TECHNOLOGY

BUSINESS ACCOUNTING

■ ASSOCIATE OF APPLIED SCIENCE

Business 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):

English 6 Credits:
ENG 101 English Composition
ENG 102 Literature & Composition *or*
ENG 235 Technical Writing
(Change effective Fall 2016.)

Mathematics 3 Credits:
MAT 101 or higher

Computers Science 3 Credits:
CSC 102 Introduction to Microcomputer Applications

Communication 3 Credits:
COM 101 Public Speaking

Accounting 20 Credits:
ACC 120 Financial Accounting
ACC 125 Managerial Accounting
ACC 159 Payroll Accounting
ACC 202 Cost Accounting
ACC 251 Federal Income Tax
ACC 252 Computer Applications in Accounting

Business 18 Credits:
BUS 101 Business Organization & Management
BUS 153 Quantitative Business Skills
BUS 213 Business Communications
BUS 260 Business Law I
BUS 261 Business Law II
BUS 285 Internship *or*
Business Elective (Any ACC, BUS, CSC three-credit course)

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

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):

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
(Change effective Fall 2016.)

Mathematics 3 Credits:
MAT 101 or higher

Computer Science 3 Credits:
CSC 102 Introduction to Microcomputer Applications

Communication 3 Credits:
COM 101 Public Speaking

Business 24 Credits:
BUS 101 Business Organization & Management
BUS 153 Quantitative Business Skills
BUS 210 Principles of Marketing
BUS 213 Business Communications
BUS 260 Business Law I
BUS 261 Business Law II
BUS 285 Business Internship *or*
One business (BUS) elective
One business elective of any accounting (ACC), business (BUS) or computer science course (CSC)

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 With a Lab:
One four-credit science courses 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 INFORMATION SYSTEMS

■ **ASSOCIATE OF APPLIED SCIENCE**

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):

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 ~~6~~ 3 Credits:
~~Two social science electives are required.~~ 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

~~Business 3 Credits:~~
~~BUS 101 Business Organization and Management~~

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.

(Changes effective Fall 2016.)

COMPUTER TECHNOLOGY

■ ASSOCIATE OF APPLIED SCIENCE

Computer Technology

■ **ASSOCIATE OF APPLIED SCIENCE**

Computer Technology is a program that provides graduates with skills in two areas: electronics and computer science. Students will study the electronics associated with computer systems as well as the software that makes computer systems function. Graduates of the Computer Technology program will be prepared for positions requiring an understanding of hardware and software applications of microprocessor and other computer-based systems, or have the opportunity to transfer to one of several Baccalaureate programs in Computer Engineering Technology in New York State.

An Associate Degree in Computer Technology prepares graduates to work in a variety of jobs that include:
- Computer Systems Repair and Maintenance
- Engineering Assistance
- Repair and Maintenance of Microprocessor Controlled Equipment
- Computer Networking
- Installation of Computer Hardware/Software Systems
- Help Desk/Computer Support

The Computer Technology program can be completed in four semesters or two years. In order to graduate, students must complete 64 credits and graduate with a grade point average of 2.0. If beginning the program with the required math (able to enroll in Tech Math I) and English skills, students can complete the program in four semesters.

Program Goals:
- Prepare students to gain knowledge and practical competence in the major areas of the Computer Technology field allowing for a wide variety of career opportunities.
- 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 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 (64 CREDITS):

English 6 Credits:
ENG 101 English Composition
ENG 102 Literature & Composition **or**
ENG 235 Technical Writing

Social Science 3 Credits:
One social science elective is required.

Mathematics or Science 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

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

Computer Info Systems 15 Credits:
CSC 121 Fundamental Concepts of Computing
CSC 217 Computer Programming
CSC 220 Operating Systems
CSC 225 Computer Hardware
CSC 230 Intro to Networking

Computer Technology Elective 3 Credits:
CSC 240 Networking II **or**
CSC 280 Technology Practicum/Seminar

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 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.*

CRIMINAL JUSTICE

■ ASSOCIATE OF APPLIED SCIENCE

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 63 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 (63-64 CREDITS):

Foundations for College Success 3 Credits:
FCS 101   Foundations for College Success

English 9 Credits:
ENG 101   English Composition
ENG 102   Literature & Composition
ENG 235   Technical Writing

Mathematics or Science 3-4 Credits:
MAT 103 Finite Math or higher; *or*
One science elective in biology, chemistry, environmental science, physics, geology or science may be taken.

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 1 Credit:
CSC 101   Computer Orientation

Health and Physical Education 2 Credits:
Two activity courses are required.

Free Elective 6 Credits:
Students may take any credit-bearing courses they choose. Students may use these credits to focus on an area of interest, sample different academic disciplines, or to take further general education courses for transfer to a four-year college.

ELECTRICAL TECHNOLOGY: ELECTRONICS

■ ASSOCIATE OF APPLIED SCIENCE

Electrical Technology: Electronics

■ ASSOCIATE OF APPLIED SCIENCE

Study the exciting field of electronics in state-of-the-art laboratories at Clinton Community College. Students can enter the program right out of high school or transfer from another college or university. With an Electrical Technology: Electronics A.A.S. degree from Clinton, graduates can seek immediate employment as an electronics technician, or pursue a baccalaureate degree in Electrical Engineering Technology at a four-year institution. Graduates from the program have had excellent results obtaining employment in the field and record some of the highest starting salaries of all Clinton graduates.

An associate degree in Electrical Technology prepares graduates to work in a variety of settings or as the following:
- Electrical and electronics repair and maintenance
- Engineering Assistant
- Testing and quality control
- Instrumentation Specialist
- Calibration Technician

The Electrical Technology program can be completed in four semesters or two years. In order to graduate, students must successfully complete a minimum of 63 credits with a grade point average of 2.0. If beginning the program with the required math (able to enroll in Tech Math I) and English skills, the program can be completed in four semesters.

Program Goals:
- Prepare students to demonstrate knowledge of the fundamentals of electrical circuits.
- Prepare students to demonstrate knowledge of the fundamentals of analog and digital electronics.
- Prepare students to demonstrate knowledge of electronic programming languages.
- Prepare students to demonstrate knowledge and proper use of electrical test equipment.
- Prepare students for work as entry-level electronics technicians or undertake 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 electronics industry.

MINIMUM DEGREE REQUIREMENTS (63-64 CREDITS):

English 6 Credits:
ENG 101   English Composition
ENG 235   Technical Writing

Mathematics 8 Credits:
MAT 105   Technical Math I
MAT 205   Technical Math II
(MAT 104/MAT 204 may be substituted)

Electrical Technology 35 Credits:
ETE 101   Electrical Circuits I
ETE 102   Electrical Circuits II
ETE 103   Computer Programming for Electronics
ETE 104   Electronics I
ETE 105   Digital Electronics I
ETE 202   Introduction to Industrial Electricity *or*
CSC 230   Introduction to Networking
ETE 204   Electronics II
ETE 205   Digital Electronics II
ETE 207   Microcontroller Fundamentals
ETE 208   Operational Amplifiers

Science 8 Credits:
PHY 111   General Physics I
PHY 112   General Physics II

Social Science 3 Credits:
One social science elective in anthropology, economics, geography, history, mass media, political science, psychology, and sociology may be taken.

Free Elective 3-4 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, or to take further general education courses for transfer to a four-year college.

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 Electrical Technology: Electronics 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.

ENVIRONMENTAL TECHNOLOGY

■ **ASSOCIATE OF APPLIED SCIENCE**

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 (60 CREDITS):

English 6 Credits:
ENG 101 English Composition
ENG 235 Technical Writing

Mathematics 7 Credits:
MAT 105 Technical Math I
MAT 161 Elementary Statistics

Science 28 Credits:
BIO 101 General Biology I
BIO 102 General Biology II
BIO 204 Microbiology **or**
BIO 206 Ecology
CHE 111 General Chemistry I
CHE 112 General Chemistry II
ENV 101 Environmental Science
GEL 101 Physical Geology

Environmental Technology 13 Credits:
ENV 210 Environmental Technology
ENV 211 Water Quality Operator
ENV 214 Internship/Field Training
ENV 215 ENV Site Assessment
ENV 216 HAZWOPER/HAZMAT
ENV 218 Basic Environmental Health and Safety Training*
ENV 220 Seminar in ENV Issues
Certificate/training courses

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.

HUMAN SERVICES

■ ASSOCIATE OF APPLIED SCIENCE

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:
Math elective, MAT 103 or higher.

Communication 3 Credits:
COM 101 Public Speaking

Human Services 30 Credits:
HUS 101 Introduction to Human Services *or*
SWK 101 Introduction to Social Work
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 281 Field Practicum Seminar
HUS 282 Field Practicum
Three approved Human Services Electives are required.

Social Science 12 Credits:
PSC 240 State and Local Government
PSY 101 Introduction to Psychology
SOC 101 Introduction to Sociology
One 200 level psychology or sociology elective is required.

Science 4 Credits:
One science course elective

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**

Individual Studies

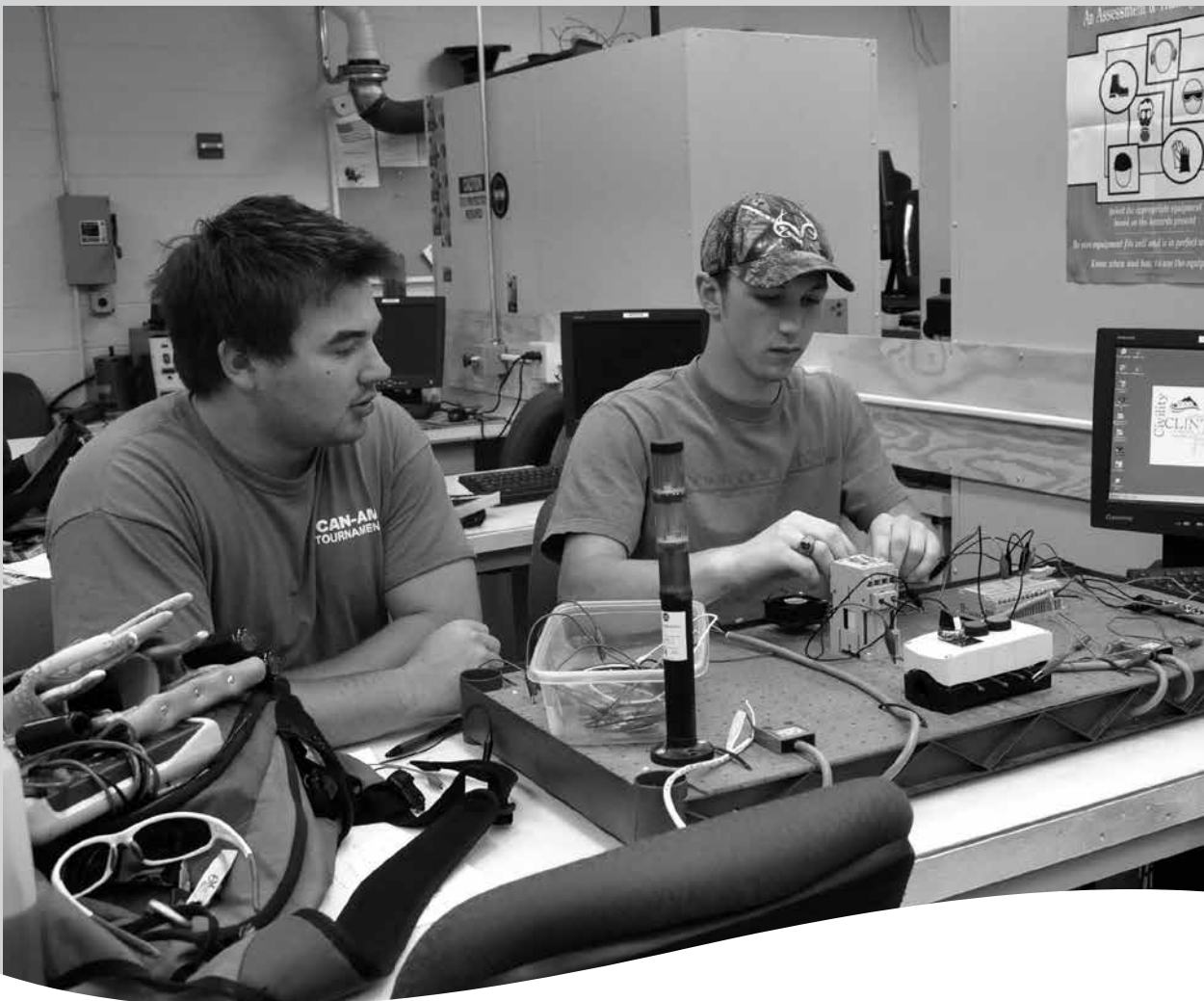## ■ ASSOCIATE OF APPLIED SCIENCE

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:

1. A minimum of 60 credit hours.
2. ENG 093, 094, 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.

MECHANICAL TECHNOLOGY

■ ASSOCIATE OF APPLIED SCIENCE

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 *or*	3
MEC 222 Programmable Logic Controllers *or*	
ETE 105 Digital Electronics I	
ETE 102 Electrical Circuits II *or* 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

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 must follow the prescribed course sequencing published in the handbook and college catalog. All required science, math and nursing courses must be completed with a "C" grade or higher.~~ 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 62 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.

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.

(Update effective Fall 2016.)

MINIMUM DEGREE REQUIREMENTS (62 CREDITS):

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

Prerequisites for Admission:
See page 10 under Competitive Degree Programs.

RENEWABLE ENERGY TECHNOLOGIES

■ ASSOCIATE OF APPLIED SCIENCE

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 (60-61 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 7 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 3-4 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

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 (61 CREDITS):

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 7 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
- EARLY CHILDHOOD CARE & DEVELOPMENT
- HEALTH STUDIES
- PAYROLL
- RENEWABLE ENERGY TECHNOLOGIES
- WIND TURBINE SERVICE TECHNICIAN

Certificate Programs

Alcohol & Substance Abuse Counseling

The Human Services Alcohol & Substance Abuse Counseling Certificate Program is a ~~31~~ 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 265 hours of the 350 total, education hours required for credentialing by the New York Office of Alcohol and Substance Abuse Services (OASAS).

English 3 Credits:
ENG 101   English Composition

Human Services 27 Credits:
HUS 101   Introduction to Human Services
HUS 105   Introduction to Basic Counseling Skills
HUS 110   Critical Topics in Chemical Dependency
HUS 175   Ethical Foundations of Chemical Dependency Counseling
HUS 201   Social Service Agencies
HUS 206   Group Skills for Human Services Professions
HUS 210   Identification, Diagnosis, and Treatment Planning
HUS 281   Field Practicum Seminar
HUS 282   Field Practicum

~~Information Management 1 Credit:~~
~~LIB 101   Library Research Skills~~
(Change effective Fall 2016)

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.

Early Childhood Care & Development

This certificate program is a ~~31~~ 30 credit program designed for individuals who wish to enter the human services field of early childhood care and development. This program enables those students to acquire the basic techniques, skills, and theoretical background needed for a potential career in early childhood development. All of the credit hours earned in this certificate program are transferable to the Human Services A.A.S. Degree program.

English 6 Credits:
ENG 101   English Composition
ENG 235   Technical Writing

Human Services 15 Credits:
HUS 101   Introduction to Human Services
HUS 103   Introduction to Early Childhood Care & Development
HUS 104   Observation of Childhood Behavior
HUS 200   Case Management & Crisis Intervention
HUS 203   Planning Programs for Young Children

Social Science 6 Credits:
PSY 101   Introduction to Psychology
PSY 235   Child Development *or*
PSY 230   Human Development

Health and Physical Education 3 Credits:
HPE 102   Safety and First Aid

~~Information Management 1 Credit:~~
~~LIB 101   Library Research Skills~~
(Change effective Fall 2016)

Health Studies

The Health Studies Certificate is a 28-29 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:

1. A minimum of 28-29 credit hours.
2. CSS 101 College Success Seminar.
3. Humanities/Social Sciences: a minimum of 7 credits to include ENG 101 and PSY 101.
4. Science: a minimum of 8 credit hours, to include BIO 228 or, BIO 101 and SCI 110, and CHE 101 or BIO 229. 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.

Basic Skills (if indicated by placement test) 1 Credit:
ENG 093 Reading & Study Skills
ENG 094 Fundamentals of Composition
MAT 096 Arithmetic
MAT 098 Pre-Algebra
CSS 101 College Success Seminar, Information Literacy

Humanities/Social Sciences 6 Credits:
ENG 101 English Composition
PSY 101 Introduction to Psychology

Science 8 Credits:
BIO 228 Anatomy & Physiology I *or*
BIO 101 General Biology and SCI 110 Foundational Skills in Science
CHE 101 Applied Chemistry *or*
BIO 229 Anatomy & Physiology II *or*
BIO 204 Microbiology

Health Studies 7 Credits:
HPE 101 Personal Health
HPE 102 Safety & First Aid
HPE 100 Seminar in Health Career Pathways

Electives 6-7 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 103 Finite Math (3 credits)
NUR 101 Introduction to Nursing (1 credit)
NUR 106 Medical Terminology (1 credit)
NUR 207 Phlebotomy (2 credits)
SOC 101 Introduction to Sociology (3 credits)

Payroll

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 Business Organization & Management
BUS 213 Business Communications
CSC 102 Introduction to Microcomputer Applications

Renewable Energy Technologies

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

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