



# Catalog Supplement

## 2024-2025

*Last Updated: May 28, 2024*

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# Course Descriptions

(Deletions, updates, new)

Please see the 2023-2024 Academic Catalog or [www.bhc.edu/academics/catalog](http://www.bhc.edu/academics/catalog) for course descriptions not listed below.

## DELETED COURSES

### **ENG 250 Film as Literature**

**3 cr. hrs.;** 3 lecture hours; 0 lab hours per week.

*Prerequisite:* ENG 101C or ENG 101 "C" or better.

ENG 250 is a study of formal, thematic, and/or historical relationships between literary and cinematic forms, including examination of adaptations and influences that demonstrate the strengths of each artistic medium. IAI: HF 908 (1.1)

## COURSE UPDATES

### **ART 190 Introduction to Computer Art**

**3 cr. hrs.;** 0 lecture hours; 6 lab hours per week.

An introduction to computer applications in the Adobe Creative Suite. A computer software based approach to visual image manipulation and generation, including the integration of computer hardware, software, and peripheral devices as tools to create and combine traditional and contemporary visual ideas as applied to art and design. An introduction to digital art creation and visual communication strategies. Industry standard software and applications are used to introduce students to varied digital approaches: image manipulation and generation, illustration, typography, and motion graphics. External devices, such as printers and drawing tablets, are integrated into course content to help create, proof, and present completed works. (1.2)

### **BIOL 105 General Biology I**

**5 cr. hrs.;** 4 lecture hours; 3 lab hours per week.

*Prerequisite:* Students must be eligible for (as determined by appropriate placement score or other assessment) or concurrent enrollment in Math 103 or higher and English 101 or higher. Students must be eligible for (as determined by appropriate placement score or other assessment) or be concurrently enrolled in MATH 103 or higher and ENG 101 or ENG 101C or higher.

For science and pre-professional majors and those with strong interest in science. This course includes the principles of cellular and molecular biology, including the chemistry of life, metabolism, photosynthesis, classical and molecular genetics, genetic regulation, and cellular reproduction. For science and pre-professional majors and those with a strong interest in science. This course includes the principles of cellular and

molecular biology including the chemistry of life, metabolism, photosynthesis, classical and molecular genetics, genetic regulation, and cellular reproduction. IAI: L1 910L; BIO 910 (1.1)

### **BIOL 106 General Biology II**

**5 cr. hrs.;** 4 lecture hours; 3 lab hours per week.

*Prerequisite:* BIOL 105 or instructor consent.

For science and pre-professional majors and those with strong interest in science. This course includes principles of organismic population and community biology including reproduction, development, homeostasis, behavior, ecology, and evolution. For science and pre-professional majors and those with a strong interest in science. This course includes principles of organismic, population and community biology including reproduction, development, homeostasis, behavior, ecology, and evolution. IAI: L1 910L; BIO 910 (1.1)

### **BIOL 150 Medical Terminology**

**3 cr. hrs.;** 3 lecture hours; 0 lab hours per week.

*Prerequisite:* REA 103 "C" or better; or appropriate reading placement score.

This course presents the principles of medical word construction through identification of root words, prefixes, suffixes, combining forms, and methods of building medical terms. Emphasis is placed on correct medical word spelling, pronunciation and definition, while introducing terminology specific to various body systems. The course is intended to prepare students to classify medical information for use in medical coding, billing, and reporting. This course presents the principles of medical word construction through identification of root words, prefixes, suffixes, combining forms, and methods of building medical terms. Emphasis is placed on correct medical word spelling, pronunciation and definition, while introducing terminology specific to various body systems. The course is intended to prepare students to communicate effectively in the health professions or to classify medical information for use in medical coding, billing, and reporting. (1.2)

### **CRT 105 Realtime Theory I**

**3 5 cr. hrs.;** 2 lecture hours; 2 6 lab hours per week.

*Prerequisite:* Instructor consent.

Students in this course study the fundamentals of realtime writing including steno machine setup, keyboard configuration, and beginning machine shorthand steno theory. Students will be tested weekly. Speeds for this course range from 30 to 80 words per minute. (1.2)

### **CRT 265 Court Reporting Internship**

**3 1 cr. hrs. hr.;** 0 lecture hours; 15 5 lab hours per week.

*Prerequisite:* ~~CRT 225 “C” or better.~~ CRT 225 “C” or better or concurrent enrollment in CRT 225.

The course is designed to help the student project a positive, professional image, and give them tools necessary to design a portfolio. The internship also includes a minimum of 40 hours of actual writing time. (1.2)

### **ENGT 104 Fundamentals of Machining Intro to Manufacturing**

**2 cr. hrs.;** 2 lecture hours; 0 lab hours per week.

This course will expose engineering technology students to the activities within a machine shop. An overview of the various machines used in a typical manufacturing process will be discussed and demonstrated. (1.2)

### **ENGT 180 Introduction to Machine Shop**

**3 cr. hrs.;** 2 lecture hours; 2 lab hours per week.

*Prerequisite:* ~~ENGT 104.~~ ENGT 101 or ENGT 107 and ENGT 280 or instructor consent.

~~This is the introductory machine shop course. Topics will include shop safety, proper care and usage of hand tools, setup and usage of saws and drill presses, basic layout procedures, and the correct application of rules, calipers, and micrometers.~~  
*This is the introductory machine shop course. Topics will include shop safety, proper care and usage of hand tools, and the correct application of rules, calipers, and micrometers.* (1.2)

### **ENGT 186 Introductory CNC**

**3 cr. hrs.;** 2 lecture hours; 2 lab hours per week.

*Prerequisite:* ~~ENGT 104.~~ ENGT 101 or ENGT 107 or instructor consent.

This is the first course in a three course sequence in computerized numerical control. The principles, techniques, and elementary applications of CNC will be explored. Some programming and laboratory experience will be obtained. Machine safety issues will be addressed. (1.2)

### **HEAL 200 First Aid**

**1 cr. hr.;** 0.5 lecture hours; 1 lab hour per week.

~~Methods and skills of emergency care for the ill or injured victim. May be repeated twice. Variable credit as follows: 1.0 Cardio Pulmonary Resuscitation and Standard First Aid; 3.0 Cardio Pulmonary Resuscitation, Advanced First Aid and Emergency Care Red Cross certification upon successful completion of course.~~  
*Methods and skills of emergency care for the ill or injured victim including American Heart Association CPR certification and Standard First Aid.* (1.2)

### **MATH 103 Essentials of Technical Math Math for Machinists**

**2 cr. hrs.;** 2 lecture hours; 0 lab hours per week.

*Prerequisite:* *Appropriate placement score.*

~~This course includes a thorough review of arithmetic, an in-depth study of plane geometry concepts, an introduction to the metric system, and an introduction to trigonometry.~~  
*This course includes a thorough review of arithmetic, an in-depth study of*

*plan geometry concepts, an introduction to the metric system, and an introduction to trigonometry.* (1.2)

### **MATH 200 Math for Elem Teachers II**

**4 cr. hrs.;** 4 lecture hours; 0 lab hours per week.

*Prerequisites:* MATH 100 “C” or better; and MATH 085 “C” or better, or appropriate placement score.

This is the second course in a two-course sequence designed for elementary education majors. This class is designed for students to experience mathematics as active participants in the learning process and to explore concepts that will be taught in the elementary classroom. Explorations are designed to go beyond the traditional rote applications. Topics in this course include probability, statistics, geometric figures, geometric constructions & concepts, measurement, and transformational geometry. The two-course MATH 100 & MATH 200 sequence meets the requirements for Illinois state certification in elementary teaching. MATH 200 is accepted in the IAI General Education Core Curriculum only for students seeking Illinois state certification as elementary teachers or special education teachers. IAI: MI 903 (1.1)

### **PTA 280 Clinical Internship I**

**4 cr. hrs.;** 0 lecture hours; 40 lab hours per week.

*Prerequisites:* ~~PTA 210 and PTA 213 “C” or better~~ PTA 210, PTA 213, PTA 290 “C” or better.

~~One of the final learning experiences in selected health care facilities with hands on application of treatment techniques and theories.~~  
*A full time supervised six-week patient care experience at an assigned clinical setting. Students will integrate didactic knowledge to further develop safe and effective patient care techniques, procedures, and interpersonal skills in the practice of physical therapy.* (1.2)

### **PTA 281 Clinical Internship II**

**4 cr. hrs.;** 0 lecture hours; 40 lab hours per week.

*Prerequisite:* PTA 208 “C” or better and PTA 214 “C” or better.

~~A final learning experience in selected health care facilities with hands on application of treatment techniques and theories and progression of patient care skills learned in Clinical Internship I.~~  
*A full time supervised final six-week patient care experience at an assigned clinical setting. Students will integrate didactic knowledge to achieve the competencies of an entry level physical therapist assistant in the practice of physical therapy.* (1.2)

### **ST 110 Surgical Technologist I**

**5 cr. hrs.;** 2.5 lecture hours; 5 lab hours per week.

*Prerequisite:* ~~ST 101~~ ST 101 “C” or better.

This course is designed to provide the student with the basic knowledge necessary to perform the duties of the surgical technologist in an operating room. Emphasis will be placed on learning the basics of surgical technology and applying them in the operating room. Theory instruction will include aseptic technique, basic equipment and supplies, instrumentation, suture, needles and operating room department policies.

Techniques learned in classroom will be practiced within the lab setting. (1.2)

### **ST 112 Surgical Pharmacology**

**3 cr. hrs.;** 3 lecture hours; 0 lab hours per week.

*Prerequisite: ST 110; appropriate placement score or MATH 078.*

~~This course is a self study course designed to assist the student with learning the principles of pharmacology within surgery. Rationale for commonly used medications used intraoperatively will be discussed, along with side effects and how they may alter the surgical intervention. The course will also include rationale behind labeling medications.~~ *This course is designed to assist the student with learning the principles of pharmacology within surgery. Rationale for commonly used medications used intraoperatively will be discussed, along with side effects and how they may alter the surgical intervention. The course will also include rationale behind labeling medications. Discussions related to principles of anesthesia, equipment used by anesthesia and complications will be presented. (1.2)*

## NEW COURSES

Effective Aug 2024

Published 5/28/2024

### ENG 255 Introduction to Film

**3 cr. hrs.;** 3 lecture hours; 0 lab hours per week.

ENG 255 is an introduction to film as an art form, emphasizing a study of the aesthetic and production elements of the medium, including narrative genres, directorial style, cinematography, acting, and editing. IAI: F2 908 (1.1)

### MUSC 160 Jazz, Blues and Rock & Roll

**3 cr. hrs.;** 3 lecture hours; 0 lab hours per week.

A survey of various ethnic musical traditions as threads of influence on contemporary American musical culture. Trace the history of jazz, blues, rock 'n' roll from their roots in African-American and other ethnic musical heritages to their continuing role in shaping a pluralistic American culture. (1.1)

### OTA 105 Introduction to OTA

**2 cr. hrs.;** 2 lecture hours; 0 lab hours per week.

*Prerequisite: Instructor approval.*

Introduction to OTA encourages the exploration and introduction into the field and profession of Occupational Therapy. Topics include introduction of Models of Practice, history of the profession, understanding the Occupational Therapy Practice Framework and appropriate usage of APA citations and usage and key concepts of practice to analyze treatment interventions. (1.2)

### OTA 111 OTA Kinesiology

**3 cr. hrs.;** 2 lecture hours; 2 lab hours per week.

*Prerequisite: ENG 101 or ENG 101C, PSYC 101, MATH 108 or MATH 108C, SPEC 175, and OTA 105 "C or better".*

OTA Kinesiology explores musculoskeletal structures and functions related to the human body and biological development for voluntary and involuntary movement patterns. Topics include planes of movement, origin and insertion points for muscles and tendons, bony landmarks, synergistic and antagonistic muscle groups to promote range of motion, endurance, and strength for independence in skills. (1.2)

### OTA 131 Pediatric Occupational Perf

**2 cr. hrs.;** 2 lecture hours; 0 lab hours per week.

*Prerequisite: ENG 101 or ENG 101C, PSYC 101, MATH 108 or MATH 108C, SPEC 175, and OTA 105 "C" or better.*

Pediatric Occupational Performance emphasizes observation, analysis and performance of children and adolescents throughout their development. The course examines the intrinsic value of child-based occupations and builds the basic skills necessary for teaching activities based on current theories used in practice. Emphasis is on creative and critical thinking, as well as strategies to use therapeutic use of self as a change agent. (1.2)

### OTA 141 Adult Occupational Performance

**2 cr. hrs.;** 2 lecture hours; 0 lab hours per week.

*Prerequisite: ENG 101 or ENG 101C, PSYC 101, MATH 108 or MATH 108C, SPEC 175, and OTA 105 "C" or better.*

Adult Occupational Performance emphasizes observation, analysis and performance of young adults through the end of life focusing on the typical aging process. The course examines the intrinsic value of adult based occupations and builds the basic skills necessary for teaching activities based on current theories used in practice. Emphasis is on creative and critical thinking, as well as strategies to use therapeutic use of self as a change agent. (1.2)

### **OTA 151 OT and Neurology**

**3 cr. hrs.; 3 lecture hours;** 0 lab hours per week.

*Prerequisite: ENG 101 or ENG 101C, PSYC 101, MATH 108 or MATH 108C, SPEC 175, and OTA 105 "C" or better.*

OT and Neurology examines the structure and function of the human nervous system including the cerebral cortex and spinal cord. Sensory, motor, and integral systems of the human are explored and related to common neurological disorders. (1.2)

### **OTA 155 Disease and Diagnosis**

**3 cr. hrs.; 3 lecture hours;** 0 lab hours per week.

*Prerequisite: PSYC 200, OTA 111, OTA 131, OTA 141 and OTA 151 "C" or better.*

Disease and Diagnosis introduces many of the clinical conditions that are encountered in occupational therapy practice, including an overview of various diagnoses including the etiology, incidence, signs and symptoms, management and prognosis of each condition throughout the lifespan. Students learn to research and evaluate information for the impact of the condition on an individual's ability to engage in the areas of occupation. (1.2)

### **OTA 161 Mental Health Practice**

**4 cr. hrs.; 3 lecture hours;** 2 lab hours per week.

*Prerequisite: PSYC 200, OTA 111, OTA 131, OTA 141 and OTA 151 "C" or better.*

Mental Health Practice presents the principles and practice of observing, assessing, documenting, teaching, adapting and grading occupations for individuals with psychological, cognitive and social challenges. Topics include assessing and modifying skills and environmental aspects to promote independence in occupation-based tasks for people, groups, and populations. (1.2)

### **OTA 171 Therapeutic Methods**

**4 cr. hrs.; 3 lecture hours;** 2 lab hours per week.

*Prerequisite: PSYC 200, OTA 111, OTA 131, OTA 141, and OTA 151 "C" or better.*

Therapeutic Methods focuses on developing measurable goal writing skills, documentation and intervention strategies for varying diagnoses across the lifespan using clinical reasoning skills. Students demonstrate necessary skills including principles of problem identification, treatment implementation, activity grading and adapting and the use of assistive technologies for individuals with difficulty in occupational performance. (1.2)

### **OTA 175 Fieldwork Level 1A**

**1 cr. hr.; 0 lecture hours;** 2 lab hours per week.

*Prerequisite: PSYC 200, OTA 111, OTA 131, OTA 141, and OTA 151 "C" or better.*

Therapeutic Methods focuses on developing measurable goal writing skills, documentation and intervention strategies for varying diagnoses across the lifespan using clinical reasoning skills. Students demonstrate necessary skills including principles of problem identification, treatment implementation, activity grading and adapting and the use of assistive technologies for individuals with difficulty in occupational performance. (1.2)

### **OTA 202 Physical Rehab Practice**

**4 cr. hrs.; 3 lecture hours;** 2 lab hours per week.

*Prerequisite: OTA 155, OTA 161, OTA 171, and OTA 175 "C" or better.*

Physical Rehab Practice explores principles and practice of observing, assessing, documenting, teaching, adapting, and grading self-care, work, and play/leisure for individuals with physical challenges. Emphasis will be placed on techniques and equipment that maximize participation in meaningful occupations, improve independence, assure safety, and prevent deformity. Ethical, critical and clinical reasoning, considerations of culture and environment are examined as an integral component of occupational therapy assistant practice. (1.2)

### **OTA 211 Therapeutic Interventions**

**4 cr. hrs.; 3 lecture hours;** 2 lab hours per week.

*Prerequisite: OTA 155, OTA 161, OTA 171, and OTA 175 "C" or better.*

Therapeutic Interventions focuses on intervention for occupational performance challenges due to disrupted client factors associated with impaired motor and process skills such as cognitive-perceptual functioning, sensory processing, and neuro-musculoskeletal functions. Facility-based and community-based interventions used by the OTA in the areas of assessment, planning, implementation of treatment programs, and service discontinuation are presented. (1.2)

### **OTA 222 Professional Practice**

**3 cr. hrs.; 3 lecture hours;** 0 lab hours per week.

*Prerequisite: OTA 155, OTA 161, OTA 171, and OTA 175 "C" or better.*

Professional Practice is a seminar course utilizing case inquiry approaches to solidify understanding of professional reasoning, ethical problem solving, communication skills, and self-reflection. Using evidence-based approaches, students work in small groups to interpret, analyze and strategize varied leadership and professional behavioral options. The course also explores coding and billing with ethical practices for various Federal State, private or public health care organizations. Topics of reimbursement delivery systems and federal laws along with advocacy will be explored. The role of the occupational therapy assistant in program development is experiential with community partners. (1.2)

### **OTA 225 Fieldwork Level 1B**



**1 cr. hr.; 0 lecture hours; 2 lab hours per week.**

*Prerequisites: OTA 155, OTA 161, OTA 171, OTA 175 "C" or better.*

Fieldwork Level 1B focuses on concepts of application skills in emerging and physical rehabilitation/habilitation practice areas of the current profession. Students will be supervised by professionals in settings designed to promote occupational performance of persons, groups, and populations. Fieldwork hours and placements will be created and designed in collaboration with community partners and the College. (1.2)

#### **OTA 261 Fieldwork Level 2A**

**6 cr. hrs.; 0 lecture hours; 20 lab hours per week.**

*Prerequisites: OTA 202, OTA 211, OTA 222, and OTS 225 "C" or better.*

Fieldwork Level 2A requires students to apply skills relating to the scope of practice for an occupational therapy assistant practitioner with direct supervision for a minimum of 8 weeks full time. Application skills will include but are not limited to, therapeutic use of self, documentation skills, treatment planning and facilitation, aspects of supervisory process and ethical and clinical reasoning skills. Fieldwork Level 2A is completed with a different setting and/or population than Fieldwork Level 2B. (1.2)

#### **OTA 262 Fieldwork Level 2B**

**6 cr. hrs., 0 lecture hours; 20 lab hours per week.**

*Prerequisites: OTA 261 "C" or better.*

Fieldwork Level 2B requires students to apply skills relating to the scope of practice for an occupational therapy assistant practitioner with direct supervision for a minimum of 8 weeks full time. Application skills will include, but are not limited to, therapeutic use of self, documentation skills, treatment planning and facilitation, aspects of supervisory process and ethical and clinical reasoning skills. Fieldwork Level 2B is completed with a different setting and/or population than Fieldwork Level 2A. (1.2)

#### **PCA 103 Professional Skills Healthcare**

**1 cr. hr.; 1 lecture hour; 0 lab hours per week.**

This is an introductory course for healthcare professionals which will provide an overview of professional communication, appearance and behaviors within the healthcare setting. (1.2)



# Errata

## NEW PROGRAM EFFECTIVE FALL 2025

Published May 28, 2024

### Occupational Therapy Assistant

Associate in Applied Science Code: 5384

Contact [swidergala@bhc.edu](mailto:swidergala@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709.

New students applying to Black Hawk College should select the AAS/General Occupational and Technical Studies (GOTS) until such time as they have been officially accepted by the department into this program.

The Occupational Therapy Assistant (OTA) program is designed to prepare individuals to function as ~~entry-level~~ ~~certified~~ entry-level occupational therapy assistants working in partnership with the occupational therapist. OTA graduates can find employment in a variety of healthcare and human service settings including hospitals, clinics, extended care facilities, schools and specialized community care and wellness programs.

Occupational therapy is a profession that is essential to the promotion of health and wellness. Occupational therapy assistants, under the supervision of the occupational therapist, plan and implement goal-directed therapeutic occupations uniquely designed to help patients and clients achieve optimal function in their daily life roles. In response to the effects of disabling disease or disorder, the OTA also may facilitate an individual's level of functional independence by modifying or re-designing any of the multiple environments in which patients and clients live and work.

#### Suggested Courses

##### First Semester Credit Hours

ENG 101	Composition I <b>or</b>	3
ENG 101C	Composition I	
PSYC 101	Introduction to Psychology	3
MATH 108	Statistics <b>or</b>	3
MATH 108C	Statistics	
SPEC 175	Intercultural Communication	3
OTA 105	Introduction to OTA	2

##### Second Semester

OTA 111	OTA Kinesiology	3
OTA 131	Pediatric Occupational Perf	2
OTA 141	Adult Occupational Performance	2
OTA 151	OT and Neurology	3
PSYC 200	Human Growth and Development	3

##### Third Semester

OTA 155	Disease and Diagnosis	3
OTA 161	Mental Health Practice	4
OTA 171	Therapeutic methods	4

OTA 175	Fieldwork Level 1A	1
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##### Fourth Semester

OTA 202	Physical Rehab Practice	4
OTA 211	Therapeutic interventions	4
OTA 222	Professional Practice	3
OTA 225	Fieldwork Level 1B	1

##### Fifth Semester

OTA 261	Fieldwork Level 2A	6
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##### Sixth Semester

OTA 262	Fieldwork Level 2B	6
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Minimum total hours required for degree 63

### Effective Aug 1, 2024

Published May 28, 2024

### CNC Production Certificates

Certificate Codes: ~~5985 and 5986~~ 5988 and

Contact [bcengi@bhc.edu](mailto:bcengi@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709.

Graduates of the CNC Production certificates will be equipped with industry knowledge and skills to work as ~~entry-level~~ entry-level CNC Machinists and Operators. CNC Machinists and Operators *set up* and operate a variety of computer-controlled or *mechanically controlled* machine tools to produce precision parts, instruments, and tools. They work in machine shops, tool rooms, and on factory floors.

The program is divided into two separate certificates: CNC Production Operator and CNC ~~Production—Machinist~~ Manufacturing in order to allow flexibility for employment opportunities.

Completion of the CNC Production Operator certificate is a prerequisite for CNC ~~Production—Machinist~~ Manufacturing certificate, and students are strongly encouraged to complete both certificates.

CNC Production is also part of the Accelerating Opportunity I-CAPS initiative targeted for students who also participate in an additional required support class.

### CNC Production Operator

Certificate Code: 5989

#### Suggested Courses

##### Fall Semester Credit Hours

ENGT 107	Blueprint Reading for Machinists	2
ENGT 186	Introductory CNC	3
ENGT 231	CNC Lathe Setup and Operation	3
ENGT 232	CNC Mill Setup and Operation	3
ENGT 280	Precision Measurement	3

<del>TMAT 101 Technical Math I</del>	<del>3</del>
MATH 103 Math for Machinists	2
<i>Minimum total hours required for certificate</i>	<del>17</del> 16

## CNC Production Machinist Manufacturing

Certificate Code: ~~5985~~ 5988

### Suggested Courses

Spring Semester	Credit Hours
ENGT 180 Introduction to Machine Shop	3
ENGT 236 CNC Manual Programming	3
ENGT 283 GD&T Interpretation	3
ENGT 286 Advanced CNC with CAM	3

*Minimum total hours required for certificate* 28

## A+ Prep Certificate

Certificate Code: 5729

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

*NOTE: This program is not financial aid eligible.*

~~For students who have industry background or knowledge, the A+ Prep Certificate offer preparation for the CompTIA A+ Certified Technician exams. For students who have an industry background or knowledge, the A+ Prep Certificate offers preparation for the CompTIA A+ Certified Technician exams.~~ These two exams comprise the CompTIA A+ Certified Technician certification. This vendor-neutral certification demonstrates competencies in the areas of installation, preventative maintenance, networking security, and troubleshooting. It demonstrates foundation-level knowledge and skills necessary for a career in PC support. Employment opportunities with this certificate include enterprise technician, field service technician and PC technician. Students who feel they may have sufficient background or knowledge to be successful in one of these abbreviated programs are strongly encouraged to contact one of the program instructors prior to enrolling, to discuss the required skill sets.

### Suggested Courses

First Semester	Credit Hours
ITS 112 Operating Systems	3
ITS 116 Computer Hardware	3
ITS 216 Advanced PC Hardware/A+ Prep	3
NETW 120 Basic Computer Networks <i>or</i>	3
NETW 125 Introduction to Networks	4

*Minimum total hours required for certificate* 12

*Minimum total hours required for*

## Accounting

Associate in Applied Science Code: 5467

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

The program is designed to develop an understanding of, and skills in, the principles of accounting as related to practical use in business. A strong emphasis is placed on computer accounting skills. Accounting skills are developed through courses in basic, intermediate, managerial, and tax accounting. Students get hands-on experience through several computer lab simulations and practice courses. Students have the opportunity to work at an actual job site for direct hands-on experience. Additional ~~course-work~~ *coursework* in business law, finance, business operations, computer information systems, business mathematics, and communications provides related knowledge necessary for the accountant.

The content and emphasis of this program are guided by an advisory committee made up of working accountants and business people of the community. This committee's advice helps ensure that the accounting graduate is well prepared for employment in accounting or in a wide range of related positions in the insurance, real estate, banking, commercial, financial, and industrial areas.

It should be clearly understood by the student that this program is **not** designed to be a **transfer** program, but, rather a program that prepares students to enter directly into the ~~work force~~ *workforce*. Students interested in pursuing a four-year degree in accounting should see the *Transfer Programs* section of this catalog.

### Suggested Courses

First Semester	Credit Hours
BUSN 110 Introduction to Business	3
BUSN 116 Business Relations	3
BUSN 160 Business Math I	3
ACCT 170 Accounting Basics – Career I	3
ACCT 171 Accounting Basics I - Lab	1
CS 100 Intro to Computers	3

### Second Semester

BE 146 Microsoft Excel	3
ACCT 121 Accounting with QuickBooks I	2
ACCT 123 Accounting with QuickBooks II	2
ACCT 180 Accounting Basics – Career II	3
ACCT 181 Accounting Basics II – Lab	1
<del>ACCT 290 Payroll Accounting</del>	<del>3</del>
BUSN 220 Business Math II	3

### Third Semester

ACCT 102 Managerial Accounting	3
ACCT 104 Managerial Accounting Lab	1
<del>ACCT 250 Federal Income Tax</del>	<del>4</del>
<del>ACCT 208 Intermediate Accounting</del>	<del>4</del>
<del>ACCT 290 Payroll Accounting</del>	<del>3</del>
BL 202 Business Law II	3
<del>BUSN 220 Business Math II</del>	<del>3</del>

#### Fourth Semester

BUSN 266	Business Policy & Ethics	3
ACCT 208	Intermediate Accounting	4
<del>ACCT 240</del>	<del>Internal Controls and Fraud</del>	<del>3</del>
<del>ACCT 250</del>	<del>Federal Income Tax</del>	<del>4</del>
ACCT 263	Accounting Internship	3
ACCT 270	Data Analytics for Accounting	3
BE 180	Business Communications	3

Minimum total hours required for degree 60

Students enrolling in internship course must have prior approval of the coordinator.

#### Automotive Repair Technology

Associate in Applied Science Code: 9398

Contact [agriculture@bhc.edu](mailto:agriculture@bhc.edu) for information.

The Automotive Repair Technology program provides a proper balance of theory and practical knowledge for students preparing for careers in the automotive service industry. Graduates of the program may become employed as automotive mechanic technicians, transmission specialists, service managers, or service writers in automotive dealerships and automotive repair businesses.

The curriculum emphasizes laboratory diagnostic procedures in both domestic and foreign engines, electrical systems, transmissions, drive trains, suspension systems, computerized control systems, and electronic fuel control systems. Students will be prepared to take and expected to pass Automotive Service Excellence (ASE) certification tests in order to qualify for the work experience internship. Students will be placed in automotive dealerships and automotive repair businesses during the last semester of the program in order to gain on-the-job experience.

The Automotive Repair Certificate program provides practical knowledge of the component parts and the fundamentals of operation of the automobile as well as diagnostic and repair procedures. Classroom and laboratory instruction are provided. Students completing the certificate may be employed as brake specialists, wheel alignment and suspension specialists, air conditioning specialists, transmission specialists, or automotive repair specialists in automotive repair businesses and automotive dealerships. The Automotive Repair Certificate differs from the Automotive Repair Technology degree in that it is comprised of only auto and mechanics courses and may be completed in one year.

Enrollment in this program is limited. Students are required to provide their own basic set of tools. Information on admission requirements and required tools, and scholarship opportunities by emailing [agriculture@bhc.edu](mailto:agriculture@bhc.edu).

#### First Year

##### Suggested Courses

##### Fall Semester

		Credit Hours
AUTO 115	Wheel Alignment & Suspension	4
MECH 102	Brake and Hydraulic Systems	4
MECH 103	Electrical Systems I	4
MECH 111	Engine Repair I	3
TMAT 101	Technical Math I	3

##### Spring Semester

AUTO 107	Engine Performance I	4
MECH 108	Hydraulic Transmissions	3
MECH 109	Power Trains	3
MECH 203	Electrical Systems II	3
MECH 211	Engine Repair II	3

##### Summer Semester

AUTO 207	Engine Performance II	2
MECH 105	Fuel Control Systems	4
MECH 112	Mobile HVAC	2

#### Second Year

##### Fall Semester

MECH 213	Auto Shop Management	3
MECH 290	Work Exp Internship Seminar	1
CS 100	Intro to Computers	3
<del>Gen Ed Math/Computer Science</del>	<del></del>	<del>3</del>
Gen Ed Humanities, Social Science, Science, or Non-Western Studies		3
Gen Ed Communications		3

##### Spring Semester

AUTO 299	ASE Review	1
MECH 204	Electrical Systems III	3
MECH 291	Work Experience Internship	5
Gen Ed Humanities, Social Science, Science, or Non-Western Studies		3

Minimum total hours required for degree 67

Suggested electives: ART 100, ~~CS 100~~, COMM 100. SPEC 101, AG 288

#### Patient Care Assistant Certificate

Certificate Code: ~~5969~~ 5979

Contact [nurs@bhc.edu](mailto:nurs@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709.

*NOTE: This program is not financial aid eligible.*

This program is focused on those individuals who wish to pursue careers in health care which are short-term and expedite students into the workforce. Upon successful completion of the Patient Care Assistant Certificate, students would be eligible to take the State of Illinois Nurse Assistant Certificate Exam. While taking the career and technical coursework, the student receives support via Adult Education to ensure successful completion.

Students completing this program will be able to:

- Display Nursing Assistant knowledge at a competent level.
- Demonstrate safe phlebotomy skills

### Suggested Courses

First 8 weeks		Credit Hours
PCA 101	Med Term for Health Professions	3
PCA 103	Professional Skills Healthcare	1
PCA 200	Phlebotomy Skills	3
CES 100	College Experience and Success	1

Second 8 weeks		Credit Hours
NA 100	Basic Nurse Assistant Training	8

Total hours required for certificate **14 16**

### Court Reporting Technology

Associate in Applied Science Code: 5651

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

Do you think court reporting would be an exciting and rewarding career? It is! Court reporters play a vital and valued role in courtrooms, depositions, and other legal proceedings. It's an exciting, demanding, and rewarding career. The Court Reporting Technology program at Black Hawk College prepares individuals for successful careers as professional judicial reporters, broadcast captioners, and ~~computer-aided~~ *computer-aided* realtime transcriptionists (CART). Broadcast captioning displays the audio portion of a television program as text on the television screen, providing a critical link to news, entertainment, and information for individuals who are deaf or ~~hard-of-hearing~~ *hard of hearing*. Computer Aided Realtime Transcription (CART) is a method to provide access to spoken communication for people who are deaf, hard of hearing, or who have certain cognitive or learning impairments. Graduates of our Associate in Applied Science in Court Reporting Technology degree will be prepared to transcribe and create complete and accurate legal records while taking advantage of exciting internship opportunities.

Court reporting degree-seeking students obtain experience with realtime reporting techniques and technology during their core courses. Every court reporting degree student at Black Hawk College completes a supervised internship which provides an exciting opportunity for students to try potential career options before graduation. At the completion of the program, students are prepared to pass the Illinois Certified Shorthand Reporter (CSR) and the national Registered Professional Reporter (RPR)

exams. Interested students are encouraged to contact an advisor or faculty member for more information.

### Suggested Courses

#### First Semester (Fall)

CRT 105	Realtime Theory I – 8 weeks	16 weeks	3 5
ENG 101	Composition I		3
ENG 101C	Composition I		
<del>CRT 110</del>	<del>Realtime Theory II – 8 weeks</del>		<del>3</del>
Gen Ed	Elective Recommended from list below		3
CS 100	Intro to Computers		3

#### Second Semester (Spring)

CRT 110	Realtime Theory II – 8 weeks		3
CRT 115	Intro to Speed/Theory Review – 8 weeks		3
<del>CRT 120</del>	<del>Speedbuilding I – 8 week</del>		<del>3</del>
CRT 125	Court Reporting Tech/CAT		3
<del>ENG 101</del>	<del>Composition I</del>		<del>3</del>
ENG 101C	Composition I		
BL 150	Legal Terminology		3

#### Third Semester (Summer)

CRT 120	Speedbuilding I – 8 week		3
<del>CRT 140</del>	<del>Speedbuilding II</del>		<del>3</del>
<del>CRT 230</del>	<del>CRT Proofreading Skills</del>		<del>3</del>

#### Fourth Semester (Fall)

CRT 140	Speedbuilding II		3
CRT 160	Speedbuilding III – 8 weeks		3
<del>CRT 180</del>	<del>Speedbuilding IV – 8 weeks</del>		<del>3</del>
CRT 230	CRT Proofreading Skills		3
BE 180	Business Communications		3
<del>CRT 240</del>	<del>Courtroom Procedures</del>		<del>3</del>
<del>CRT 150</del>	<del>CRT Medical Terminology</del>		<del>3</del>
<del>SOC 102</del>	<del>Contemporary Social Problems</del>		<del>3</del>

#### Fifth Semester (Spring)

CRT 150	CRT Medical Terminology		3
CRT 180	Speedbuilding IV – 8 weeks		3
CRT 240	Courtroom Procedures		3
SOC 102	Contemporary Social Problems		3

#### Sixth Semester (Summer)

CRT 200	Speedbuilding V		3
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#### Seventh Semester (Fall)

CRT 225	Speedbuilding VI		3
CRT 265	Court Reporting Internship		3 1
<del>BE 180</del>	<del>Business Communications</del>		<del>3</del>

Minimum total hours required for degree **60**

Ged Ed Electives Recommended: BUSN 110, SPEC 114, SPEC 175, PHIL 100, 101, 103

<del>*ART 290 Applications in Computer Art</del>	<del>3</del>
Mathematics Elective	3

#### Fourth Semester

ART 282	History of Western Art II	3
ART	Studio Elective	3
SOC 101	Principles of Sociology	3
	Humanities Elective	3
	Humanities Elective	3

*Minimum total hours required for degree* 62

\* Recommended studio course

### Cybersecurity

*Associate in Applied Science Code: 5289*

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

Cybersecurity is a vital component of “best practices” for businesses, industry, and government, and the demand for trained professionals in the field will continue to grow. The Cybersecurity program at Black Hawk College is designed to prepare individuals with the knowledge and skills for a successful career in this important and dynamic arena.

Cybersecurity professionals are tasked with protecting information confidentiality, integrity, and availability by configuring and maintaining network routers, firewalls and intrusion-detection systems, detecting and minimizing security vulnerabilities, maintaining secure remote communication and implementing corporate security policy. Students in the program will gain hands-on experience in these skills, as well as broad background training that includes computer hardware, networking, operating systems, and programming and scripting courses. Course content is shaped by an Advisory board made up of local IT and business professionals, who regularly review the curriculum and offer input, to ensure the program maintains relevance with industry trends.

Students who complete the Cybersecurity AAS degree will have served an internship to enhance classroom training with real-world experience. They will also have the opportunity to earn several industry certifications, including CompTIA A+, Network+ and Security+ and Cisco CCNA.

Interested students are encouraged to contact an advisor or faculty member for more information.

#### Suggested Courses

##### First Semester

ITS 116	Computer Hardware	3
ITS 125	IT Professional Skills	1
CIP 214 C	Programming	3
NETW 125	Introduction to Networks	4

### Associate in Fine Arts

**Associate in Fine Arts Code: 1245**

**Total minimum credits required: 62**

Contact [artdesign@bhc.edu](mailto:artdesign@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

The Associate in Fine Arts in Art provides preparation for students planning to major in art at a four-year institution pursuing the BFA in Art. It is also appropriate for those who seek foundation-level training to work as a fine artist, graphic designer, illustrator, media designer, or animator. This degree includes successful completion of ~~ART 200 Special Topics in Art~~ *ART 289 Portfolio Development* the semester prior to graduation, and the satisfactory evaluation of a final graduation portfolio that is representative of art program coursework at Black Hawk College. Students will meet with a program advisor to determine career/transfer objectives and assess portfolio needs/strengths. Additional coursework or internships may be advised to strengthen portfolio work or develop additional skills.

All Design fields and most BFA Studio programs require a second semester portfolio review prior to being admitted to the degree program. Demonstrated proficiency and specific grade point averages may be required. Most coursework will be accepted but additional work to strengthen the portfolio may be required prior to admission thus delaying the time to degree completion. Students are strongly encouraged to contact their preference of transfer institution prior to their sophomore year for specific admission advice.

Each student who is awarded an Associate in Fine Arts degree by the College shall have completed thirty-seven (37) credit hours of general education:

#### First Semester

	Credit Hours
ART 101 2-Dimensional Design	3
ART 121 Drawing I	3
ENG 101 Composition I <i>or</i>	
ENG 101C Composition I	3
PSYC 101 Intro to Psychology	3
Physical Science Elective	3

#### Second Semester

ART 111 3-Dimensional Design	3
ART 122 Drawing II	3
SPEC 101 Principles of Speech Communica	3
ENG 102 Composition II	3
Life Science Elective	4

#### Third Semester

<del>ART 200 Special Topics in Art</del>	<del>1</del>
<i>ART 190 Introduction to Computer Arts</i>	3
ART 201 Life Drawing	3
ART 213 Digital Photography	3
ART 281 History of Western Art I	3
<i>ART 289 Portfolio Development</i>	1

Gen Ed Communications	3
<b>Second Semester</b>	
ITS 112 Operating Systems	3
NETW 145 Switching, Routing, & Wireless	4
NETW 170 Intro to Information Security	3
NETW 215 Windows Server	3
Gen Ed Math & Science	3

### Third Semester

ITS 212 Linux Shell Programming	3
NETW 167 PowerShell	3
*Technical Elective	3
Gen Ed Humanities, Social Sciences, Science or Non-Western Studies	6

### Fourth Semester

NETW 274 Ethical Hacking/Security+ Prep	3
NETW 280 Cisco CCNA Security	3
NETW 290 IT Internship	3
*Technical Elective	3
Gen Ed Humanities, Social Sciences, Science or Non-Western Studies	3

*Minimum total hours required for degree:* 60

\*Technical Electives – 6 credits

ITS 118 Computer Troubleshooting	3
ITS 216 Advanced PC Hardware/A+ Prep	3
NETW 255 Advanced Networking/N+ Prep	3
NETW 265 Enterprise Net.Sec./Automation	4

## Network+ Prep Certificate

*Certificate Code: 5656*

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709

*NOTE: This program is not financial aid eligible.*

~~For students who have industry~~ For students who have an industry background or knowledge, the Network+ Prep certificate offers preparation for the CompTIA Network+ certification exam, which is the leading vendor-neutral certification for networking professionals. Topics covered include network technologies, media and topologies, devices, management tools and security. Employment opportunities with this certificate include network administrator, network technician, network installer, help desk technician, and IT cabling installer. Students who feel they may have sufficient background or knowledge to be successful in one of these abbreviated programs are strongly encouraged to contact one of the program instructors prior to enrolling, to discuss the required skill sets.

## Suggested Courses

First Semester	Credit Hours
NETW 120 Basic Computer Networks <i>or</i>	3
NETW 125 Introduction to Networks	4
NETW 170 Intro to Information Security	3
NETW 215 Windows Server - <i>spring only</i>	3
NETW 255 Advanced Networking/N+ Prep	3
<i>Minimum total hours required for certificate</i>	12

## Engineering Technology

*Associate in Applied Science Code: 5187*

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709.

The Engineering Technology degree program will allow students to enter into a wide range of career fields within industrial settings after two years of study while also providing the option of university transfer upon graduation. After completing the first year of common courses in the Fundamentals of AutoCAD, DC circuits, machining, PC applications in technology, hydraulics/pneumatics and technical math and calculus, students will have the opportunity to focus on any track from three fields of engineering technology: electrical, mechanical and manufacturing. Students with employment or job shadow opportunity in a technical field will be able to do technology-based practicum or internships in an industrial setting.

Students will learn the required skills to take manufacturing or engineering designs from concept to completion. Opportunities for employment exist for engineering technicians in aerospace, electrical and electronic, maintenance, industrial, mechanical, electro-mechanical, environmental, and civil engineering fields.

Note: ENGT and MATH courses in this degree are offered only once per year. Some courses require a specific sequence. To complete this degree within 2 years, please follow the recommended Track outline. This program is intended to start in the Fall. See faculty contact person to discuss alternatives.

## Engineering Technology Tracks

### Electrical Track

Students who complete this track will be able to:

- Demonstrate a general knowledge of MS Office (Word, Excel, PowerPoint), Technical Math (algebra, trigonometry, geometry, differential and integral calculus) hydraulics, blueprint reading.
- Gain introductory skills in analysis and measurement of passive and reactive circuits, Process Control, programming, and PLCs.

## Suggested Courses



analysis in structures and machines, and strength of materials.

**Suggested Courses**

<b>First Semester</b>		<b>Credit Hours</b>
ENGT 100	Intro to Engineering Tech	1
ENGT 101	Blueprint/Schematic Reading	3
ENGT 102	Introduction to 2D-CAD	2
ENGT 103	Fundamentals of DC Circuits	3
<del>ENGT 104</del>	<del>Fundamentals of Machining</del>	<del>2</del>
<i>ENGT 104</i>	<i>Intro to Manufacturing</i>	2
CS 100	Intro to Computers	3
MATH 123	Technical Algebra/Trigonometry	4

**Second Semester**

ENG 101	Composition I <i>or</i>	3
ENG 101C	Composition I <i>or</i>	
COMM 100	Communication Skills	3
ENGT 150	Hydraulics/Pneumatics	3
MATH 223	Technical Calculus	4
PHYS 101	College Physics I	5

**Third Semester**

ENGT 186	Introductory CNC	3
ENGT 224	Computer Programming	3
ENGT 231	CNC Lathe Setup and Operation	3
ENGT 232	CNC Mill Setup and Operation	3
ENGT 280	Precision Measurement	3
GT 200	Independent Study	1

**Fourth Semester**

ENGT 180	Introduction to Machine Shop	3
ENGT 236	CNC Manual Programming	3
ENGT 283	GD&T Interpretation	3
ENGT 286	Advanced CNC with CAM	3
ENGT 290	Engineering Tech Internship	3

*Minimum total hours required for degree* 64

**Engineering Technology Tracks  
Mechanical Track**

Students who complete this track will be able to:

- Demonstrate a general knowledge of MS Office (Word, Excel, PowerPoint), Technical Math (algebra, trigonometry, geometry, differential and integral calculus) hydraulics, blueprint reading.
- Demonstrate knowledge and application of interpreting engineering drawings, machine operations, Lathe machine, milling machine, CNC programming, and CNC machine operation.

**Suggested Courses**

<b>First Semester</b>		<b>Credit Hours</b>
ENGT 100	Intro to Engineering Tech	1
ENGT 101	Blueprint/Schematic Reading	3

<b>First Semester</b>		<b>Credit Hours</b>
ENGT 100	Intro to Engineering Tech	1
ENGT 101	Blueprint/Schematic Reading	3
ENGT 102	Introduction to 2D-CAD	2
ENGT 103	Fundamentals of DC Circuits	3
<del>ENGT 104</del>	<del>Fundamentals of Machining</del>	<del>2</del>
<i>ENGT 104</i>	<i>Intro to Manufacturing</i>	2
CS 100	Intro to Computers	3
MATH 123	Technical Algebra/Trigonometry	4

**Second Semester**

ENGT 150	Hydraulics/Pneumatics	3
ENGT 163	Fundamentals of AC Power	3
ENGT 168	Logic Systems I	3
ENGT 210	Mechatronics I	3
MATH 223	Technical Calculus	4

**Third Semester**

ENG 101	Composition I <i>or</i>	3
ENG 101C	Composition I <i>or</i>	
COMM 100	Communication Skills	
ENGT 106	Sustainable Energy Systems I	3
ENGT 218	Programmable Logic Controllers	3
ENGT 224	Computer Programming	3
ENGT 260	Mechatronics II	3

**Fourth Semester**

ENGT 215	Experimental Testing Systems	3
ENGT 263	Topics in Engineering Tech	3
ENGT 268	Engineering Technology Project	3
PHYS 101	College Physics I	5
<sup>1</sup> Engineering Technology Elective		1

*Minimum total hours required for degree* 64

<sup>1</sup>Choose electives from the appropriate tracks below.

**<sup>1</sup>Electrical Track Electives**

ENGT 120	Introduction to Nanomaterials	2
ENGT 130	Introduction to Biomaterials	2
ENGT 290	Engineering Tech Internship	3
GT 200	Independent Study	1

**Engineering Technology Tracks  
Manufacturing Track**

Students who complete this track will be able to:

- Demonstrate a general knowledge of MS Office (Word, Excel, PowerPoint), Technical Math (algebra, trigonometry, geometry, differential and integral calculus) hydraulics, blueprint reading.
- Demonstrate knowledge and application of 2D computer-aided drawing, orthographic views, line styles, dimensioning styles, auxiliary views, sectional views, GD&T, symbols, layout, and title block, 3D computer-aided solid modeling, basic tools, extrude tool, revolve tool, patterns, parts assembly, working drawings from solid models, interpreting engineering drawings, basic hydraulics and machines, stress

ENGT 102	Introduction to 2D-CAD	2
ENGT 103	Fundamentals of DC Circuits	3
<del>ENGT 104</del>	<del>Fundamentals of Machining</del>	<del>2</del>
<i>ENGT 104</i>	<i>Intro to Manufacturing</i>	2
CS 100	Intro to Computers	3
MATH 123	Technical Algebra/Trigonometry	4

### Second Semester

ENGT 150	Hydraulics/Pneumatics	3
ENGT 172	AutoCAD I	3
MATH 223	Technical Calculus	4
PHYS 101	College Physics I	5

### Third Semester

ENG 101	Composition I <i>or</i>	3
ENG 101C	Composition I <i>or</i>	
COMM 100	Communication Skills	
ENGT 170	Engineering Materials ( <i>elective</i> )	3
ENGT 224	Computer Programming	3
ENGT 226	3D-CAD Modeling with Creo ( <i>elective</i> )	3
ENGT 290	Engineering Tech Internship ( <i>elective</i> )	3

### Fourth Semester

ENGT 222	AutoCAD II – 3D Graphics ( <i>elective</i> )	3
ENGT 270	Statics & Strength of Material ( <i>elective</i> )	4
ENGT 272	Advanced 2D-CAD ( <i>elective</i> )	3
ENGT 274	CAD Design and Modeling Project ( <i>elect.</i> )	3
ENGT 276	Advanced 3D-CAD ( <i>elective</i> )	3

Minimum total hours required for degree 64

<sup>1</sup>Choose electives from the appropriate tracks below.

### Mechanical Track Electives

ENGT 120	Introduction to Nanomaterials	2
ENGT 130	Introduction to Biomaterials	2
ENGT 186	Introductory CNC	3
ENGT 190	Engineering Tech Practicum	2

## Engineering Technology Fundamentals Certificate

Certificate Code: 5782

Contact [bcengt@bhc.edu](mailto:bcengt@bhc.edu) for information; Advising Center, 309-796-5100, Rm 1-213; East Campus Advising Center, 309-854-1709.

Graduates of the Engineering Technology Fundamentals Certificate program will be equipped to operate in the new technological environment and will have a valuable skill that employers need to remain competitive in the global market.

Coursework	Credit Hours	
ENGT 100	Intro to Engineering Tech	1
ENGT 101	Blueprint/Schematic Reading	3
ENGT 102	Introduction to 2D-CAD	2
ENGT 103	Fundamentals of DC Circuits	3
<del>ENGT 104</del>	<del>Fundamentals of Machining</del>	<del>2</del>
<i>ENGT 104</i>	<i>Intro to Manufacturing</i>	2
CS 100	Intro to Computers	3
ENGT 150	Hydraulics/Pneumatics	3

MATH 123	Technical Algebra/Trigonometry	4
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Minimum total hours required for a certificate 21

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Students must successfully document and meet all health and background checks required by academic programs and/or clinical sites prior to admission to program and/or courses.

### Associate Degree Nursing

Pre-Requisite Courses	Credit Hours	
BIOL 145	Anatomy-Physiology I	4
PHIL 100	Logic <i>or</i>	3
<i>one of the following MATH classes:</i>		
MATH 108	Statistics for General Education	3
MATH 108C	Statistics for General Education	3
MATH 110	Math for General Education	3
MATH 110C	Math for General Education	3
MATH 112	College Algebra	4
MATH 112C	College Algebra	4
MATH 116	Trigonometry	3
MATH 118	Precalculus	5

### First Semester (Level I)

BIOL 146	Anatomy-Physiology II	4
NURS 112	Nursing Concepts I	10
NURS 138	Intro to Professional Nursing	1