

CAREER STUDIES CERTIFICATES

Many specialized certificates are available for students who wish to pursue a special interest course of study. Each Career Studies curriculum is usually equivalent to one semester of full-time community college work. However, completion time varies for each student and each certificate.

Admission Requirements: Career Studies students apply for admission to the College and register for the appropriate classes.

To be eligible for graduation, a student must:

1. fulfill all course and credit-hour requirements specified in the program option (approved courses may be substituted for minimum requirements);
2. earn a minimum of 25% of the credits required at Blue Ridge Community College;
3. earn a minimum grade point average of 2.0;
4. resolve all financial obligations to the College;
5. complete an Application for Graduation form in the Admissions and Records Office.

Students who complete requirements for Career Studies Certificates are not eligible for graduation honors. Appropriate courses taken in this program may be applicable toward other programs at the College. Students may be eligible to receive credit for some courses in these curricula through the College's advanced standing process.

Alternative Energy

Award: Career Studies Certificate

Purpose: to provide entry-level knowledge and skills in the fundamentals of alternative energy. This career studies certificate provides the minimum preparation for employment in the new 'green' jobs section, which are expected to heavily involve the installation of residential solar (hot water and electric), wind electric, and cogeneration systems.

| Course No. | Title | Credits |
|-------------------------------|--|----------|
| EGR 115 | Engineering Graphics | 3 |
| ELE 123 | Electrical Applications I | 2 |
| EGR 195 | Topics in Residential Wind Generation | 1 |
| EGR 195 | Topics in Residential Solar Water Heating System | 1 |
| EGR 295 | Topics in Residential Photovoltaic System | 1 |
| EGR 295 | Topics in Residential Waste Cooking Oil System | 1 |
| Total credits required | | 9 |

American Sign Language

Purpose: to provide a basic knowledge of American Sign Language and deaf culture. The completed career studies certificate will provide a foundation for those students who wish to pursue more advanced preparation for ASL interpreter certification.

| Course No. | Title | Credits |
|-------------------------------|----------------------------|----------|
| ASL 101 | American Sign Language I | 3 |
| ASL 102 | American Sign Language II | 3 |
| ASL 201 | American Sign Language III | 3 |
| Total credits required | | 9 |

Applications in Corrections

Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both officers working in the corrections field as well as those who aspire to careers in corrections. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice with a specialization in Corrections.

| Course No. | Title | Credits |
|-------------------------------|---------------------------------------|-----------|
| ADJ 100 | Survey of Criminal Justice | 3 |
| ADJ 145 | Corrections and the Community | 3 |
| ADJ 147 | Local Adult Detention Facilities | 3 |
| ADJ 245 | Management of Correctional Facilities | 3 |
| ADJ 248 | Probation, Parole and Treatment | 3 |
| ADJ | Elective ^a | 3 |
| ITE 119 | Information Literacy | 3 |
| Total credits required | | 21 |

^a SPA 150 may also be used.

Applications in Law Enforcement

Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both in-service officers and those aspiring to criminal justice careers. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice.

| Course No. | Title | Credits |
|-------------------------------|---------------------------------------|-----------|
| ADJ 100 | Survey of Criminal Justice | 3 |
| ADJ 110 | Introduction to Law Enforcement | 3 |
| ADJ 236 | Principles of Criminal Investigation | 3 |
| ADJ 211 | Criminal Law Evidence and Procedure I | 3 |
| ADJ 228 | Narcotics and Dangerous Drugs | 3 |
| ADJ 232 | Domestic Violence | 3 |
| ADJ | Elective ^a 3 | |
| ITE 119 | Information Literacy | 3 |
| Total credits required | | 24 |

^a SPA 150 may also be used.

Art: Introduction to Two-Dimensional Art

Purpose: to provide a foundation for individuals interested in two-dimensional art for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

| Course No. | Title | Credits |
|---|------------------------------------|-----------|
| ART 101 | History and Appreciation of Art I | 3 |
| | or | |
| ART 102 | History and Appreciation of Art II | (3) |
| ART 121 | Drawing I3 | |
| ART 122 | Drawing II3 | |
| Plus two electives from the following: | | |
| ART 241 | Painting I(3) | |
| ART 242 | Painting II(3) | |
| ART 243 | Watercolor I | (3) |
| ART 244 | Watercolor II | (3) |
| Total credits required | | 15 |

Art: Introduction to Three-Dimensional Art

Purpose: to provide a foundation for individuals interested in the three-dimensional arts for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

| Course No. | Title | Credits |
|--|------------------------------------|-----------|
| ART 101 | History and Appreciation of Art I | 3 |
| | or | |
| ART 102 | History and Appreciation of Art II | (3) |
| ART 121 | Drawing I | 3 |
| ART 132 | Fundamentals of Design II | 3 |
| ART 153 | Ceramics I3 | |
| Plus one elective from the following: | | |
| ART 154 | Ceramics II | (3) |
| ART 235 | Functional Ceramics | (3) |
| ART 236 | Sculptural Ceramics | (3) |
| Total credits required | | 15 |

Automation in Manufacturing Engineering

Purpose: to provide students with the fundamental knowledge and skills necessary for employment or professional development in an automated manufacturing environment with focus on computer integrated manufacturing and sensor input/output process control systems. This career studies certificate prepares students for manufacturing occupations such as control technician, instrumentation technician, manufacturing technologist, electromechanical technician, and industrial technician. Upon completion of the career studies certificate, credits may be applied toward the A.A.S. degree with a specialization in Technical Studies in Manufacturing Engineering Technology.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| IND 165 | Principles of Industrial Technology I | 4 |
| IND 166 | Principles of Industrial Technology II | 4 |
| CAD 140 | Technical Drawing | 3 |
| ETR 113 | DC and AC Fundamentals I | 4 |
| IND 250 | Introduction to Basic Computer | 3 |
| ETR 114 | Integrated Manufacturing | 4 |
| ETR 237 | DC and AC Fundamentals II | 3 |
| IND 251 | Automation in Manufacturing Systems | 4 |
| Total credits required | | 29 |

Basic Office Skills

Purpose: to provide students with an opportunity to acquire basic skills for entry-level positions in the 21st century office environment. Studies will include foundational computer hardware and software knowledge, keyboarding, word-processing and document production, spreadsheets and fundamental accounting procedures, and essential office procedures. Once completed, courses in this career studies certificate may be applied toward other programs offered by the College, such as the A.A.S. degree in Management, with an Administrative Assistant and Business Information Specialist specialization.

| Course No. | Title | Credits |
|-------------------------------|----------------------------|-----------|
| ACC 211 | Principles of Accounting I | 3 |
| | or | |
| ACC 115 | Applied Accounting | (3) |
| AST 102 | Keyboarding II | 3 |
| AST 243 | Office Administration I | 3 |
| BUS 100 | Introduction to Business | 3 |
| ENG 111 | College Composition I | 3 |
| | or | |
| ENG 137 | Communication Processes I | (3) |
| ITE 119 | Information Literacy | 3 |
| Total credits required | | 18 |

Commercial Driving

Purpose: to provide students with the knowledge and skills necessary for employment as licensed Class A commercial tractor trailer drivers.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| TRK 101 | DOT Safety Rules and Regulations | 2 |
| TRK 102 | Preventive Maintenance for Truck Drivers | 1 |
| TRK 103 | Tractor Trailer Driving | 9 |
| Total credits required | | 12 |

Computer-Aided Drafting

Purpose: to train students in the fundamentals of design and drafting and the use of computer software applications in various drafting disciplines. This career studies certificate provides the minimum preparation for employment as a draftsman or CAD operator.

| Course No. | Title | Credits |
|-------------------------------|-------------------------------|-----------|
| CAD 140 | Technical Drawing | 3 |
| CAD 241 | Parametric Solid Modeling I | 3 |
| CAD 242 | Parametric Solid Modeling II | 3 |
| ARC 121 | Architectural Drafting I | 3 |
| | or | |
| CAD 243 | Parametric Solid Modeling III | (3) |
| Total credits required | | 12 |

Computer Applications for Professionals

Purpose: to provide faculty in local elementary, middle, and secondary schools with instructional technology applications skills. Standards of Learning (SOLs) established for schools are the basis for course content. The course content and career studies certificate are valuable for other professionals who need to use presentation, Internet and other software applications.

| Course No. | Title | Credits |
|-------------------------------|--|----------|
| ITE 193 | Introduction to Microcomputer Software | 3 |
| | or | |
| ITE 119 | Information Literacy | (3) |
| ITE 130 | Introduction to Internet Services | 3 |
| ITE 298 | Seminar and Project | 3 |
| Total credits required | | 9 |

Computer Help Desk

Purpose: to provide students with both the technical skills and the interpersonal skills needed to be successful in a help desk support position. The goal of the course content and the career studies certificate is to include up-to-date information and technology that is currently used by many help desk professionals in today's workforce. Following the completion of the program, graduates will be prepared for an entry-level position in a help desk support role.

| Course No. | Title | Credits |
|-------------------------------|---|-----------|
| BUS 270 | Interpersonal Dynamics in the Business Organization | 3 |
| ITE 105 | Career and Cyber Ethics | 2 |
| ITE 119 | Information Literacy | 3 |
| ITE 182 | User Support/Help Desk Principles | 3 |
| ITE 140 | Spreadsheet Software | 3 |
| | or | |
| ITD 130 | Database Fundamentals | (3) |
| ITN 106 | Microcomputer Operating Systems ^a | 3 |
| ITN 103 | Administration of Networked Servers | 3 |
| ITN 260 | Networking Security Basics | 3 |
| Total credits required | | 23 |

^a Cross-listed as ETR 164 Upgrading and Maintaining PC Hardware.

Computer Network Technologies

Purpose: to provide students with fundamental knowledge and skills in data communications, computer systems, LAN (Local Area Network) architecture and administration. The program emphasizes the importance of certification and assists students to prepare for certification exams.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| ITE 182 | User Support/Help Desk | 3 |
| ITN 106 | Microcomputer Operating Systems ^a | 3 |
| ITN 208 | Protocols and Communications ^b | 4 |
| ITE 119 | Information Literacy | 3 |
| ITN 103 | Administration of Networked Servers | 3 |
| ITN 151 | Introductory Routing and Switching | 3 |
| ITN 260 | Network Security Basics | 3 |
| Total credits required | | 22 |

^a Cross-listed as ETR 164.

^b Cross-listed as ETR 225.

Computer Science

Purpose: to provide the student the opportunity to undertake a foundational curriculum in Computer Science. These courses form the requisite lower division requirements at most institutions in Computer Science. This certificate follows the guidelines outlined in Association for Computing Machinery Associate Degree in Computer Science (2003).

| Course No. | Title | Credits |
|-------------------------------|----------------------------|-----------|
| ITE 105 | Career and Cyber Ethics | 2 |
| ITP 120 | Java Programming I | 4 |
| ITP 220 | Java Programming II | 4 |
| ITP 200 | Data Structures | 4 |
| ITP 258 | System Development Project | 3 |
| Total credits required | | 17 |

E-Commerce for Small Business

Purpose: The E-Commerce for Small Business Career Studies Certificate provides students with an opportunity to acquire the skills to implement and use computer application packages for business and managerial functions. Students may begin with the certificate and continue their studies to complete the A.A.S. degree in Information Systems Technology.

| Course No | Title | Credits |
|-------------------------------|-----------------------------------|-----------|
| BUS 100 | Introduction to Business | 3 |
| ITE 119 | Information Literacy ^a | 3 |
| ITE 160 | Introduction to E-Commerce | 3 |
| ITD 110 | Web Page Design I | 3 |
| ACC 115 | Applied Accounting | 3 |
| ITD 130 | Database Fundamentals | 3 |
| ITD 210 | Web Page Design II | 3 |
| ITD 196 | Capstone Project in E-Commerce | 3 |
| ITD 220 | E-Commerce Administration | 3 |
| Total credits required | | 27 |

^a ITE 119 is a prerequisite to all other IST courses and should be taken in the first semester.

Electrical Control Fundamentals

Purpose: to provide students, who already possess an understanding of electrical fundamentals, further instruction into the areas of electrical control and programmable logic control. This career studies certificate prepares students for entry-level positions as controls or instrument technicians in manufacturing.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| ETR 112 | Math Applications for ELE/ETR Analysis | 2 |
| INS 110 | Principles of Instrumentation | 3 |
| ELE 156 | Electrical Controls Systems | 3 |
| ETR 237 | Industrial Electronics I | 3 |
| SAF 127 | Industrial Safety | 2 |
| Total credits required | | 13 |

Electrical Fundamentals

Purpose: to provide students with a strong foundation in electrical principles, both A.C. & D.C., and to familiarize students with basic applications. This career studies certificate prepares students for entry-level technical positions in manufacturing that focus on electrical applications.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| ETR 112 | Math Applications for ELE/ETR Analysis | 2 |
| ELE 113 | Electricity I | 3 |
| ELE 123 | Electrical Applications I | 2 |
| ELE 114 | Electricity II | 3 |
| ELE 124 | Electrical Applications II | 2 |
| SAF 127 | Industrial Safety | 2 |
| Total credits required | | 14 |

Entrepreneurship

Purpose: to provide students with the opportunity to acquire the knowledge and skills needed to become an entrepreneur, rather than employee or manager. Students will learn how to plan, implement, and monitor a new business, understand market and capital economies, and will fully explore the role of globalization in the marketplace.

| Course No. | Title | Credits |
|-------------------------------|--------------------------------|-----------|
| ACC 115 | Applied Accounting | 3 |
| BUS 165 | Small Business Management | 3 |
| BUS 241 | Business Law | 3 |
| BUS 226 | Computer Business Applications | 3 |
| ITE 119 | Information Literacy | 3 |
| FIN 215 | Financial Management | 3 |
| ITE 160 | Introduction to E-Commerce | 3 |
| MKT 100 | Principles of Marketing | 3 |
| Total credits required | | 24 |

Fundamentals of Business

Purpose: to provide students with the opportunity to acquire basic skills and knowledge in business operations. This would include areas in business such as marketing, information technology, and the basic foundations of business operations. Each of the courses in this certificate could lead to an advanced certificate and eventually to the Associates degree in Business Management.

| Course No. | Title | Credits |
|-------------------------------|--------------------------|-----------|
| BUS 100 | Introduction to Business | 3 |
| BUS 200 | Principles of Management | 3 |
| ITE 119 | Information Literacy | 3 |
| MKT 100 | Principles of Marketing | 3 |
| Total credits required | | 12 |

Gerontology

Purpose: to promote an understanding of the aging process, discuss disease processes unique to this age group, and to provide resources for care givers that will improve the care for the elder members of society. Participation in this program will provide opportunities for continuing education credits for healthcare providers. Completion of this certificate program will result in graduates who make a difference in the community, augment skills and/or provide skills necessary for entry level healthcare jobs.

| Course No. | Title | Credits |
|-------------------------------|---|-----------|
| HMS 236 | Gerontology | 3 |
| HLT 230 | Principles of Nutrition and Human Development | 3 |
| HLT 272 | Medical Management of the Older Adult | 3 |
| HMS 238 | Selected Topics in Aging | 3 |
| HLT 271 | Physical Care Management of the Older Adult | 3 |
| HMS 106 | Working with Death and Dying | 3 |
| Total credits required | | 18 |

Graphic Design

Purpose: to provide the educational background and skills in graphic design for entry level positions in graphic communications and graphic design. These courses generally transfer to a four-year college or university.

| Course No. | Title | Credits |
|-------------------------------|--------------------------|-----------|
| ART 121 | Drawing I | 3 |
| ITD 110 | Web Page Design I | 3 |
| ART 131 | Fundamentals of Design I | 3 |
| PHT 264 | Digital Photography | 3 |
| ART 283 | Computer Graphics I | 3 |
| ART 284 | Computer Graphic II | 3 |
| Total credits required | | 18 |

Horticulture

Purpose: to provide the knowledge and skills needed for entry-level positions in horticulture. This program is also appropriate for individuals who desire personal enrichment.

| Course No. | Title | Credits |
|-------------------------------|-------------------------------|-----------|
| HRT 116 | Home Horticulture | 3 |
| HRT 126 | Home Landscaping | 3 |
| HRT 260 | Introduction to Floral Design | 3 |
| HRT 226 | Greenhouse Management | 3 |
| HRT 207 | Plant Pest Management | 3 |
| HRT | Elective | 3 |
| Total credits required | | 18 |

Human Services Program Support Specialist

Purpose: to provide the knowledge and skills needed for entry-level positions in the human services field as well as incumbent employees interested in advancement to Benefits Eligibility Specialist and Program Support positions.

| Course No. | Title | Credits |
|-------------------------------|--------------------------------|-----------|
| ITE 119 | Information Literacy | 3 |
| ENG 137 | Communication Processes I | 3 |
| HMS 100 | Introduction to Human Services | 3 |
| MEN 101 | Mental Health Skills Training | 3 |
| SOC 215 | Sociology of the Family | 3 |
| SOC 266 | Minority Group Relations | 3 |
| HMS 190 | Coordinated Internship | 2 |
| Total credits required | | 20 |

Information Technology

Purpose: to provide the student with an opportunity to explore various technical areas within Information Technology. These courses will provide an overview of the discipline for those interested in expanding their knowledge but will also provide an appropriate background for continuing academic studies. This certificate follows the guidelines for transfer options in Information Systems prepared by the Association for Computing Machinery Two-Year College Education Committee.

| Course No | Title | Credits |
|-------------------------------|------------------------------|-----------|
| ITP 120 | Java Programming I | 4 |
| ITN 208 | Protocols and Communications | 3 |
| ITP | Programming elective a | 4 |
| ITD 130 | Database Fundamentals | 3 |
| ITE 105 | Careers and Cyber Ethics | 2 |
| ITP 258 | System Development Project | 3 |
| Total credits required | | 19 |

^a Students should select from one of the following: ITP 110, ITP 220.

Leadership and Supervision

Purpose: to provide students with an opportunity to acquire basic skills and knowledge in the areas of Leadership and Supervision. Studies will include topics in leadership skills, problem solving, decision making, effective communications, dealing with conflict and employee relations, delegation, motivation, time management, team building, process improvement and others. Once completed, courses in this career studies certificate may be applied toward the A.A.S. degree in Business Management.

| Course No. | Title | Credits |
|-------------------------------|---|-----------|
| BUS 118 | Concepts of Supervision | 3 |
| BUS 100 | Introduction to Business | 3 |
| ENG 137 | Communication Processes I | 3 |
| | or | |
| ENG 111 | College Composition I | (3) |
| ITE 119 | Information Literacy | 3 |
| ECO 120 | Survey of Economics ^a | 3 |
| BUS 200 | Principles of Management | 3 |
| BUS 270 | Interpersonal Dynamics in the Business Organization | 3 |
| ENG 138 | Communication Processes II | 3 |
| | or | |
| ENG 112 | College Composition II | (3) |
| Total credits required | | 24 |

^a Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 202.

Light Sport Aircraft Mechanic

Purpose: to provide students with the content and skills needed to operate and maintain light sport aircraft. Full-time students may complete the program in two semesters; part-time students determine their own pace.

| Course No. | Title | Credits |
|-------------------------------|---|----------|
| AMT 171 | Light Sport Aircraft Regulations | 1 |
| AMT 173 | Light Sport Aircraft General Airframe | 1 |
| AMT 175 | Light Sport Aircraft Engines and Propellers | 1 |
| AMT 177 | Light Sport Aircraft Class | 1 |
| AMT 178 | Light Sport Aircraft Maintenance and Training | 1 |
| ARO 120 | Light Sport Aircraft Ground School | 3 |
| ARO 290 | Coordinated Internship in Aviation | 1 |
| Total credits required | | 9 |

Manufacturing Management and Productivity

Purpose: to provide a broad overview of the three major areas involved in the day-to-day operations of a manufacturing facility, including economics and financial management, and human resource utilization. The completed career studies certificate will provide a foundation for those students seeking further study in the area of manufacturing management.

| Course No. | Title | Credits |
|-------------------------------|---|----------|
| BUS 200 | Principles of Management | 3 |
| BUS 270 | Interpersonal Dynamics in the Business Organization | 3 |
| EGR 206 | Engineering Economics | 3 |
| Total credits required | | 9 |

Mechanical Maintenance Technology

Purpose: to provide students with an understanding and training in mechanical systems found in a manufacturing environment, including: mechanical drives, hydraulics and pneumatics. This career studies certificate prepares students for positions in industrial maintenance.

| Course No. | Title | Credits |
|-------------------------------|---|-----------|
| MAC 195 | Math Applications for Mechanisms | 2 |
| CAD 161 | Blueprint Reading I ^a | 2 |
| MAC 156 | Mechanisms I | 3 |
| MAC 157 | Mechanisms II | 3 |
| MEC 161 | Basic Fluid Mechanics - Hydraulics/Pneumatics | 4 |
| Total credits required | | 14 |

^a Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.

Medical Coding—Hospital

Purpose: to provide students with fundamental knowledge and skills in health records, medical coding, and reimbursement processes. The program's primary focus is on ICD-9/10 coding for hospital applications and preparation for the Certified Coding Associate and/or Certified Coding Specialist exams.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| HLT 143 | Medical Terminology I | 3 |
| BIO 141 | Anatomy and Physiology I | 4 |
| HIM 253 | Coding for Health Records (Emphasizes ICD-9/10) | 4 |
| HLT 144 | Medical Terminology II | 3 |
| BIO 142 | Anatomy and Physiology II | 4 |
| HIM 254 | Advanced Coding and Reimbursement (Emphasizes CPT) | 4 |
| HIM 190 | Coordinated Internship | 2 |
| Total credits required | | 24 |

Multimedia Development and Integration

Purpose: to provide faculty in local elementary, middle, and secondary schools, as well as Technology Resource Teachers (TRTs) with advanced instructional technology applications skills. The career studies certificate will fulfill their technology requirements for recertification. The course content and career studies certificate provide valuable knowledge and skills for other professionals who also need to use multimedia and web development applications.

| Course No | Title | Credits |
|-------------------------------|---------------------------------|-----------|
| ITE 170 | Multimedia Software | 3 |
| ITD 110 | Web Design I | 3 |
| ITE 270 | Advanced Multimedia Development | 3 |
| ART 283 | Computer Graphics | 3 |
| Total credits required | | 12 |

Process Technology

Purpose: to provide students with an introduction to various systems found in a manufacturing environment and a fundamental understanding of the controls used. This career studies certificate prepares the student to advance to positions such as control room operator or production team leader.

| Course No. | Title | Credits |
|-------------------------------|---|-----------|
| IND 106 | Industrial Engineering Technology | 3 |
| CAD 161 | Blueprint Reading I ^a | 2 |
| IND 165 | Principles of Industrial Technology I | 4 |
| INS 110 | Principles of Instrumentation | 3 |
| ETR 150 | Machine Control Using Relay and Programmable Logic | 3 |
| IND 250 | Introduction to Basic Computer Integrated Manufacturing | 3 |
| Total credits required | | 18 |

^a Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.

Quality Control

Purpose: to give students training in quality control techniques. This career studies certificate prepares students for assembly line quality assurance jobs.

| Course No. | Title | Credits |
|-------------------------------|-----------------------------|-----------|
| CAD 161 | Blueprint Reading I | 2 |
| IND 145 | Introduction to Metrology | 3 |
| IND 146 | Statistical Quality Control | 3 |
| MEC 111 | Materials for Industry | 3 |
| MEC 112 | Processes of Industry | 3 |
| Total credits required | | 14 |

Veterinary Assisting

Purpose: to assist people presently employed in veterinary hospitals who want professional development. Individuals with other pet-related interests, such as pet shop personnel, dog breeders, and pet owners, may also benefit from this set of courses. All courses except VET 236 may be taken in any order for completion of the career studies certificate. VET 101 or VET 102 must be completed prior to VET 236.

| Course No. | Title | Credits |
|-------------------------------|--|-----------|
| VET 101 | Introduction to Veterinary Assisting | 3 |
| VET 102 | Care and Maintenance of Small Domestic Animals | 3 |
| VET 103 | Veterinary Office Assisting | 3 |
| VET 236 | Companion Animal Behavior | 3 |
| Total credits required | | 12 |

Web Design and Development

Award: Career Studies Certificate

Purpose: to train students to use standards-based web design fundamentals including code, graphic design, usability and accessibility. Students also have the opportunity to learn programming skills and apply them to database-driven web applications.

Following completion of the program, graduates will be prepared for entry-level positions in: web design, web development, and web page maintenance.

| Course No. | Title | Credits |
|-------------------------------|--------------------------|-----------|
| ITE 119 | Information Literacy | 3 |
| ITD 110 | Web Page Design I | 3 |
| ITD 210 | Web Page Design II | 3 |
| ART 283 | Computer Graphics | 3 |
| ITE 170 | Multimedia Software | 3 |
| ITP 100 | Software Design | 3 |
| ITP 120 | Java Programming I | 4 |
| | or | |
| ITP 110 | Visual Basic Programming | (4) |
| IT | Elective ^a 6 | |
| Total credits required | | 28 |

^a Choose from ITD 130, ITE 160, or ITP 220.