This Business and Industry Specialization curriculum is designed for personnel employed by the banking industry. The American Institute of Banking (AIB) assisted in developing the curriculum, which covers every facet of bank operations. Students must be employed by the banking industry. Students complete a total of 15 hours from the courses below to complete the Business and Industry Specialization.

ACC 2000 Principles of Accounting* I or
BKG 2005 Accounting for Bankers .................................................................3
ACC 2030 Principles of Accounting II* or
BKG 2100 Analyzing Financial Statements ..................................................2-3
BKG 2200 Principles of Banking.................................................................2
BKG 2060 Marketing for Banking..............................................................2
BKG 2150 Introduction to Commercial Lending ........................................2
BKG 2130 Consumer Lending.................................................................2
BKG 2240 Deposit Operation .................................................................2
BKG 2250 Money & Banking .................................................................3
BKG 2300 Law & Banking ....................................................................2
BKG 2310 Law & Banking Applications ...................................................2
BKG 2350 Trust Business .................................................................3
BKG 2400 Commercial Bank Management .............................................3
BKG 2420 Introduction to Mortgage Lending ........................................2
BKG 2450 Supervision or
MGT 2000 Principles of Management ....................................................3
BKG 2600 Bank Investments & Funds Management................................2
BKG 2700 Financial Planning .................................................................2

TOTAL HOURS REQUIRED: 15
* The prerequisites for ACC 2000 and ACC 2030 are not required for students pursuing the Business and Industry Specialization.
CIVIL STRUCTURAL DESIGN TECHNOLOGY

The Civil Structural Design Technology Business and Industry Specialization curriculum provides the basic skills individuals need for a career in civil structural design technology. Several of the courses may be applied toward an associate’s degree. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.**

**Foundation Course(s)**
- MATH 1730 Precalculus* .................................................................................................................. 5

**Core Course(s)**
- MET 1040 Applied Statics .................................................................................................................. 3

**Advanced Track Course(s)**
- CET 2410 Structural Steel Design ..................................................................................................... 3
- CET 2420 Reinforced Concrete Design .............................................................................................. 3
- MET 1050 Strength of Materials ....................................................................................................... 3

**TOTAL HOURS REQUIRED: 17**

* The prerequisites for MATH 1730 are not required for students pursuing the Business and Industry Specialization.
COMPUTER INTEGRATED DRAFTING AND DESIGN

The Computer Integrated Drafting and Design Business and Industry Specialization focuses on developing knowledge and skills necessary to use AutoCAD efficiently. Traditional 2D drafting principles and practices will be covered. Also covered will be 3D modeling. The integration of 3D models with 2D dimensioned drawings will be a significant portion of this Business and Industry Specialization. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)
- ENGT 1100 Fundamentals of Technical Drawing W/Lab* .........................3

Core Course(s)
- CID 1210 Architectural Drawing W/Lab ...................................4
- CID 2150 Advanced AutoCAD W/Lab.............................................4

Advanced Track Course(s)
- CID 2112 Architectural 3D Modeling W/Lab.................................4

TOTAL HOURS REQUIRED: 15
* May be waived at the discretion of the program coordinator with demonstrated competence.
CREDIT UNION MANAGEMENT

This curriculum is designed for professionals employed by the credit union industry. Coursework consists of the nationally recognized Certified Credit Union Executive (CCUE) program. People who successfully complete the program and pass the National CCUE exams will also receive the CCUE designation. Coursework is also American Council on Education (ACE) accredited.

CUE 1080 Credit Union Marketing .........................................................3
CUE 2000 History & Philosophy of Credit Unions .................................2
CUE 2050 Credit & Collections .............................................................3
CUE 2100 Credit Union Accounting I ....................................................3
CUE 2150 Human Resource Management .............................................3
CUE 2200 Credit Union Management ..................................................2
CUE 2230 Strategic Business Management & Leadership ....................3
CUE 2250 Risk Management & Insurance ..........................................3
CUE 2300 Financial Counseling ............................................................2
CUE 2310 Economics & the Monetary System ....................................3
CUE 2350 Money & Banking .................................................................3
CUE 2400 Business Law ....................................................................3
CUE 2450 Financial Management I .....................................................3

TOTAL HOURS REQUIRED: 15
ELECTRONICS TECHNICIAN

The Electronics Technician curriculum provides upgrading of skills for those presently in the electronics and computer related fields or basic skills for those who want to enter these fields. The certificate is based on the skills required of an electronics technician including soldering, electronic devices, electronic repair and troubleshooting, microcomputer programming and troubleshooting, and computer repair. Students are encouraged to pursue A+ certification or CET certification upon completion of this Business and Industry Specialization. High school graduate reading and writing skills are expected, as development of technical reports and use of technical manuals are required in these courses. Math skills should include practical knowledge of algebra, basic trigonometry and geometry. All courses may be applied toward the associate’s degree in EET. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)
- EET 1001 Introduction to EET ..............................................1
- EET 1012 Electrical Circuits I W/Lab*.....................................3
- EET 1310 Digital Fundamentals W/Lab...................................4

Core Course(s)
- EET 1210 Active Devices I W/Lab .........................................4
- EET 1715 Microcomputer Architecture.................................2

TOTAL HOURS REQUIRED: 14

* The corequisite for EET 1012 is not required for students pursuing the Business and Industry Specialization.
FINANCIAL ACCOUNTING

The Financial Accounting curriculum is designed to prepare students to quickly enter the accounting job market or update their accounting skills for their current jobs. The certificate includes basic topics in financial and cost accounting and advanced topics in financial accounting. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level.**

**Foundation Course**
ACC 2000  Principles of Accounting I.................................................3

**Core Course**
ACC 2030  Principles of Accounting II.................................................3

**Advanced Track I Course**
ACC 2215  Intermediate Accounting I.................................................3

**Advanced Track II Course**
ACC 2220  Intermediate Accounting II.................................................3

**TOTAL HOURS REQUIRED: 12**
GRAPHIC DESIGN

The Graphics Design curriculum is targeted toward degreed individuals, visual communications professionals and current students in Media Technologies who wish to update or expand upon the technical skills needed for success within the field of graphic design. Throughout all required courses, emphasis is placed on developing proficiency with industry standard software. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)
   CGT 1030 Introduction to Macintosh Graphic Design* ** .................3

Core Course(s)
   CGT 1040 Digital Photography* .................................................3
   CGT 1105 Digital Graphic Design I.............................................4
   CGT 1110 Typography ...........................................................3
   CGT 1950 Design Fundamentals* ** ..........................................3

Advanced Track Course(s)
   CGT 2005 Digital Graphic Design II .........................................4
   CGT 2040 Computer Illustration ..............................................3
   CGT 2140 Desktop Publishing** ................................................3

TOTAL HOURS REQUIRED: 17-26
* CGT 1030, 1040 and 1950 may be waived at the discretion of the program coordinator with demonstrated competence.
** The corequisites for CGT 1030 and CGT 1950 are not required for students pursuing the Business and Industry Specialization.
INDUSTRIAL MAINTENANCE

The Industrial Maintenance curriculum will provide upgrading of skills for those presently in the manufacturing field or basic skills for those who want to enter the field. The certificate is based on preventive and predictive skills in the following areas: print reading, applied mathematics, hydraulics, pneumatics, power trains, mechanisms, electronics, and PLCs. Courses for this certificate may be applied toward an associate's degree. High school graduate reading and writing skills are expected, as development of technical reports, use of technical manuals and interpretation of codes are required in these courses. Math skills should include practical knowledge of algebra, basic trigonometry and geometry. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1012</td>
<td>Electrical Circuits I W/Lab*</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 1010</td>
<td>Engineering Technology Applications &amp; Communications*</td>
<td>3</td>
</tr>
<tr>
<td>MET 1022</td>
<td>Shop Practices**</td>
<td>3</td>
</tr>
<tr>
<td>MET 1060</td>
<td>Maintenance Printreading Applications W/Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Course(s)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2920</td>
<td>Programmable Controllers</td>
<td>2</td>
</tr>
<tr>
<td>MET 2030</td>
<td>Machine Elements W/Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 17-20

* The prerequisites/corequisites for EET 1012, ENGT 1010, MET 1022, and MET 2022 are not required for students pursuing the Business and Industry Specialization.

** MET 1022 may be waived at the discretion of the program coordinator with demonstrated competence.
LOCAL AREA NETWORK OPERATIONS/MANAGEMENT

The Local Area Network Operations/Management curriculum is designed to prepare an individual for a career in the operations and management of local area networks. Each course in this certificate also prepares the student for either a Microsoft or CompTIA certification examination. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

Foundation Course(s)
- CSIT 1710 A+ Computer Hardware.................................................................4
- CSIT 1720 A+ Computer Software.................................................................4
- CSIT 1730 Networking Fundamentals ..............................................................4

Core Course(s)
- CSIT 1740 Windows Professional.................................................................4

Advanced Track Course(s)
- CSIT 2710 Windows Server ........................................................................4

TOTAL HOURS REQUIRED: 20
MANUFACTURING AUTOMATION TECHNICIAN

The Manufacturing Automation Technician curriculum provides upgrading of skills for those presently employed in manufacturing as instrument and electrical technicians or basic skills for those who want to enter these fields. The certificate is based on the skills required to troubleshoot and maintain PLC and CNC control systems and Data Acquisition systems. High school graduate reading and writing skills are expected, as development of technical reports and use of technical manuals are required in these courses. Math skills should include practical knowledge of algebra, basic trigonometry and geometry. All courses may be applied toward the associate’s degree in EET and MET. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 1100</td>
<td>Fundamentals of Technical Drawing W/Lab</td>
<td>3</td>
</tr>
<tr>
<td>EET 1012</td>
<td>Electrical Circuits I W/Lab*</td>
<td>3</td>
</tr>
<tr>
<td>EET 2910</td>
<td>Data Acquisition &amp; Control*</td>
<td>2</td>
</tr>
<tr>
<td>MET 1022</td>
<td>Shop Practices*</td>
<td>3</td>
</tr>
<tr>
<td>EET 2920</td>
<td>Programmable Controllers</td>
<td>2</td>
</tr>
<tr>
<td>MET 2700</td>
<td>CNC Milling*</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED: 17**

* The prerequisites/corequisites for EET 1012, EET 2910, MET 1022 and MET 2700 are not required for students pursuing the Business and Industry Specialization.
MECHANICAL AND ELECTRICAL SYSTEMS DESIGN TECHNOLOGY

The Mechanical and Electrical Systems Design Technology curriculum provides the basic skills individuals need for a career in building mechanical and electrical systems design technology. Several of the courses may be applied toward an associate’s degree.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1010 Construction Methods</td>
<td>4</td>
</tr>
<tr>
<td>CET 2012 Cost Estimating</td>
<td>4</td>
</tr>
<tr>
<td>CET 2021 Project Scheduling W/Lab*</td>
<td>3</td>
</tr>
<tr>
<td>CET 2310 Mechanical Systems I W/Lab*</td>
<td>4</td>
</tr>
<tr>
<td>EET 2655 Applied Electricity</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED: 19**

* The prerequisites for CET 2021 and CET 2311 are not required for students pursuing the Business and Industry Specialization.
PHOTOGRAPHY

The Photography curriculum is designed for the media professional interested in adding photography skills. It is also a career option for someone interested in working as a photofinishing lab technician or digital imaging technician in the photographic support industry or in owning a photography-related business. The certificate is useful for someone who uses photography as part of his or her profession, such as in the medical industry or law enforcement, but who needs additional photographic skills. All of the courses are hands-on and practical and are taught by experienced professionals. Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.

<table>
<thead>
<tr>
<th>Foundation Course(s) (Complete all courses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHO 1000 Introduction to Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Course(s) (Complete all courses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT 2100 Photoshop Essentials</td>
<td>3</td>
</tr>
<tr>
<td>PHO 1100 Advanced Photographic Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2060 Advanced Digital Imaging Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2850 Photography Portfolio</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Track Course(s) (Select two courses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CGT 1030 Introduction to Macintosh Graphic Design*</td>
<td>3</td>
</tr>
<tr>
<td>MDT 2998 Media Technologies Internship</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2100 Nature &amp; Travel Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2200 Commercial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2300 Portrait Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2400 Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2500 Wedding &amp; Retail Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2700 Special Topics in Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2900 Photography Internship</td>
<td>3</td>
</tr>
<tr>
<td>PHO 2950 Independent Photographic Projects</td>
<td>3</td>
</tr>
<tr>
<td>VPT 1045 Technical Video Production</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 19

* The corequisites for CGT 1030 are not required for students pursuing the Business and Industry Specialization.
QUALITY CONTROL

The Quality Control curriculum will provide an individual with basic skills needed for process control, testing and analysis of product quality. Areas of emphasis include testing fundamentals, destructive testing, nondestructive testing, computer-assisted measuring and statistical process control (SPC). Associated lab exercises allow hands-on experience with testing equipment and measuring devices such as ultrasound, magnetic particle, dye penetrant, hardness, Charpy-Izod impact tests, tensile/compression tests, SPC data collection units and software, digital calipers, and coordinate measuring machines. Courses required for this certificate can be applied toward an associate’s degree. High school graduate reading and writing skills are expected, as development of technical reports, use of technical manuals and interpretation of codes are required in these courses. Math skills must include algebra, geometry and basic trigonometry. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.**

**Foundation Course(s)**

- ENGT 1100 Fundamentals of Technical Drawing W/Lab..........................3
- ENGT 1010 Engineering Technology Technical Communications*........3

**Core Course(s)**

- MET 2310 Geometrics & Coordinate Measuring*.............................4
- MET 2800 Fundamentals of Testing* ..............................................3
- MET 2810 Destructive & Nondestructive Testing..............................3
- MET 2820 Statistical Process Control* .............................................4

**TOTAL HOURS REQUIRED: 20**

* The prerequisites/corequisites for ENGT 1010, MET 2310, 2800 and 2820 are not required for students pursuing the Business and Industry Specialization.
SUPERVISION

Supervisors with solid, up-to-date management skills are critical for a business to be successful. This curriculum offers potential supervisors these necessary skills. In addition, it helps experienced supervisors improve their managerial skills to realize their full potential as managers. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.**

**Foundation Course(s)**
- MGT 2000 Principles of Management .............................................3

**Core Course(s)**
- MGT 2030 Team Leadership .........................................................3
- MGT 2050 Human Resources .........................................................3

**TOTAL HOURS REQUIRED:** 9
WEB VISUALS

The Web Visuals curriculum is targeted toward degreed individuals, visual communications professionals and current students in Media Technologies who wish to update or expand upon the technical skills needed for success within the field of Web visuals. Throughout all required courses, emphasis is placed on developing proficiency with industry standard software. **Courses in each level (Foundation, Core, Advanced Track) must be completed prior to advancing to the next level. Where more than one course is offered within a level, courses may be taken in any sequence.**

<table>
<thead>
<tr>
<th>Foundation Course(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CGT 1030 Introduction to Macintosh Graphic Design*</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Course(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CGT 1040 Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>CGT 1105 Digital Graphic Design I*</td>
<td>4</td>
</tr>
<tr>
<td>CGT 1110 Typography</td>
<td>3</td>
</tr>
<tr>
<td>CGT 1950 Design Fundamentals*</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Track Course(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CGT 2040 Computer Illustration</td>
<td>3</td>
</tr>
<tr>
<td>WEB 2000 Dreamweaver/Fireworks**</td>
<td>3</td>
</tr>
<tr>
<td>WEB 2110 Flash** or</td>
<td>3</td>
</tr>
<tr>
<td>WEB 2811 Advanced Computer Graphics**</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED: 16-25**

* CGT 1030, 1105 and 1950 may be waived at the discretion of the program coordinator with demonstrated competence.

** The prerequisites for the WEB courses are not required for students pursuing the Business and Industry Specialization.

Posted: August 2010