Addendum

Due to a change in the West Virginia Community and Technical College System's Policy on general education and total program credit hour requirements, the following certificate and degree program modifications/additions have been added to the 2012-2013 College Catalog.
(See 135CSR11, TITLE 135, PROCEDURAL RULE. WEST VIRGINIA COUNCIL FOR COMMUNITY AND TECHNICAL COLLEGE EDUCATION SERIES 11: DEGREE DESIGNATION, GENERAL EDUCATION REQUIREMENTS, NEW PROGRAM APPROVAL, AND DISCONTINUANCE OF EXISTING PROGRAMS. http://www.wvctcs.org/images/stories/Regs_Rules/Series_11_Rule_Final.pdf)

ADVANCED SKILL SET CERTIFICATE PROGRAMS

Creative Writing

Requirements for the Certificate:
Total: 15 hours

(1) ENGL 210 Introduction to Creative Writing
(2) Three courses from the following:
- English 213 Creative Writing: Poetry
- English 214 Creative Writing: Creative Nonfiction
- English 215 Creative Writing: Fiction
- English/Theater 406 Playwriting

(3) ENGL 444 Writers' Workshop

Creative Writing Course Rotation

Fall 2012 English 210 Intro English/Theater 406 Playwriting	**Spring 2013** English 213 Poetry	**Summer 2013** English 215 Fiction
Fall 2013 English 210 Intro English/Theater 406 Playwriting	**Spring 2014** English 214 Creative Nonfiction	**Summer 2014** English 444 Workshop
Fall 2015 English 210 Intro English/Theater 406 Playwriting	**Spring 2016** English 215 Fiction	**Summer 2016** English 214 Creative Nonfiction
Fall 2016 English 210 Intro English/Theater 406 Playwriting	**Spring 2017** English 444 Workshop	**Summer 2017** English 214 Creative Nonfiction
Fall 2017 English 210 Intro English/Theater 406 Playwriting	**Spring 2018** English 213 Poetry	**Summer 2018** English 215 Creative Nonfiction
Fall 2018 English 210 Intro English/Theater 406 Playwriting	**Spring 2019** English 214 Fiction	**Summer 2019** English 444

Writing

15 Hours (5 of six courses) chosen from the following:

English 101: Composition 1.
Expanding and sharpening skills necessary to express ideas and feeling clearly and effectively in expository essays. (Prerequisite: passing grade ENGL 091 or appropriate score on English placement test.)

English 102: Composition 2.
The writing of papers based on analysis, synthesis, and conclusion from research sources. (Prerequisite: Grade of C or better in ENGL 101.)

English 103: English Grammar, Usage, and Style.
Intense study of syntax, grammar, word-forms, punctuation, and various accepted writing styles. Designed for new writers, editors, secretaries, and students. (Prerequisite: pass grade in English

091 or placement test.)

English 107: Technical Writing 1.
Develops technical writing skills by applying various approaches used to communicate in technical environments. Includes writing structural descriptions, operational descriptions, process explanations, analytical summaries, and other technical reports. (Prerequisite: English ACT score of 21; pass grade ENGL 091 or appropriate placement test.)

English 108: Technical Writing 2.
Continues development of students' technical writing skills. Expands problem-solving abilities through writing technical content associated with the principles of inductive/deductive reasoning. Emphasizes applied writing assignments, research, and analytical reports that may include pictorial and statistical data. Clarity and organization are stressed. Develops skills in writing in response to other writers' ideas through reading and interpreting technical and non-technical material. Requires strong grammar and usage skills. (Prerequisite: grade of C or better in ENGL 107 or ENGL 101.)

English 308: Advanced Writing.
Advanced Writing develops enhanced techniques expected in academic and professional writing. This course concentrates on formal formats, audience analysis, research and documentation, proofreading, editing, revisions, and integration of source materials from various disciplines. (Prerequisite: Grade of C or better in ENGL 101 and ENGL 102 and 60 hours college credit or permission of instructor.)

CERTIFICATE DEGREE PROGRAMS

Culinary Arts

First Semester

Course	Course Description	Cr. Hrs.
CUL 100	Food Service Sanitation	2
CUL 125	Nutrition for Foodservice	3
CUL 105	Introduction to Baking	3
CUL 101	Food Preparation I	3
CUL 120	Meat Fabrication/Preparation	3
CS 101	Introduction to Computing	3

Second Semester

Course	Course Description	Cr. Hrs.
CUL 126	Dining Service	3
CUL 130	Commercial Food Preparation	3
CUL 102	Food Preparation II	3
MATH 100	Intermediate Algebra	4
PROGRAM TOTAL		30

Diversified Agriculture

Course	Course Description	Cr. Hrs.
DAGR 111	Professions in Agriculture	1
DAGR 112	Principles of Soil Science	4
DAGR 113	Greenhouse Management	3
DAGR 114	Agroecology	3
BIO 101	General Biology	3
BIO 103	General Biology Lab	1
CHEM 111	Chemistry	4
CHEM 111L	Chemistry Lab	0
MATH 126	College Algebra	3
ENT 200	Entrepreneurship	3
ENT 206	Management and Marketing	3
ENGL 101	English Composition	3
PROGRAM TOTAL		31

Emergency Response

First Semester

Course	Course Description	Cr. Hrs.
FFT 101	Fire Fighting 1	3
CJ 111	Introduction to Criminal Justice	3
EMED 105	Introduction to EMS 1	5
PSYC 365	Forensic Psychology	3
Semester Total		14

Second Semester

Course	Course Description	Cr. Hrs.
FFT 102	Fire Fighting 2	3
ENGL 107	Technical Writing	3
or	or	
ENGL 101	Composition 1	
CS 101	Introduction to Computing	3
ERES 120	Emergency Communication	3
ERES 130	Emergency Response to Terrorism	3
ERES 260	Emergency Response Capstone	1
Semester Total		16
PROGRAM TOTAL		30

Science, Technology, Engineering and Math

Course	Course Description	Cr. Hrs.
Science		
Select 8 Hours From The Courses Below:		
Biology 107	Anatomy And Physiology I	4
Biology 108	Anatomy And Physiology Ii	4
Biology 101/103	General Biology I	4
Biology 102/104	General Biology Ii	4
Chemistry 111	Introduction To General Chemistry	4
Chemistry 112	Introduction To Org & Biol Chemistry	4
Chemistry 115	Fundamentals Of Chemistry I	4
Chemistry 116	Fundamentals Of Chemistry Ii	4
Physics 101	Introduction To Physics I	4
Physics 102	Introduction To Physics Ii	4
Physics 111	General Physics I	4
Physics 112	General Physics Ii	4
Physical Science 111	Introduction To Physical Science I	4
Physical Science 112	Introduction To Physical Science Ii	4
Geology 101/102	Physical Geology	4
Geology 103/104	Historical Geology	4
Technology		
Select 6 Hours From The Courses Below:		
Cit 130	Principles Of Information Systems	3
Cs 128	Introduction To Animation	6
Drafting 102	Drafting Fundamentals	3
Drafting 111	Technical Drafting 1	3
Drafting 114	Electrical Drafting	3
Eamt 107	Energy Technology	3
Eamt 108	Building Science	3
Envr 102	Basic Environmental Science	3
Mtec 103	Introduction To Maintenance Technologies	3
Set 154	Solar Pv Installation	3
Mtec 112	Workplace Safety	3
Engineering		
Select 6 Hours From The Courses Below:		
Engineering 199	Engineering Orientation	1
Engineering 101	Engineering Problem Solving 1	2
Engineering 102	Engineering Problem Solving 2	3
Cs 101	Introduction To Computing	3
Cs 102	Spreadsheet Applications	3
Electronics 101/101l	Electricity And Electronics Fundamentals	3
Mathematics		
Select 3-4 Hours From The Courses Below:		
Math 126	College Algebra	3
Math 128	Trigonometry	3
Math 121	Introduction To Mathematics	3

Math 129	Precalculus	4
Math 141	Finite Math	3
Math 155	Calculus I	4
Math 156	Calculus Ii	4
Required General Education		
English 101	Composition 1	3
Comm 111	Fundamentals Of Speech	3
Capstone Course		1
PROGRAM TOTAL		30-31

Residential and Commercial Electricity

Course	Course Description	Cr. Hrs.
Summer Semester		
MTEC 102	Introductory Craft Skills	2
MTEC 112	Workplace Safety	3
Semester Total		5
Fall Semester		
MATH 107	Shop Math	3
ELEC 115	Res/Comm Electrical 1	3
ELEC 116	Res/Comm Electrical 2	3
ELEC 117	Res/Comm Electrical 3	3
ENGL 107	Technical Writing	3
Semester Total		15
Spring Semester		
ELEC 118	Res/Comm Electrical 4	3
ELEC 101	Electrical & Electronic Fundamentals	2
ELEC 101 L	Electrical & Electronic Fundamentals Lab	1
ELEC 234	Service Learning Experience	3
ELEC 260	E & I Capstone Course	1
Semester Total		10
PROGRAM TOTAL		30

Surgical Technology: Program Terminated

Welding

Fall Semester		
Course	Course Description	Cr. Hrs.
WELD 113	Welding Basics	2
WELD 171	Welding Theory	2
WELD 281	Metallurgy	3
WELD 111 or WELD 148 + 149	Basic Oxyacetylene	3
WELD 160 or WELD 150 + 151	Welding Blueprint Reading	3
WELD 121 or WELD 152 + 153	Basic Shielded Metal Arc Welding (SMAW)	3
Semester Total		16

Spring Semester		
Course	Course Description	Cr. Hrs.
WELD 131 or WELD 154 +155	Basic Gas Tungsten Arc Welding (GTAW)	3
WELD 133 or WELD 156 + 157	Basic Flux Core Arc Welding (FCAW)	3
WELD 134 or WELD 158 + 159	Basic Gas Metal Arc Welding (GTAW)	3
WELD 261	Steel Fabrication	3
MATH 107	Shop Math 1	3
Semester Total		15
PROGRAM TOTAL		31

ASSOCIATE IN ARTS (AA) DEGREE PROGRAMS

Writing Emphasis

The Area of Emphasis in Writing for the Associate in Arts Degree has the following requirements. 15 Hours, 5 courses chosen from the following. Students should choose whichever Intro writing courses are not required by their general education to fulfill their 15 hours:

English 103: English Grammar, Usage, and Style.
Intense study of syntax, grammar, word-forms, punctuation, and various accepted writing styles. Designed for new writers, editors, secretaries, and students. (Prerequisite: pass grade in English 091 or placement test.)

English 107: Technical Writing 1.
Develops technical writing skills by applying various approaches used to communicate in technical environments. Includes writing structural descriptions, operational descriptions, process explanations, analytical summaries, and other technical reports. (Prerequisite: English ACT score of 21; pass grade ENGL 091 or appropriate placement test.)

English 108: Technical Writing 2.
Continues development of students' technical writing skills. Expands problem-solving abilities through writing technical content associated with the principles of inductive/deductive reasoning. Emphasizes applied writing assignments, research, and analytical reports that may include pictorial and statistical data. Clarity and organization are stressed. Develops skills in writing in response

to other writers' ideas through reading and interpreting technical and non-technical material. Requires strong grammar and usage skills. (Prerequisite: grade of C or better in ENGL 107 or ENGL 101.)

English 350. Approaches to Teaching Grammar.
Students learn diagramming sentences, active/passive voice, distinction among verbals, use of modifiers, how to connect words, phrases, clauses and sentences correctly.

English 308: Advanced Writing.
Advanced Writing develops enhanced techniques expected in academic and professional writing. This course concentrates on formal formats, audience analysis, research and documentation, proofreading, editing, revisions, and integration of source materials from various disciplines. (Prerequisite: Grade of C or better in ENGL 101 and ENGL 102 and 60 hours college credit or permission of instructor.)

Up to 6 Hours in any Creative Writing Course: ENGL 210, ENGL 213, ENGL 214, ENGL 215, ENGL/THEA 406, or ENGL 444

Creative Writing Course Rotation

Fall 2012 English 210 Intro English/Theater 406 Playwriting	**Spring 2013** English 213 Poetry	**Summer 2013** English 215 Fiction
Fall 2013 English 210 Intro English/Theater 406 Playwriting	**Spring 2014** English 214 Creative Nonfiction	**Summer 2014** English 444 Workshop
Fall 2015 English 210 Intro English/Theater 406 Playwriting	**Spring 2016** English 215 Fiction	**Summer 2016** English 214 Creative Nonfiction
Fall 2016 English 210 Intro English/Theater 406 Playwriting	**Spring 2017** English 444 Workshop	**Summer 2017** English 214 Creative Nonfiction
Fall 2017 English 210 Intro English/Theater 406 Playwriting	**Spring 2018** English 213 Poetry	**Summer 2018** English 215 Creative Nonfiction
Fall 2018 English 210 Intro English/Theater 406 Playwriting	**Spring 2019** English 214 Fiction	**Summer 2019** English 444

Writing Course Rotation

Fall 2012	Spring 2013	Summer 2013
English 101	English 101	English 101
English 102	English 102	English 102
English 103	English 107	English 107
English 107	English 108	
English 308	English 308	
Fall 2013	**Spring 2014**	**Summer 2014**
English 101	English 101	English 101
English 102	English 102	English 102
English 103	English 107	English 107
English 107	English 108	
English 308	English 308	
Fall 2015	**Spring 2016**	**Summer 2016**
English 101	English 101	English 101
English 102	English 102	English 102
English 103	English 107	English 107
English 107	English 108	
English 308	English 308	

ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE

3D Modeling and Simulation Design

First Semester

Course	Course Description	Cr. Hrs.
MATH 111	Technical Math 1	4
ENGL 101	Composition 1	3
ART 111	Drawing 1	3
DRAF 111	Fundamentals Of Drafting Using Autocad	3
DRAF 220	Fundamentals Of Microstation With 3d	3

Second Semester

COMM 111	Fundamentals Of Speech	3
JOUR 360	Digital Imaging	3
DRAF 122	Fundamentals Of 3d Studio Max	3
DRAF 112	Advanced Drafting Techniques	3
DRAF 116	3d Modeling With Autocad	3

Third Semester

PHYS 101	Introduction To Physics 1	4
DRAF 225	Advanced Work With 3d Studio Max	3
DRAF 212	Structural Design With Autodesk Revit	3
DRAF 213	Schematic Drawing	3
DRAF 226	3d Parametric Modeling With Inventor	3

Fourth Semester		
HDP	General Education Elective (Historical)	3
DRAF 227	Autodesk Simulation 360	3
DRAFT 228	3d Architectural Drafting	3
DRAFT 229	Autodesk Revit	3
DRAF 260	Capstone Course	1
PROGRAM TOTAL		60

Computer and Information Technology

First Semester		
Course	Course Description	Cr. Hrs.
CIT 101	Pc Management And Maintenance (A+)	5
CIT 105	Network Fundamentals (Cisco 1)	5
CIT 130	Principles Of Information Systems	3
CS 101	Introduction To Computer	3
Semester Total		16

Second Semester		
ENGL 101	Composition 1	3
CIT 106	Routers & Routing Fundamentals (Cisco 2)	5
CIT 114	Windows Operating Systems (Mcp)	3
COMM 111	Fundamentals Of Speech	3
Semester Total		14

Third Semester		
Math 111	Tech Math 1	4
CIT 205	Intermediate Routing & Switching (Cisco 3)	5
CIT 140	Electricity & Digital Electronics Fund	2
CIT 141	Electricity & Digital Electronics Fund Lab	1
CIT 240	Introduction To Linux	3
Semester Total		15

Fourth Semester		
Math 112	Tech Math 2	4
CIT 206	Wan Theory And Design (Cisco 4)	5
CIT 211	Network Infrastructure (Mcp)	3
CIT 260	Capstone Project	2
CIT 260l	Capstone Project Lab	1
Semester Total		15
PROGRAM TOTAL		60

Culinary Arts

First Semester

Course	Course Description	Cr. Hrs.
CUL 100	Food Service Sanitation	2
CUL 125	Nutrition for Foodservice	3
CUL 105	Introduction to Baking	3
CUL 101	Food Preparation I	3
CUL 120	Meat Fabrication/Preparation	3
CS 101	Introduction to Computing	3

Second Semester

CUL 126	Dining Service	3
CUL 130	Commercial Food Preparation	3
CUL 102	Food Preparation II	3
ENGL 101	Composition I	3
MATH 100	Intermediate Algebra	4

Third Semester

CUL 175	Culinary Internship	3

Fourth Semester

CUL 220	Culinary Supervision	3
CUL 235	American Regional Cuisine	3
CUL 225	Garde Manger	3
COMM 111	Fundamentals of Speech	3

Fifth Semester

CUL 205	Advanced Baking and Pastry	3
CUL 245	International Cuisines	3
CUL 240	Menu Planning/Cost Control	3
CUL 260	Culinary Capstone	1
SS Core Requirement		3
PROGRAM TOTAL		61

Diversified Agriculture

Course	Course Description	Cr. Hrs.
DAGR 111	Professions in Agriculture	1
DAGR 112	Principles of Soil Science	4
DAGR 113	Greenhouse Management	3
DAGR 114	Agroecology	3
BIO 101	General Biology	3
BIO 103	General Biology Lab	1
CHEM 111	General Chemistry	4
CHEM 111L	Chemistry Lab	0
MATH 126	College Algebra	3
ENT 200	Entrepreneurship	3
ENT 206	Management & Marketing	3
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
CS 101 or higher	Intro to Computing	3
DAGR 201	Vegetable Crops	1
DAGR 202	International Agriculture	3
DAGR 203	Forage Crops	3
DAGR 280	Summer Internship	8
*Electives listed below - choose 2		
PROGRAM TOTAL		60-61

*Choose 2 electives from the list below.

BIOL 200	Microbiology
BIOL 212	Botany
BIOL 211	Zoology
MATH 211	Statistics

Energy Assessment and Management Technology

Summer Semester

Course	Course Description	Cr. Hrs.
MTEC 102	Introductory Craft Skills	2
Semester Total		2

Fall Semester

HVAR 120	HVAC/R 1	3
HVAR 130	HVAC/R 2	3
HVAR 140	HVAC/R 3	3
MATH 107	Shop Math 1	3
EAMT 107	Energy Technology	3
Semester Total		15

Spring Semester

ENGL 107	Technical Writing	3
MATH 111	Tech Math 1	4

HVAR 150	HVAC/R 3	3
EAMT 128	Weatherization	3
CS 102	Spreadsheet Applications	2
Semester Total		15
Summer Semester		
ELEC 234	Service Learning Experience	1*
Fall Semester		
ELEC 115	Res/Comm Electrical 1	3
ELEC 116	Res/Comm Electrical 2	3
ELEC 117	Res/Comm Electrical 3	3
EAMT 220	Residential Energy Audits	3
EAMT 124	Lighting Systems	3
Semester Total		15
Spring Semester		
ELEC 118	Res/Comm Electrical 4	3
EAMT 108	Building Science	3
COMM 112	Interpersonal Communication	3
EAMT 228	Commercial Energy Audits	3
SET 280	Degree Capstone	1
Semester Total		13
PROGRAM TOTAL		60

*Cooperative Work Experience is optional and not included in total credits

Engineering Technology – Electronics

Course	Course Description	Cr. Hrs.
Summer Semester		
MTEC 102	Introductory Craft Skills	2
MTEC 103	Introduction to Maintenance Technologies	3
Semester Total		5
Fall Semester		
ELEC 102	Electrical & Instrumentation Technology 1	3
ELEC 103	Electrical & Instrumentation Technology 2	3
ELEC 104	Electrical & Instrumentation Technology 3	3
MATH 111	Tech Math 1	4
Semester Total		13
Spring Semester		
ELEC 202	Electrical & Instrumentation Technolgy 4	3
ELEC 203	Electrical & Instrumentation Technolgy 5	3
ELEC 204	Electrical & Instrumentation Technolgy 6	3
CS 101	Introduction to Computing	3
ENGL 101	Composition 1	3
Semester Total		15

Fall Semester		
ELEC 220	Automated Systems Control	3
ELEC 222	Digital Circuits	3
PHYS 101	Introduction to Physics 1	4
DRAF 114	Electrical Drafting	3
Semester Total		13
Spring Semester		
ELEC 124	Analog Circuits	3
PHYS 102	Introduction to Physics 2	4
COMM 111	Fundamentals of Speech	3
HDP ELECTIVE	Historical & Diverse Perspectives Elective	3
ELEC 224	Capstone Course	1
Semester Total		14
PROGRAM TOTAL		60

Engineering Technology – Specialized

Course	Course Description	Cr. Hrs.
ONE-YEAR COLLEGE CERTIFICATE PROGRAM		30
MTEC 102	Introductory Craft Skills	2
or	or (as needed)	
MTEC 103	Introduction to Maintenance Technologies	3
ELEC 102	Electrical & Instrumentation Technology I	3
ELEC 103	Electrical & Instrumentation Technology 2	3
ELEC 104	Electrical & Instrumentation Technology 3	3
ELEC 202	Electrical & Instrumentation Technology 4	3
ELEC 203	Electrical & Instrumentation Technology 5	3
ELEC 204	Electrical & Instrumentation Technology 6	3
ENGL 101	Composition 1	3
CS 101	Introduction to Computing	3
COMM 111	Fundamentals of Speech	3
ELEC 260	Capstone Course	1
PROGRAM TOTAL		60

Machining Technology

Fall Semester		
Course	Course Description	Cr. Hrs
MATH 107	Shop Math 1	3
ENGL 107	Technical Writing	3
CS101	Introduction To Computing	3
MTEC 102	Introductory Craft Skills	2
MACH 101	Machine Shop 1	4
Semester Total		15

Spring Semester		
MATH 108	Shop Math 2	3
COMM 112	Interpersonal Communication	3
MACH 102	Machine Shop 2	4
MACH 103	Shop Fabrication	3
MACH 104	Machinist Print Reading	3
Semester Total		16
Fall Semester		
IM 254	Cnc Machining 1	3
MACH 201	Machine Shop 3	4
WELD 281	Metallurgy	3
DRAF 102	Drafting Fundamentals	3
Semester Total		13
Spring Semester		
PHIL 231	Workplace And Business Ethics	3
IM 255	Cnc Machining 2	3
MACH 202	Machine Shop 4	4
WELD 131	Basic Gtaw	4
MACH 260	Machining Capstone Projects	2
Semester Total		16
PROGRAM TOTAL		60

Multicraft Technology

Summer Semester		
Course	Course Description	Cr. Hrs
MTEC 102	Introductory Craft Skills	2
MTEC 103	Introduction to Maintenance Technologies	3
Semester Total		5
Fall Semester		
IM 101	Industrial Maintenance 1	3
IM 102	Industrial Maintenance 2	3
IM 103	Industrial Maintenance 3	3
MATH 107	Shop Math 1	3
CS101	Introduction To Computing	3
Semester Total		15
Spring Semester		
IM 201	Industrial Maintenance 4	3
IM 202	Industrial Maintenance 5	3
IM 203	Industrial Maintenance 6	3
ENGL 107	Technical Writing	3
MATH 108	Shop Math 2	3
Semester Total		15

Fall Semester		
ELEC 102	Electrical & Instrumentation Technology 1	3
ELEC 103	Electrical & Instrumentation Technology 2	3
ELEC 104	Electrical & Instrumentation Technology 3	3
COMM 112	Interpersonal Communication	3
PHIL 231	Workplace And Business Ethics	3
Semester Total		15
Spring Semester		
ELEC 202	Electrical & Instrumentation Technology 4	3
ELEC 203	Electrical & Instrumentation Technology 5	3
ELEC 204	Electrical & Instrumentation Technology 6	3
MTEC 280	Capstone Course	1
Semester Total		10
PROGRAM TOTAL		60

Solar Energy Technology

Summer Semester		
Course	Course Description	Cr. Hrs.
MTEC 102	Introductory Craft Skills	2
Semester Total		2
Fall Semester		
ELEC 115	Res/Comm Electrical 1	3
ELEC 116	Res/Comm Electrical 2	3
ELEC 117	Res/Comm Electrical 3	3
SET 154	Solar PV Installation	3
EAMT 107	Energy Technology	3
Semester Total		15
Spring Semester		
ENGL 107	Technical Writing	3
MATH 107	Shop Math 1	3
ELEC 118	Res/Comm Electrical 4	3
SET 158	Solar PV Design/Install 1	3
Semester Total		12
Summer Semester		
SET 293*	Cooperative Work Experience	1*
Fall Semester		
HVAR 120	HVAC/R 1	3
HVAR 130	HVAC/R 2	3
HVAR 140	HVAC/R 3	3
SET 155	Solar Thermal Install	3
SET 228	Solar PV Design/Install 2	3
Semester Total		15

Spring Semester		
HVAR 150	HVAC/R 4	3
COMM 112	Interpersonal Communication	3
MATH 111	Technical Math 1	4
CS 102	Spreadsheet Applications	2
SET 159	Solar Thermal Design/Install	3
SET 280	Degree Capstone	1
Semester Total		16
PROGRAM TOTAL		60

*Cooperative Work Experience is optional and not included in total credits

Welding Technology

Fall Semester		
Course	Course Description	Cr. Hrs.
WELD 113	Welding Basics	2
WELD 171	Welding Theory	2
WELD 281	Metallurgy	3
WELD 111 or WELD 148 + 149	Basic Oxyacetylene	3
WELD 160 or WELD 150 + 151	Welding Blueprint Reading	3
WELD 121 or WELD 152 + 153	Basic Shielded Metal Arc Welding (SMAW)	3
Semester Total		16

Spring Semester		
WELD 131 or WELD 154 + 155	Basic Gas Tungsten Arc Welding (GTAW)	3
WELD 133 or WELD 156 + 157	Basic Flux Core Arc Welding (FCAW)	3
WELD 138 or WELD 156 + 159	Basic Gas Metal Arc Welding (GTAW)	3
WELD 261	Steel Fabrication	3
MATH 107	Shop Math 1	3
Semester Total		15

Fall Semester		
WELD 291	Fabrication Shop	3
WELD 132	Advanced Gas Tungsten Arc Welding (GTAW)	3
WELD 221	Advanced Shielded Metal Arc Welding (SMAW)	3
CS101 or CS 100	Computer Science Course	3
ENGL 107	Technical Writing	3
Semester Total		15

Spring Semester		
WELD 279	Welding Inspection	3
WELD 136	Advanced Flux Core Arc Welding (FCAW)	3
WELD 135	Advanced Gas Metal Arc Welding (GMAW)	3
WELD 260	Welding Capstone	2
Semester Total		14
PROGRAM TOTAL		60

BACCALAUREATE DEGREE PROGRAMS

Bachelor of Applied Technology – Management Major

Targeted Courses from A.A.S.	45
Gen Ed Hours from A.A.S.	15
TOTAL A.A.S. DEGREE HOURS	60

Plus B.A.T. Management Courses Below

Upper-level Courses

Course	Course Description	Cr. Hrs.
INDT 340	Methods, Standards & Work Design	3
ENVR 310	Topics in Environmental Science	3
GBUS 310	Business Law	3
GBUS 320	Negotiable Instruments/UUC	1
GBUS 322	Business Ethics and Social Responsibility	1
GBUS 324	Business Analysis	1
GBUS 326	OSHA in the Workplace	1
MGMT 333	Human Resource Management	3
MGMT 322	Organizational Behavior	3
MGMT 320	Principles of Management	3
INDT 393	Cooperative Work Experience OR	3
INDT 460	Interdisciplinary Project	
INDT 420	Project Conception & Definition	1
INDT 424	Project Organization & Implementation	2
COMM 303	Business & Professional Communication	3
PHIL 346	Introduction to Ethics	3
PSYC 310	Environmental Psychology	3
COMM 306	Human Communication in Organizations/ Institutions	3
TOTAL B.A.T. UPPER-LEVEL COURSES		40

Supporting Courses

MATH 112	Technical Math 2	4
Math 211	Statistics	3
ENGL 102	Composition 2	3
	Natural Science Elective	4
ECON 201	Microeconomics	3
SOC 151	Sociology of the Workplace	3
Total B.A.T. Supporting Courses		20
PROGRAM TOTAL		120

Course Descriptions

CULINARY ARTS (CUL)

100. FOODSERVICE SANITATION **2 HRS.**
Topics addressed include sanitation in food service, the role of food service managers, the identification of food-borne illnesses, prevention of illness and the application of sanitation concepts in a food service establishment.

101. FOOD PREPARATION I **3 HRS.**
This course is an introduction to basic cooking skills, knife skills and the chemistry of foods. Content includes sandwiches, salads and dressings, stocks, soups, fruits, vegetables, egg cookery and beverages.

105. INTRODUCTION TO BAKING **3 HRS.**
This course is designed for the beginner baker. Topics include baking principles, ingredient function and handling, weights and measures, terminology, technique and formula procedures.

125. NUTRITION FOR FOODSERVICE **3 HRS.**
This is an introductory course in nutrition. Topics include definition of the nutrients, will address nutrient requirements and the use of RDA charts. Course includes the sources of nutrients and the effect of nutrient deficiencies.

DIVERSIFIED AGRICULTURE (DAGR)

111. PROFESSIONS IN AGRICULTURE **1 HR.**
This course is designed to enlighten the students to the different careers available in the field of Agriculture

112. PRINCIPLES OF SOIL SCIENCE **4 HRS.**
This lab/lecture interaction course examines factors of soil formation and discusses basic physical, chemical, ecological and morphological properties that affect soil characteristics in managed and natural systems, as well as how important soil classification variables are influenced by these processes. This is an interactive lecture/laboratory course complemented by local field trips with emphasis on soils from pedon-to-landscapes as a resource for environmental quality.

113. GREENHOUSE MANAGEMENT SCIENCE **3 HRS.**
Course about environmental factors regulated in a greenhouse and management of a greenhouse business. This course helps to prepare students for a career in management of commercial greenhouses.

114. AGROECOLOGY **3 HRS.**
Ecological principles and concepts important for sustainable food systems are addressed. Case studies will be used to integrate student understanding of concepts and make comparison between conventional agricultural and sustainable food systems.
Prerequisites: list Corequisites:

201. VEGETABLE CROPS **3 HRS.**
The course will focus on the management factors necessary for successful vegetable production

and marketing such as market outlets, soils, variety selection, planting techniques, irrigation practices of the most commonly used crops in MOV.

202. INTERNATIONAL AGRICULTURE **1 HR.**

Agriculture already has major global environmental impacts: erosion, salinization, deforestation, desertification and Biodiversity. A series of presentations, discussions, and debates will address agriculture issues in several countries.

213. FORAGE CROP **3 HRS.**

Focus is on aspects of forage crop production and biology, cultural practices, adaptation, sustainable agriculture use, seed production, harvesting, livestock utilization, and storage of forages. The course especially emphasizes characteristics of important legumes.